

OBGYN MIXED BAG

From Concept to Clinical Decisions
and Beyond the Basics . VOL 1

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Dedication

Dedicated with deepest respect and gratitude to my parents, whose values of discipline, perseverance and unwavering faith shaped my journey. Their blessings have been my greatest strength and their teachings, my life long guide.

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QUESTION PAPERS

PAPER 1

1. 21 y/o woman comes to the OPD requesting testing for gonorrhoea as she read a poster regarding gonorrhoea infection. She has had three sexual partners in the last year but uses condoms for contraception. What test should you offer her?
 - a) Gonorrhoea only
 - b) Gonorrhoea and chlamydia
 - c) Gonorrhoea, chlamydia, HIV and syphilis
 - d) Gonorrhoea, chlamydia, HIV and HPV
 - e) Gonorrhoea, chlamydia, HIV and HCV
2. 21 y/o woman comes to the genitourinary medicine clinic complaining of vaginal discharge. Vaginal-high swab results show that she has bacterial vaginosis. She asks you about the treatment of her sexual partner. Which of the following requires treatment of an asymptomatic partner?
 - a) Bacterial vaginosis
 - b) HPV
 - c) HSV
 - d) Trichomonas vaginalis
 - e) Candidiasis
3. 24 y/o woman comes to the genitourinary medicine clinic complaining of multiple painful grouped vulval ulcers. On examination, the base of the ulcer was erythematous and inguinal lymph nodes were painful. What is the most likely diagnosis?
 - a) Chancroid
 - b) Syphilis
 - c) Granuloma inguinale
 - d) HSV
 - e) Lymphogranuloma venereum

4. 24 y/o woman comes to the genitourinary medicine clinic complaining of multiple painful ulcers in the vulval area. On examination, the ulcers are sharply circumscribed with a yellow exudate at the base. There is also painful inguinal lymphadenopathy on the left side. What is the most likely causative organism?
- a) HCV type 2
 - b) *Haemophilus ducrei*
 - c) *Treponema pallidum*
 - d) Chlamydia
 - e) *Calymmatobacterium granulomatis*
5. A young woman presents to the genitourinary medicine clinic. After a swab was taken from endocervix, microscopic examination reveals gram negative diplococci. What is the organism in question?
- a) *Actinomyces israelii*
 - b) Chlamydia
 - c) *Haemophilus ducrei*
 - d) *Neisseria Gonorrhoea*
 - e) *Trichomonas vaginalis*
6. A 20 y/o pregnant woman presents to the genitourinary medicine clinic with anogenital warts. She was diagnosed with HPV type 11 infection. What are her treatment options?
- a) 5 Fluorouracil
 - b) Cryotherapy
 - c) Imiquimod
 - d) Podophylline
 - e) Trichloroacetic acid
7. A 20 y/o pregnant woman presented to the genitourinary medicine clinic 2 weeks previously and was found to have chlamydia infection. She received a single dose of 1g Azithromycin. You arranged for contact tracing. What is the next step?
- a) Follow up after 6 months
 - b) Nothing to be done
 - c) Full STI screening
 - d) Test of cure during this visit
 - e) Test of cure after 5 weeks

8. Gonorrhoea most commonly causes the following except for which one?
- a) Urethritis
 - b) Proctitis
 - c) Conjunctivitis
 - d) Pharyngitis
 - e) Endocarditis
9. A 28 y/o pregnant woman at 29 weeks of gestation visits an antenatal clinic. She had inguinal lymphadenopathy. What treatment would be appropriate for her among the following options?
- a) Benzathine penicillin G single dose as first line therapy.
 - b) Azithromycin single dose as first line therapy.
 - c) Two doses of Benzathine penicillin G given 1 week apart
 - d) Tetracycline 100mg three times a day for 2 weeks
 - e) Benzathine penicillin G three weekly doses as first line therapy
10. A 29 y/o attends antenatal clinic at 28 weeks of gestation. She gives history of syphilis infection 2 years ago. She has recently been diagnosed late syphilis and was advised CSF (cerebrospinal Fluid) examination. All of the following are indications for CSF examinations except?
- a) Ophthalmic signs and symptoms
 - b) Syphilis treatment failure
 - c) Neurological signs and symptoms
 - d) Cardiovascular signs and symptoms
 - e) HIV infection with late latent syphilis
11. A 25 y/o female presents to A&E with painful vulva. Examination reveals multiple ulcers (around the fourchette) with ragged undermined edges with necrotic base and purulent exudate. There is also associated contact bleeding and painful inguinal lymphadenopathy. What is the likely diagnosis?
- a) Lymphogranuloma venereum
 - b) Donovanosis
 - c) Syphilis gummata
 - d) Chancroid
 - e) Type 2 HSV

12. A lady has chronic pelvic pain that worsens during menstruation. What are the chances of her having endometriosis?
- a) 2%
 - b) 5%
 - c) 10%
 - d) 20%
 - e) 50%
13. A woman presented with premenstrual syndrome symptoms including severe mood swings and breast pain, headache but no psychological problems. What is the best first line option for her?
- a) CBT
 - b) Combined pill
 - c) Progestogens
 - d) SSRIs
 - e) Danazol
14. A patient presented with endometrial hyperplasia without atypia on histopathology. What is the risk of progression to endometrial cancer?
- a) <1%
 - b) 2%
 - c) 4%
 - d) 10%
 - e) 27%
15. First line management option according to NICE guidelines for Heavy Menstrual Bleeding is:
- a) Mefenamic acid
 - b) Tranexamic acid
 - c) Mirena
 - d) OCPs
 - e) DMPA

16. A postmenopausal obese woman who is a known smoker, presents with hot flushes, and is asking for hormone replacement therapy, what is the best management option for her?
- a) COC
 - b) COC estradiol
 - c) Estradiol patch with Mirena
 - d) Estrogen with Mirena
 - e) POP
17. 58 y/o woman presents with 2 episodes of post-menopausal bleeding (PMB). Transvaginal USG reveals endometrial thickness 3mm. The patient is otherwise asymptomatic and has no history HRT. What is the next best step of management?
- a) Follow up in 6 months
 - b) Reassure and discharge
 - c) TVS in three months
 - d) Endometrial biopsy now
 - e) Hysteroscopy and biopsy
 - f) To comeback again if bleeding recurs
18. A 55 y/o postmenopausal woman is having a right ovarian cyst on USG. Another septate mass with no ovarian tissue of around 6.5cm is noted just medial to the above-mentioned cyst. CA125 was 35. What is the next step of management?
- a) Follow up after 6 months
 - b) Refer to cancer centre
 - c) Cystectomy
 - d) Oophorectomy
 - e) TAH
 - f) BSO
19. Tumor marker used for follow-up in case of Granulosa cell tumor to see recurrence is?
- a) LDH
 - b) INHIBIN
 - c) ALPHA FETOPROTEIN
 - d) BIOPSY
 - e) CA 125

20. A 30 y/o patient with irregular periods was diagnosed with PCOS is also suffering from Obstructive Sleep Apnea. The patient is worried about long term complications of this disease if any. Which of the following is the long term complication of this condition?
- a) Cardiovascular disease
 - b) Alzheimer (dementia)
 - c) Respiratory acidosis
 - d) Diabetes mellitus type 2
 - e) Respiratory Failure
21. According to NICE guidelines, which among the following is the first line management for Heavy Menstrual Bleeding?
- a) Mirena
 - b) Progesterone
 - c) UPA
 - d) Tranexamic acid
 - e) NSAID
22. What is the best indicator for ovarian cancer which will help managing and revering(triaging) the patient?
- a) IOTA
 - b) RMI
 - c) ROAMA-8
 - d) TVS
 - e) Ca-125
23. A 65 y/o postmenopausal woman presented with vaginal bleeding and TVS scan showed endometrial thickness of 5 mm. What is the next step of management?
- a) Hysteroscopic biopsy
 - b) Inpatient Hysteroscopy
 - c) Outpatient endometrial sampling
 - d) LNG-IUD
 - e) Discharge from clinic

24. A 14 y/o girl was referred by GP with complains of primary amenorrhea. On examination normal pubic hair, breast tanner stage 3 and normal general growth was seen. What is the next best management plan?
- a) USG pelvis
 - b) FSH, LH
 - c) Karyotyping
 - d) MRI abdomen and pelvis
 - e) Wait for a year, or conservative treatment
25. A post-menopausal patient came with bloated abdomen since last 6 months. TVS was performed where ovaries were not visualised. Next management plan for this patient?
- a) MRT
 - b) CT-scan
 - c) Repeat TVS
 - d) Discharge her
 - e) CA-125
26. A 30 y/o lawyer, who is a known case of endometriosis, currently on GnRH therapy, with add back for the last six months, is still having severe pain episodes. She is Para 3 and previously tried all treatment options and none of them have relieved her pain. She now wants definitive management, What is the best management option for her?
- a) CBT
 - b) TAH
 - c) TAH+BSO
 - d) OC[
 - e) Continue GnRH therapy
27. A 28 y/o sexually active woman presented with chronic abdominal pain, bloating which aggravated during menstrual cycles, with relapses, she passes stool several times per day usually just after a meal, pain relieves after the passage of stool, presently on OCPS for contraception which were prescribed by her GP. Her cervical smear is up to date no history of STI. On Vaginal examination normal vagina and uterus. Which of the following will be useful in the diagnosis of her condition?
- a) RMI
 - b) ROME III
 - c) USG
 - d) Laproscopy
 - e) Upper GI Endoscopy

28. A young 18 y/o female, presented to the GP with normal breast development and clitoromegaly with labial fusion. Which of the following can be the diagnosis?
- a) Late onset CAH
 - b) AIS (Androgen Insensitivity Syndrome)
 - c) Turner Syndrome
 - d) Early Onset CAH
29. A postmenopausal woman with right ovarian simple cyst of 2 cms detected incidentally, presented to you. Her CA-125 is 22. What is the further management plan?
- a) Discharge and send back to GP
 - b) MRI 4 monthly
 - c) Yearly follow up with CA-124 and TVS
 - d) 4 monthly follow up with CA-125 and TVS
 - e) Refer to cancer centre.
30. You are supervising a trainee who is counselling a patient regarding the risks of Hormonal Replacement Therapy. Which of the following statements is appropriate advice?
- a) Combined HRT increases the risk of VTE 4 times with 5 year use
 - b) HRT is contraindicated in people with family history of breast carcinoma
 - c) HRT is contraindicated for women with sickle cell anaemia
 - d) HRT is not necessarily contraindicated for all woman on tamoxifen for breast cancer.
 - e) Transdermal HRT has lower risk for VTE compared to oral therapy.
31. A healthy 40 y/o woman presented to gynaecology clinic with heavy menstrual bleeding. History, Usg and examination all suggest the presence of adenomyosis, but no other pathology. What should be considered the first line treatment?
- a) Cyclical oral progestogens
 - b) Endometrial ablation
 - c) Insertion of LNG-IUS
 - d) Total abdominal hysterectomy
 - e) Total laproscopic hysterectomy

32. A 35 y/o woman presents to the gynaecology OPD with heavy menstrual bleeding and opts to have LNG-IUS inserted. She is warned of the possibility of changes to the bleeding pattern. For how long should she be advised to preserve with any unwanted changes in her bleeding pattern in order to see maximum benefits of treatment?

- a) Three cycles
- b) Six cycles
- c) Nine cycles
- d) Twelve cycles
- e) No specified time

33. What are the three most prevalent symptoms in women with peritoneal endometriosis?

	Chronic pelvic pain	Cyclical intestinal complaints	Deep dyspareunia	Dysmenorrhoea	Heavy menstrual bleeding	Infertility
A	✓	✓	✓			
B	✓		✓	✓		
C	✓	✓				✓
D		✓	✓		✓	
E				✓	✓	✓

- a)
- b)
- c)
- d)
- e)

34. Ulipristal acetate has previously been used for uterine fibroids. What percentage of women using this will develop progesterone receptor modulator associated endometrial changes (PAEC)?

- a) 10%
- b) 20%
- c) 40%
- d) 60%
- e) 90%

35. Which hormone is implicated in the development of endometrial polyps in obese postmenopausal women?

- a) Androstenedione
- b) Oestradiol
- c) Oestriol
- d) Oestrone
- e) Testosterone

36. What is the most common benign tumor of women?
- a) Breast fibroadenoma
 - b) Lipoma
 - c) Renal adenoma
 - d) Thyroid Adenoma
 - e) Uterine Leiomyoma
37. What pharmacological treatment is most commonly used as first line therapy in treatment of endometriosis with chronic pelvic pain?
- a) Aromatase inhibitors
 - b) Ccp
 - c) GnRH analogues
 - d) LNG-IUS
 - e) Oral progestogens
38. What percentage of postmenopausal women with bleeding have co-existing cervical and endometrial polyps?
- a) 4-7%
 - b) 14-17%
 - c) 24-27%
 - d) 34-37%
 - e) 44-47%
39. During endometrial procedure, what depth of myometrium needs to be destroyed to prevent endometrial regeneration from basal glands?
- a) 1mm
 - b) 2mm
 - c) 3mm
 - d) 4mm
 - e) 5mm

40. A 48 y/o woman presents with heavy irregular menstrual bleeding, and an endometrial biopsy confirms endometrial hyperplasia without atypia. The woman has a normal BMI and the only significant history is a laproscopic sterilisation done at the age of 35 years. A LNG-IUS is inserted which too is removed after 6 months. An endometrial biopsy is normal at that time, and a subsequent biopsy done 6 months later is also normal. The woman continues to have on going bleeding. What is the appropriate management?
- a) Offer endometrial ablation
 - b) Offer hysterectomy
 - c) Reassure and discharge
 - d) Re-insert LNG-IUS and reassess after 1 year
 - e) Repeat endometrial biopsy 1 year later.
41. What is the primary aim of medical interventions in management of Heavy Menstrual Bleeding?
- a) To improve haemoglobin levels
 - b) To improve serum ferritin levels
 - c) To improve woman's quality of life
 - d) To reduce blood loss as assessed by a menstrual calendar
 - e) To reduce blood loss as assessed by pictorial charts
42. The most common cause of post-menopausal bleeding is atrophic vaginitis/endometritis. What is the SECOND most common cause?
- a) Cervical polyp
 - b) Endometrial carcinoma
 - c) Endometrial hyperplasia
 - d) Endometrial polyp
 - e) Exogenous oestrogens
43. What proportion of circulating testosterone in the female body is produced by the ovaries?
- a) 5%
 - b) 10%
 - c) 15%
 - d) 20%
 - e) 25%

44. A 55y/o woman presents with post-menopausal bleeding. A pipelle endometrial biopsy is performed, and she is found to have endometrial hyperplasia without atypia. It is explained to her that she will need to have treatment for 6 months followed by repeat biopsy. Which treatment is most likely to result in histologically normal endometrium after 6 months?

- a) Conservative management
- b) Continuous oral medroxyprogesterone acetate (MPA)
- c) Cyclical oral MPA
- d) GnRH Analogues
- e) Insertion of an LNG-IUS

45. A 28 y/o woman admitted to gynaecology ward with persistent nausea and vomiting in early pregnancy. Her serum urea and electrolyte values are as follows:

- Sodium- 130 mmol/l
- Potassium- 3.0 mmol/l
- Urea- 4.3 mmol/l
- Creatinine 100 micro mol/l

What would be the most appropriate agent for electrolyte replacement therapy?

- a) I.V. KCL 0.3% with 5%glucose solution
- b) I.V. KCL 0.1% with 0.45% NaCl solution
- c) I.V. KCL 0.3% with Normal saline
- d) Oral potassium bicarbonate 500 mg with potassium acid tartrate 300 mg
- e) Oral KCl tablets 600 mg

46. A 34 y/o woman is admitted for an elective caesarean section. The woman is a known carrier of methicillin-resistant staphylococcus aureus (MRSA). Which antibiotic prophylaxis is most appropriate in this situation?

Which are the most appropriate antibiotics for MRSA prophylaxis?

	Cefuroxime	Clindamycin	Metronidazole	Teicoplanin	Vancomycin
A	✓	✓	✓		
B		✓	✓	✓	
C				✓	✓
D					✓
E	✓				

47. A 32 y/o multiparous woman has undergone an elective caesarean section under spinal anaesthesia at term. The spinal anesthetic included intrathecal morphine. What is the minimum regime of postoperative clinical observations required in this woman?

- a) Continue observations every 30 mins for 2 hours
- b) Continue observations every 30 mins for 6 hours
- c) Continue observations every hour for 12 hrs
- d) Continue observations every hour for 24 hours
- e) Continue observations every hour for 36 hours

48. In medical teaching, what is the single best determinant of expertise in a subject?

- a) Communication skills
- b) Knowledge
- c) Organisational skills
- d) Technical ability
- e) Positive role modelling

49. Which two tiers of miller's pyramid are best assessed using workplace-based assessment tools?

	Knows	Knows how	Shows how	Does
A	✓	✓		
B	✓		✓	
C	✓			✓
D		✓	✓	
E			✓	✓

50. Which absorbable suture has the greatest tensile strength?

- a) Polydioxanone (PDS)
- b) Polyglactin 910 (Vicryl rapide)
- c) Polyglactin (Vicryl)
- d) Polyglecaprone (Monocryl)
- e) Polyglycolic acid (Dexon)

51. Which nerve is particularly susceptible when self retaining retractors are used in gynaecological surgeries?
- a) Femoral nerve
 - b) Genitofemoral nerve
 - c) Obturator nerve
 - d) Pudendal nerve
 - e) Iliohypogastric nerve
52. What is the most appropriate suture material to repair the anorectal mucosa in a fourth-degree perineal tear?
- a) Polydioxanone (PDS)
 - b) Polyglactin 910 (Vicryl rapide)
 - c) Polyglactin (Vicryl)
 - d) Polyglecaprone (Monocryl)
 - e) Polyglycolic acid (Dexon)

PAPER 2

1. 32 y/o woman with sudden severe lower abdomen pain, USG shows ovarian cyst with internal echoes, most likely complication?
 - a) Torsion
 - b) Malignancy
 - c) Infection
 - d) Rupture
2. 23y/o woman with severe dysmenorrhea, dyspareunia and infertility, fixed retroverted uterus and tender nodularity in the pouch of Douglas. Diagnosis?
 - a) Fibroid uterus
 - b) PID
 - c) Endometriosis
 - d) Adenomyosis
3. 27 y/o with infertility, USG showing Septate uterus- Best management?
 - a) OCP
 - b) Metroplasty
 - c) Hysterectomy
 - d) Septoplasty
4. 30 y/o with infertility and B/L chocolate cysts in ovaries-Most likely diagnosis?
 - a) Luteal cyst
 - b) Dermoid cyst
 - c) Serous cystadenoma
 - d) Endometrioma

5. 48 y/o with abnormal uterine bleeding and endometrial thickness of 4mm on USG- most likely diagnosis?
- a) Atrophic endometrium
 - b) Hyperplasia
 - c) Cancer
 - d) Polyp
6. 29 y/o woman with secondary amenorrhea for 6 months, UPT was negative, withdrawal bleeding after progesterone challenge test was seen, what is the most likely diagnosis?
- a) Asherman syndrome
 - b) Anovulation
 - c) Outflow tract obstruction
 - d) Oestrogen deficiency
7. A 35 y/o woman with PID, adnexal mass, fever, severe pain, USG showing tubo-ovarian abscess-Initial management?
- a) Hysterectomy
 - b) Immediate laparotomy
 - c) IV antibiotics
 - d) OCPs
8. 26 y/o with amenorrhea, galactorrhoea and headache- most appropriate investigation?
- a) Oestradiol
 - b) TSH
 - c) FAH
 - d) Prolactin
9. 24 y/o with irregular cycles, acne, obesity and infertility, USG showing multiple peripheral follicles-First line ovulation inducing drug?
- a) Progesterone
 - b) Clomiphene citrate
 - c) GnRH analogues
 - d) Oestrogen therapy

10. 34 y/o with heavy menstrual bleeding, endometrial biopsy showing simple hyperplasia without atypia-management?
- a) Hysterectomy
 - b) Chemotherapy
 - c) Progesterone therapy
 - d) Radiotherapy
11. 50 y/o with uterine prolapse, cervix outside introitus but uterus inside vagina-degree of prolapse?
- a) Procidentia
 - b) First degree
 - c) Second degree
 - d) Third degree
12. 31 y/o with severe dysmenorrhoea not relieved by NSAIDs, desires fertility-best next step?
- a) DMPA
 - b) Laparoscopy
 - c) GnRH analogues
 - d) Hysterectomy
13. 60 y/o with postmenopausal bleeding, cervix showing ulcerative proliferative growth that bleeds on touch. Diagnosis?
- a) Cervical carcinoma
 - b) Endometrial carcinoma
 - c) Cervicitis
 - d) Cervical polyp
14. 55 y/o postmenopausal woman with bleed, Transvaginal sonography shows endometrial thickness of 9 mm- next step of management?
- a) CA-125
 - b) PAP smear
 - c) Endometrial biopsy
 - d) Repeat USG after 3 months

15. 45 y/o with progressively increasing dysmenorrhoea and menorrhagia, uterus uniformly enlarged and tender. Diagnosis?
- a) Fibroid
 - b) PID
 - c) Adenomyosis
 - d) Endometriosis
16. 40 y/o with intermenstrual bleeding, cervix healthy on examination-best initial investigation?
- a) Hysteroscopy
 - b) Endometrial biopsy
 - c) PAP smear
 - d) Transvaginal sonography
17. Germ cell tumor marker among the following:
- a) LF
 - b) TSH
 - c) AFP
 - d) CA-125
18. A woman with PCOS is at increased risk of all of the following except?
- a) Osteoporosis
 - b) Diabetes mellitus
 - c) Hypertension
 - d) Endometrial carcinoma
19. High risk HPV Types:
- a) 3,4
 - b) 6,11
 - c) 1,2
 - d) 16,18
20. The most common benign ovarian tumor:
- a) Fibroma
 - b) Dermoid cyst
 - c) Serous cystadenoma
 - d) Mucinous tumor

21. A 55 y/o woman attends urogynaecology clinic with urinary incontinence associated with urgency. Urine dipstick test is negative. A diagnosis of urge incontinence is made. What could be the first line treatment?
- a) Bladder training
 - b) Botulinum toxin A
 - c) Mirabegron
 - d) Oxybutynin
 - e) Pelvic floor muscle training
22. A 60 y/o attends urogynaecology clinic with urinary incontinence associated with coughing and sneezing. A urinary dipstick test is negative. A diagnosis of stress urinary incontinence is made. What should be considered the first line treatment?
- a) Bladder training
 - b) Desmopressin
 - c) Duloxetine
 - d) Systemic Hormone replacement therapy
 - e) Supervised pelvic floor muscle training.
23. What percentage of women who you use vaginal pessaries to manage pelvic organ prolapse report satisfactory symptom relief?
- a) 47%
 - b) 58%
 - c) 69%
 - d) 80%
 - e) 92%
24. The incidence of asymptomatic bacteriuria in pregnancy is 2-5%. If left untreated, what proportion of cases will proceed to lower UTI?
- a) 20%
 - b) 40%
 - c) 60%
 - d) 80%
 - e) 90%

25. Which aetiological factor is associated with the greatest risk of developing pelvic organ prolapse?
- a) Age
 - b) Connective tissue disorder
 - c) Menopausal status
 - d) Parity
 - e) Weight
26. By what factor are obese women at an increased risk of anal incontinence as compared to non-obese women?
- a) 2-fold
 - b) 3-fold
 - c) 4-fold
 - d) 6-fold
 - e) 8-fold
27. Which antimuscarinic drug used in the management of an overactive bladder should be avoided in frail older women?
- a) Darifenacin
 - b) Desmopressin
 - c) Mirabegron
 - d) Oxybutynin
 - e) Tolterodine
28. What is the mode of action of duloxetine?
- a) M3 receptor antagonist
 - b) Monoamine oxidase inhibitor
 - c) Alpha-2 receptor agonist
 - d) Beta-3 receptor agonist
 - e) Serotonin -noradrenaline uptake inhibitor.
29. What is the only true contradiction to cystoscopy?
- a) Congenital urinary tract anomalies
 - b) Untreated UTI
 - c) Urethral stricture
 - d) Vesicovaginal fistula
 - e) Visible haematuria

30. A woman is seen on the postoperative ward round following the insertion of a trans-obturator tape for the treatment of stress urinary incontinence. Within what timeframe should she be offered a follow-up appointment with a vaginal examination to exclude erosion?
- a) within 1 month
 - b) Within 2 months
 - c) Within 3 months
 - d) Within 6 months
 - e) Within 12 months
31. Correct statement regarding establishing chroniocity in twin pregnancy is:
- a) Best detected after 16 w of pregnancy
 - b) Thick membrane is monochorionic
 - c) Same sex rules out dichorionicity
 - d) Twin peak is dichorionic
32. The presenting diameter in face presentation is
- a) Submentobregmatic
 - b) Verticomental
 - c) Suboccipeto-bregmatic
 - d) Occipitofrontal
33. The smallest diameter in the female pelvis is:
- a) Interspinous diameter
 - b) Obstetric conjugate
 - c) Diagonal conjugate
 - d) True conjugate
34. Commonest cause of non engagement in primigravida at term is:
- a) Breech
 - b) Brow
 - c) CPD
 - d) Hydramnios

35. Best method of evacuation of missed abortion >12weeks uterus:
- a) Vaginal misoprostol followed by evacuation
 - b) Intramuscular prostaglandin
 - c) Oxytocin infusion
 - d) Suction evacuation
36. With oral iron therapy, rise in Hb% can be seen after:
- a) 6 weeks
 - b) 4 weeks
 - c) 1 week
 - d) 3 weeks
37. TORCH infection involves all except
- a) HIV
 - b) CMV
 - c) Toxoplasma
 - d) Rubella
38. The most common site of placental implantation is:
- a) Cornual region
 - b) Cervix
 - c) Fundus of the uterus
 - d) Lower uterine region
39. Vaginal birth after caesarean section (VBAC) is contraindicated in all except:
- a) Previous uterine rupture
 - b) No previous vaginal birth
 - c) Previous classical section
 - d) Suspected CPD
40. Formula used for estimation of total iron requirement is (Take body weight in Kg, Hb deficit in g/dl):
- a) $3.3 \times \text{body weight} \times \text{Hb deficit}$
 - b) $0.3 \times \text{body weight} \times \text{Hb deficit}$
 - c) $4 \times \text{Body weight} \times \text{Hb deficit}$
 - d) $4.4 \times \text{Body weight} \times \text{Hb deficit}$

41. Lochia alba lasts till:

- a) 1 week
- b) 2 weeks
- c) 3-6 weeks
- d) 8 weeks

42. Uterine rupture risk is highest in:

- a) Multiparity
- b) Young age
- c) Primigravida
- d) Previous caesarean section

43. True regarding abruptio placenta with DIC is:

- a) V,VII,Fibrinogen
- b) Decreases fibrinogen
- c) Decreased factor V
- d) Decreased factor VIII

44. A newborn born at term has a heart rate of 110/min, irregular breathing, grimaces on stimulation, flexed limbs, and a bluish discoloration of limbs. What is the APGAR score at 1 minute?

- a) 8
- b) 7
- c) 5
- d) 6

45. Biophysical profile assessment in pregnancy includes all of the following except:

- a) Maternal blood pressure
- b) Amniotic fluid volume
- c) Foetal breathing movements
- d) Non-stress test

46. High risk factors for choriocarcinoma in vesicular mole except:

- a) Bilateral theca lutein cysts in ovaries
- b) Features of thyrotoxicosis
- c) Serum hCG > 100000
- d) Uterus > 16weeks

47. The placental barrier is thinnest during:

- a) At term rupture
- b) First trimester
- c) Second trimester
- d) Third trimester

48. Amniotic fluid is mainly produced by:

- a) Foetal lungs
- b) Maternal plasma
- c) Placenta
- d) Foetal urine

49. Uterus is enlarged more than the period of amenorrhoea in all of the following conditions except:

- a) IUGR
- b) Molar pregnancy
- c) Multiple pregnancy
- d) Polyhydramnios

50. Following drugs are used in management and prevention of PPH except:

- a) Mifepristone
- b) Carboprost
- c) Misoprostol
- d) Oxytocin

51. What proportion of circulating testosterone in female is produced by the ovaries:

- a) 5%
- b) 10%
- c) 15%
- d) 20%
- e) 25%

PAPER 3

1. A 55y/o postmenopausal woman presents with postmenopausal bleeding. A pipelle endometrial biopsy is performed and she is found to have endometrial hyperplasia without atypia. It is explained to her that she will need treatment for 6 months after which a repeat biopsy will be performed. Which treatment is most likely to result in a histologically normal endometrium after 6 months?
 - a) Conservative management
 - b) Continuous oral medroxyprogesterone acetate
 - c) Cyclical oral medroxyprogesterone acetate
 - d) GnRH analogues
 - e) Insertion of LNG-IUS
2. A 48 y/o woman presents with irregular heavy menstrual bleeding, and an endometrial biopsy confirms endometrial hyperplasia without atypia. The woman has a normal BMI and the only medically significant history is laparoscopic sterilisation at the age of 35 years. An LNG-IUS is inserted for 6 months, which is removed after 6 months. An endometrial biopsy is normal both before insertion and after the removal of the LNG-IUS. The woman continues to have ongoing bleeding. What is the appropriate management?
 - a) Offer endometrial ablation
 - b) Offer hysterectomy
 - c) Reassure and discharge
 - d) Reinsert LNG-IUS and reassess after 1 year
 - e) Repeat the endometrial biopsy after 1 year
3. What is the most common congenital abnormality of fusion in the female genital tract?
 - a) Bicornuate uterus
 - b) Mayer-Rokitansky-Kuster-Hauser (MRKH) syndrome
 - c) Transverse vaginal septum
 - d) Uterine septum
 - e) Uterus didelphys

4. During an endometrial ablation procedure, what depth of myometrium needs to be destroyed to prevent endometrial regeneration from basal glands?
 - a) 1mm
 - b) 2mm
 - c) 3mm
 - d) 4mm
 - e) 5mm
5. What pharmacological treatment is most commonly used as the first line therapy in the treatment of endometriosis in women with chronic pelvic pain?
 - a) Aromatase inhibitors
 - b) Cocp
 - c) GnRH analogues
 - d) LNG-IUS
 - e) Oral progestogens
6. What is the most common benign tumour in females?
 - a) Breast fibroadenoma
 - b) Lipoma
 - c) Renal adenoma
 - d) Thyroid adenoma
 - e) Uterine leiomyoma
7. A 50 y/o woman is referred to the gynaecology clinic with the symptoms of abdominal bloating, loss of appetite and lower abdominal discomfort. Her serum CA-125 was measured at the GP practice and found to be 40 IU/L. An urgent USG is done but is found to be normal with no uterine or ovarian pathologies. The patient's symptoms continue. What is the most appropriate management?
 - a) Urgent CT scan of pelvis
 - b) Urgent MRI scan of pelvis
 - c) Asses for other clinical causes of her symptoms
 - d) Repeat CA-125 in three months
 - e) Refer to the gynaecology multi-disciplinary team meeting in view of her raised CA-125.
8. Which hormone is implicated in the development of endometrial polyps in obese postmenopausal women?

- a) Androstenedione
 - b) Oestradiol
 - c) Oestriol
 - d) Oestrone
 - e) Testosterone
9. Where in the vagina is the transverse vaginal septum most commonly found?
- a) Equal distribution throughout vagina
 - b) Introitus
 - c) Lower vagina
 - d) Mid-vagina
 - e) Upper-vagina
10. What is the most common subtype of vulval lichen planus to cause vulval symptoms?
- a) Classical
 - b) Erosive
 - c) Hypertrophic
 - d) Hypertrophic hyperpigmented
 - e) Non-classical
11. A 35 y/o woman presents to the gynaecology OPD with heavy menstrual bleeding and opts to have the LNG-IUS inserted. She is warned of the possibility of changes to her bleeding pattern. For how long should she be advised to persevere with any unwanted changes to her bleeding pattern in order to see maximum benefits of treatment?
- a) 3 cycles
 - b) 6 cycles
 - c) 9 cycles
 - d) 12 cycles
 - e) No specific time

12. A 38 y/o woman presents to the gynaecology OPD with a 6 month history of amenorrhoea and hot flushes. A pregnancy test is found to be negative and her serum FSH level is found to be 45 IU/L. What further result would confirm the diagnosis of premature ovarian failure?
- a) AMH in 2 weeks' time <1.1pmol/L
 - b) Further FSH in 2 weeks' time >50 IU/L
 - c) Further FSH in 2 weeks' time >25 IU/L
 - d) Immediate AMH <1.1pmol/L
 - e) Immediate LH level > 50 IU/
13. Para 1 with previous CS due to labour dystocia want to know her chances of a successful VBAC?
- a) 30%
 - b) 40%
 - c) 60%
 - d) 70%
 - e) 80%
14. Previous shoulder dystocia wants to know the chances of recurrence compared to general population:
- a) 2 fold
 - b) 3 fold
 - c) 4 fold
 - d) 5 fold
 - e) 10 fold
15. Patient needing to have forceps delivery in second stage asks about risk of 3rd/4th degree perineal tear by forceps:
- a) 5%
 - b) 10%
 - c) 15%
 - d) 20%
 - e) 25%

16. A nulliparous woman presents in labour, she was a low risk pregnancy. Following with consultant, serial scan of the baby in 70th centile. How to follow her up in labour?
- a) Initial CEFM for 30 mins then intermittent auscultation
 - b) Intermittent using the hand doppler
 - c) Intermittent auscultation using the CTG machine
 - d) CEFM
 - e) USG to see foetal heart
17. Main cause of litigation due to CTG is:
- a) Failure to act
 - b) Failure to recognise an abnormal one
 - c) Failure to monitor
 - d) Failure to refer
 - e) Inappropriate oxytocin use
18. Foetal diameter deflexed:
- a) Mentovertical
 - b) Occipitofrontal
 - c) Occipeto bregmatic
 - d) Submentobregmatic
 - e) Suboccipetobregmatic
19. Low risk pregnancy contracting every 15 mins for the past 12 hours. Os is 2 cm dilated and well effaced. What is your next step?
- a) Advice to go home and come back
 - b) Come back next morning for IOL
 - c) Amniotomy
 - d) Admission
 - e) Oxytocin
20. The second twin was breech, engaged and membranes were intact. CTG was normal. 30 mins passed since the delivery of the first twin. Whats the next step of management?
- a) Breech extraction
 - b) Reassess in 30 mins
 - c) Continue CTG and wait
 - d) Emergency CS
 - e) Forceps delivery

21. There was cord presentation in a multigravida, she was at 9 cm with intact membranes and CTG was normal. What is the next step in her management?
- a) CAT 2 CS
 - b) CAT 1 CS
 - c) Forceps in theatre
 - d) Forceps in room
 - e) ARM
22. A breech in labor at 6 cm came with cord presentation. The theatre is busy at the moment and she is having good contraction. What is the appropriate next step?
- a) CAT 1 CS
 - b) CAT 2 CS
 - c) Terbutaline 0.25mg S/C
 - d) Post in another theatre
 - e) Breech extraction
23. Previous classical caesarean section for foetal indication, came to discuss plan for delivery:
- a) Allow vaginal delivery at term
 - b) Classical C.S. at 38 weeks
 - c) Lower segment C.S. at 38 weeks
 - d) Lower segment C.S. at 39 weeks
 - e) Lower classical C.S. at 39 weeks
24. Patient was in the first stage of labour with epidural anaesthesia. She needs a top up. As she is now intermittent monitoring, what is the recommendation regarding foetal monitoring after epidural top up?
- a) CEFM
 - b) USG
 - c) Foetal heart beats for 1 min every 5 mins for 15 mins
 - d) Check every half an hour
 - e) Start continuous foetal monitoring for 30 mins after top up

25. What is the success rate of McRobert's maneuver in shoulder dystocia?
- a) 88%
 - b) 70%
 - c) 60%
 - d) 90%
 - e) 50%
26. Pregnant lady at 39 weeks came in A&E with strong labour pains, on examination, fully dilated, FHR normal, in breech, with cervix 9 cm dilated, patient counselled regarding pros and cons of breech delivery. She has consented for vaginal breech delivery. What is the initial management at this stage?
- a) Start CEFM
 - b) Intermittent foetal heart auscultation
 - c) ECV
 - d) Emergency LSCS
 - e) FHR using doppler every 20 mins
27. What nodal involvement is a negative prognostic indicator of survival for cervical cancer?
- a) Axillary lymphadenopathy
 - b) Inguinal lymphadenopathy
 - c) Para-aortic lymphadenopathy
 - d) Pelvic lymphadenopathy
 - e) Supraclavicular lymphadenopathy
28. Treatment recommended for stage 1A1 cervical cancer?
- a) Cervical conisation (LLETZ, LASER, Knife) in fertility sparing subgroup
 - b) Chemo-radiotherapy
 - c) Pelvic lymphadenectomy
 - d) Radical hysterectomy with pelvic lymphadenectomy
 - e) Radical trachelectomy

29. Invasive carcinoma ≥ 4 cm in greatest dimension with lesion limited to cervix-uteri. Identify FIGO stage.
- a) Stage 1A1
 - b) Stage 1B1
 - c) Stage 1B2
 - d) Stage 1B3
 - e) Stage 2A1
30. Which imaging modality is first line for staging of cervical cancer in pregnancy?
- a) CT-Scan
 - b) MRI
 - c) PET scan
 - d) USG abdomen and pelvis
 - e) USG pelvis
31. Which sub-type of cervical cancer is related to in utero exposure of Diethylstilbestrol?
- a) Adenocarcinoma of cervix
 - b) Clear cell carcinoma of cervix
 - c) Primary malignant, melanoma of uterine cervix
 - d) Small cell cancer of cervix
 - e) Squamous cell cancer of cervix
32. Which of these is not an important prognostic factor?
- a) Lympho-vascular space invasion
 - b) Metastasis to pelvic or para-aortic nodes
 - c) Parity
 - d) Performance status of individual patient
 - e) Size of tumour
33. Gold standard treatment for stages 1A2 to 1B2?
- a) Cervical conisation with pelvic lymphadenectomy
 - b) Chemo-radiation
 - c) Pelvic exenteration
 - d) Radical hysterectomy, bilateral salpingectomy +/- bilateral oophorectomy with bilateral pelvic lymphadenectomy
 - e) Radical trachelectomy and pelvic lymphadenectomy

34. What would you advise a 28 y/o patient who is found to have HR-HPV positive infection with normal cytology?
- a) Re-screen for HR-HPV in 12 months
 - b) Re-screen for HR-HPV in 6 months
 - c) Refer to colposcopy
 - d) Routine recall in 3 years
 - e) Routine recall in 5 years
35. What would you advise a 25 y/o patient who is found to have HR-HPV positive infection with abnormal cytology?
- a) Re-screen for HR-HPV in 12 months
 - b) Re-screen for HR-HPV in 6 months
 - c) Refer to colposcopy
 - d) Routine recall in 3 years
 - e) Routine recall in 5 years
36. What would you advise a 31 y/o patient who has attended for her re-screen HR-HPV which is negative?
- a) Re-screen for HR-HPV in 12 months
 - b) Re-screen for HR-HPV in 6 months
 - c) Refer to colposcopy
 - d) Routine recall in 3 years
 - e) Routine recall in 5 years
37. What does an anterior exenteration involve?
- a) Removal of tumour and adjacent structures including bladder and vagina
 - b) Removal of tumour and adjacent structures including bowel and vagina
 - c) Removal of tumour and adjacent structures including bowel, bladder and vagina
 - d) Removal of tumour and adjacent structures including bowel, uterus and vagina
 - e) Removal of tumour and vagina
38. A 27 y/o nulliparous woman is seen in colposcopy following a smear report of severe dyskaryosis. Colposcopy reveals transformation zone with large areas of dense aceto-white epithelium consistent with CIN3. Appropriate management for this patient?
- a) HPV testing of the smear
 - b) Loop excision of the cervical transformation zone
 - c) Repeat colposcopy in 12 months
 - d) Repeat smear in 6 months
 - e) Single punch biopsy from the transformation zone

39. A 34 y/o woman is referred by her GP for colposcopy after her cervical smear shows 'mild dyskaryosis'. Her BMI is 35 and she has smoked 20 cigarettes/day since the age of 14 years. She has 4 children, all by normal vaginal deliveries, and has been using combined oral contraceptive pills for the past 3 years. At colposcopy you note thin, smooth aceto-white lesions with well demarcated margins. Which of the following options is most suitable for her?
- Hysterectomy
 - Knife cone biopsy
 - Large loop excision of the transformation zone (LLETZ)
 - Laser cone biopsy
 - Punch biopsy
40. A 29 y/o is referred for colposcopy by her GP when her cervical smear shows 'moderate dyskaryosis'. Her BMI is 29. She has 2 children, both born by NVD, and has been using combined oral contraceptive pills for the past 2 years. At colposcopy you note coarse vascular patterns with punctuation and mosaicism and large aceto-white lesions with irregular margins. She is keen to discuss her management with you. Which of the following is the most suitable option for her?
- Follow up in colposcopy clinic
 - Hysterectomy
 - Knife cone biopsy
 - Large loop excision of transformation zone (LLETZ)
 - Punch biopsy
41. Ovarian torsion should be managed by:
- Conservative management with antibiotics, fluids and analgesia
 - Oophorectomy
 - Untwisting
 - Untwisting and fixation of the ovary to the pelvic sidewall
42. A 30 y/o woman who is 2 weeks postnatal following a normal vaginal delivery at term presents with a 5 day history of offensive vaginal discharge and general malaise. She complains of sore throat. Temperature is 38 degree celcius.
- What could be the infective aetiology in this case?
- Clostridium difficile
 - Escherichia coli
 - Staphylococcus aureus
 - Streptococcus pyogenes
 - Streptococcus pneumoniae

43. A 20 y/o woman who is 20 weeks pregnant, presents to the GP with flu like symptoms, loss of appetite and jaundice. On closer questioning she reveals she visited Pakistan 1 month previously. The GP suspects acute hepatitis A infection. Which investigation would be the most useful in confirming the diagnosis?
- a) Elevated alanine transferase
 - b) Positive HAV RNA in faeces
 - c) Positive HAV RNA in saliva
 - d) Positive serology for anti-HAV IgG
 - e) Positive serology for anti-HAV IgM
44. A woman is referred to your antenatal clinic and you see her at 20 weeks of gestation. She is hepatitis B positive. She asks if she can breastfeed her child. What investigation or history would most help you advise her?
- a) Her hepatitis E antigen status
 - b) Her LFT status
 - c) Her hepatitis B viral load
 - d) Whether she is on antiviral therapy
 - e) Will she accept hepatitis B vaccine for neonate?
45. A 20 y/o primiparous woman presents at 32 weeks of gestation with recurrence of genital herpes. She asks you regarding plans for vaginal delivery. What would be your recommendation?
- a) Elective LSCS at 39 weeks
 - b) Induce labour at 6 weeks
 - c) No intervention required (Normal vaginal delivery)
 - d) Prophylactic acyclovir from 36 weeks of gestation and elective LSCS
 - e) Prophylactic acyclovir from 36 weeks of gestation and normal delivery
46. A female infant is born vaginally at 36 weeks following spontaneous rupture of membranes 22 hours prior. Her mother developed a fever (38 degree Celsius) during the last hour of labour. Six hours after the delivery her mother notes that the baby is lethargic and not feeding well. What is the most likely aetiology?
- a) Mycoplasma hominis
 - b) Plasmodium falciparum
 - c) CNS herpes simplex virus infection
 - d) Early onset group B streptococcus disease
 - e) Early onset listeriosis

47. A 28 y/o woman is found to have group-B streptococcus on a high vaginal swab she has taken because of vaginal discharge. She is currently 30 weeks pregnant. She has had 2 previous elective LSCS and is planning a third. She has no allergies. What would be your proposed treatment?
- a) Antenatal penicillin
 - b) Intrapartum intravenous penicillin
 - c) Intrapartum penicillin orally
 - d) No treatment required
 - e) Post natal penicillin to infant
48. A 35 y/o woman in her third pregnancy attends for a routine prenatal visit at 8 weeks of gestation. She already has 2 children aged 3 and 5 years old. She is a school teacher and is concerned about the risk of seasonal influenza. She is also concerned about the risks of influenza vaccine to her and her baby. Which of the following actions is most recommended?
- a) Give intramuscular vaccine as soon as possible
 - b) Give intramuscular vaccine postnatally
 - c) Give nasal vaccine spray as soon as possible
 - d) Give nasal vaccine spray postnatally
 - e) Wait until the second trimester than give the intramuscular vaccine.
49. A 35 y/o woman in her third pregnancy come for a routine prenatal visit at 18 weeks of gestation. She has 2 children aged 3 and 5 yrs. She is a school teacher and is concerned about the risk of slapped cheek disease as she has been exposed to a child with rash. The diagnosis of Human parvovirus 19 has been confirmed in that child. However, she remains asymptomatic. What is the most appropriate next step?
- a) Amniocentesis for diagnosis of Parvovirus B19
 - b) Maternal antibodies for Parvovirus B19
 - c) Maternal middle cerebral artery doppler measurements
 - d) Reassure her and no further testing
 - e) Umbilical cord sampling

50. A woman is 39 weeks pregnant. She is under consultant care as she has had a previous caesarean birth for breech. She is planning to have an elective caesarean section in this pregnancy. Within the last 24 hours she developed chickenpox rash. Other than the rash, she is fine. How should this woman be managed?

- a) Oral acyclovir and aim for caesarean section in 3 days
- b) Oral acyclovir and aim for caesarean section in 7 days
- c) Intravenous acyclovir and category 3 caesarean section
- d) VZV IgG and aim for caesarean section within 7 days
- e) VZV IgG and category 3 caesarean section

PAPER 4

1. A 21 y/o primiparous woman has a term normal vaginal delivery after 16 hours of labour. Within the first 24 hours she notices a green purulent discharge from the baby's eyes that causes congealing of eyelids. What is the causative agent?
 - a) CMV
 - b) HSV
 - c) Syphilis
 - d) GBS
 - e) Listeria
 - f) Rubella
 - g) Toxoplasma
 - h) HIV
 - i) Gonorrhoea
 - j) Measles
 - k) Hepatitis B
 - l) Varicella

2. A 30 y/o immigrant from Botswana presented to A&E for status epilepticus for which she was managed acutely. On further investigation she was found to have a symphysio-fundal height of 24 cm and UPT was positive. BP was 134/88 mmhg and on Brain CT Scan, multiple low intensity circumscribed lesions were seen.
 - a) CMV
 - b) HSV
 - c) Syphilis
 - d) GBS
 - e) Listeriosis
 - f) Rubella
 - g) Toxoplasma
 - h) HIV

3. A 24 y/o woman in her first pregnancy attends for induction of labour at term +13. She had membrane sweeps at 40 and 41 weeks. She is examined and the cervix is found to be 2 cm dilated and 2 cm long with foetal head engaged. She does not report any contractions. What would be the preferred method for induction of labour?
- a) Amniotomy+/- oxytocin (syntocinon)
 - b) Balloon catheter
 - c) Membrane sweep
 - d) Misoprostol
 - e) Vaginal prostaglandin
4. A woman is admitted to the labour ward with intermittent lower abdominal pain and is found to be in pre term labour. Her uterus is contracting 3 times in 10 mins and cervix is 4 cm dilated. Until which gestational age should magnesium sulphate be offered?
- a) 29+6 weeks
 - b) 30+6 weeks
 - c) 31+6 weeks
 - d) 32+6 weeks
 - e) 33+6weeks
5. A 26 y/o woman is seen complaining of regular contractions (one every 10 mins) at 30+3 weeks of gestation. A speculum examination is performed and the cervix appears long but slightly dilated. There is no history of ruptured membranes. What investigation should be considered first in this situation?
- a) Foetal fibronectin
 - b) Full blood count and C-reactive protein (CRP)
 - c) No test required, treat as pre-term labour
 - d) Test for insulin like growth factor binding protein (IGFBP-1) or placental alpha macroglobulin-1 (PAMG-1)
 - e) Transvaginal USG
6. A 41 y/o woman is seen at 36 weeks of gestation. This is her first pregnancy, and a plan for induction of labour at 39 weeks has been made. She is anxious about induction of labour. What intrapartum risk is increased for women in this age group who undergo induction of labour compared with expectant management?
- a) C-section
 - b) Failed induction of labour
 - c) Foetal hypoxia
 - d) Instrumental delivery
 - e) No additional risk

7. A woman in labour requests an epidural for anaesthesia, but unfortunately during the siting of epidural there is an inadvertent puncture of dura mater. How likely is she to develop a post dural puncture headache?
- a) 5-10%
 - b) 15-25%
 - c) 30-45%
 - d) 70-80%
 - e) 100%
8. What is the most common cardiac adverse effect associated with the use of atosiban?
- a) Chest pain
 - b) Hypotension
 - c) Palpitations
 - d) Pulmonary oedema
 - e) Tachycardia
9. Rh -ve mother in early pregnancy, normal levels of Anti-D antibody levels, at 36 weeks Anti-C antibody reached to 20. She had delivered at 37 weeks of gestation. The baby is at an increased risk of which of the following?
- a) Early anaemia
 - b) Early jaundice
 - c) Late anaemia
 - d) Late jaundice
10. A 36 y/o at 36 weeks of gestation was admitted in hospital due to bleeding PV due to placenta previa. Now there is no active bleeding. She has atypical antibodies in her blood. How often samples for crossmatch should be sent?
- a) Twice per week
 - b) Daily
 - c) Once per week
 - d) Once fortnightly
 - e) Every 3 days
11. In MCDA twin pregnancy monitoring to detect TTTS starts at which week?
- a) 12 weeks
 - b) 24 weeks
 - c) 16 weeks
 - d) 28 weeks

12. An USG shows twin pregnancy at 14 weeks. What is the best parameter to diagnose chorionicity?
- a) Concordance foetal sex
 - b) No. of placentae
 - c) Thickness of intersecting membranes
 - d) How membrane is attached to placenta
 - e) Lambda sign.
13. Pregnant lady, for the first time, was checked at 28 weeks and was found to have antibodies. Which antibody at any level needs referral to FM centre?
- a) Anti D
 - b) Anti C
 - c) Anti K
 - d) Anti E
14. Which is the most common infection during early pregnancy responsible for symmetrical intrauterine growth restriction, microcephaly and calcium deposition in brain?
- a) CMV
 - b) Rubella
 - c) Toxoplasmosis
 - d) Syphilis
15. A primigravida with twin monochorionic, diamniotic pregnancy at 30 weeks reports with decreased foetal movements. USG confirms death of one of the twins. How will you manage her?
- a) Conservative management until delivery
 - b) MRI for foetal brain
 - c) Immediate delivery
 - d) Reassure
 - e) Emergency caesarean section

16. A pregnant woman has been screened for Down's syndrome at 11 weeks. Her lab results are as follows:

Beta-HCG normal for gestation

Nuchal translucency normal for gestation

PAPPA-0.39 (Normal range-0.25-0.40)

Other values were also normal.

How will you manage this patient?

- a) Amniocentesis
 - b) Chorionic villi sampling
 - c) Serial growth scans
 - d) CffDNA
 - e) Reassurance
17. A woman reports with her ANC routine screening which shows Anti-K antibodies positive with titre 1:64. The father of the baby is heterozygous positive for the K antigen. What is the most appropriate next step?
- a) Amniocentesis
 - b) CVS
 - c) CffDNA
 - d) US
 - e) FBS
18. A woman delivered her first baby spontaneously 40 mins ago and had oxytocin (syntocinon) 10IU intramuscularly for active management of third stage of labour. The placenta has still not delivered, with no signs of separation. She isn't bleeding, has an intravenous access in-situ and haemodynamically stable. What would be the appropriate management?
- a) Manual removal of placenta
 - b) Oxytocin 20IU in 20ml saline into the umbilical vein
 - c) Oxytocin 40IU intravenous infusion at 125ml/h
 - d) Oxytocin 5IU intravenously
 - e) Oxytocin/ergometrine (syntometrine) 5IU/500Micro grams Intramuscularly

19. A 31 y/o pregnant woman presents in preterm labour at 34 weeks of gestation. Her labour progresses quickly and she delivers a baby boy. Both mother and baby appear to be in good health, and the mother requests delayed cord clamping. What time frame would be recommended for delayed cord clamping in this situation?
- a) 10-30 seconds
 - b) 30 seconds-3 minutes
 - c) 4-6 minutes
 - d) 6-10 minutes
 - e) Do not recommend delayed cord clamping.
20. A woman in first stage of labour is diagnosed with inadequate progress. The CTG tracing is classified as suspicious and a plan for category 2 Caesarean section is made. Within how many minutes of making the plan should the baby be delivered?
- a) 30 mins
 - b) 45 mins
 - c) 60 mins
 - d) 75 mins
 - e) 90 mins
21. A woman has been pushing in the second stage of labour for 2 hours. The head is 2/5th palpable at the abdomen, at -1 station, with caput and moulding. A decision for proceeding with LSCS is made. Which complication is more likely for this woman when compared to having a caesarean section in the first stage of labour?
- a) Bladder injury
 - b) Blood loss >1000ml
 - c) Intraoperative uterine trauma
 - d) Perinatal asphyxia
 - e) Venous thromboembolism
22. What is the recommended uterotonic regimen for routine management of the third stage at caesarean section?
- a) Oxytocin (syntocinon) 10 IU intravenously
 - b) Oxytocin (syntocinon) 5 unit IU IV
 - c) Oxytocin (syntocinon) 5 IU IV with 40 IU oxytocin infusion
 - d) Oxytocin /ergometrine (syntometerin) 5 IU intramuscular
 - e) Oxytocin /ergometrine 5 IU/ 500microgram with 40 IU oxytocin infusion

23. What is the common reason for litigation following a shoulder dystocia ?
- a) birth asphyxia
 - b) brachial plexus injury
 - c) clavicular fracture
 - d) humeral fracture
 - e) maternal trauma
24. What proportion of women who are planning a vaginal birth will require an emergency caesarean section .
- a) 10%
 - b) 20%
 - c) 30%
 - d) 40%
 - e) 50%
25. For women with a breech presentation after 39 weeks of gestation, how many times higher is the perinatal mortality rate associated with a planned vaginal breech birth compared with an elective caesarean section.
- a) 2 times
 - b) 3 times
 - c) 4 times
 - d) 5 times
 - e) 10 times
26. What is the the single best predictor of a successful vaginal birth after a caesarean section .
- a) gestation when in labour
 - b) history of a previous vaginal birth
 - c) maternal age
 - d) scar thickness measured by USG
 - e) type of caesarean section

27. Following a prolonged second stage of labour , a woman is taken to theatre for a trial of forceps delivery . examination in theatre reveals the fetal head to be 1/5 palpable per abdomen . on vaginal examination , the station of the fetal head is +1.

How would the forceps delivery be classified ?

- a) High
- b) Unclassified
- c) Low
- d) Mid
- e) Outlet

28. A 24-year-old woman in her first pregnancy attends for induction of labour at term +13. She had membrane sweeps at 40 and 41 weeks. She is examined and the cervix is found to be 2 cm dilated and 2 cm long with the fetal head engaged. She does not report any contractions.

What would be the preferred method of induction of labour?

- a) Amniotomy $\pm$ oxytocin (Syntocinon)
- b) Balloon catheter
- c) Membrane sweep
- d) Misoprostol
- e) Vaginal prostaglandin

29. A woman is admitted to the labour ward with intermittent lower abdominal pain and is found to be in preterm labour. Her uterus is contracting three times in 10 minutes and the cervix is 4 cm dilated.

Until which gestational age should magnesium sulfate be offered?

- a) 29 + 6 weeks
- b) 30 + 6 weeks
- c) 31 + 6 weeks
- d) 32 + 6 weeks
- e) 33 + 6 weeks

30. A 26-year-old woman is seen complaining of regular contractions (one every 10 minutes) at 30 + 3 weeks of gestation. A speculum examination is performed and the cervix appears long but slightly dilated. There is no history of ruptured membranes.

What investigation should be considered first in this situation?

- a) Fetal fibronectin
 - b) Full blood count (FBC) and C-reactive protein (CRP)
 - c) No test required – treat as preterm labour
 - d) Test for insulin-like growth factor-binding protein-1 (IGFBP-1) or placental alpha-microglobulin-1 (PAMG-1)
 - e) Transvaginal ultrasound
31. A 41-year-old woman is seen at 36 weeks of gestation. This is her first pregnancy, and a plan for induction of labour at 39 weeks has been made. She is anxious about induction of labour.

What intrapartum risk is increased for women in this age group who undergo induction of labour compared with expectant management?

- a) Caesarean section
 - b) Failed induction of labour
 - c) Fetal hypoxia
 - d) Instrumental delivery
 - e) No additional risk
32. A woman in labour requests an epidural for analgesia, but unfortunately during the siting of the epidural there is inadvertent puncture of the dura mater.

How likely is it that she will develop a postdural puncture headache?

- a) 5–10%
 - b) 15–25%
 - c) 30–45%
 - d) 70–80%
 - e) 100%
33. What is the most common cardiac adverse effect associated with the use of atosiban?
- a) A. Chest pain
 - b) B. Hypotension
 - c) C. Palpitations
 - d) D. Pulmonary oedema
 - e) E. Tachycardia

34. An Rh-negative mother early in pregnancy had normal levels of anti-D antibodies. At 36 weeks, the anti-c antibody titre reached 20. She delivered at 37 weeks of gestation.

The baby is at increased risk of which of the following?

- a) Early anemia
- b) Early jaundice
- c) Late anemia
- d) Late jaundice

35. A 36-year-old woman at 36 weeks' gestation was admitted to the hospital due to bleeding per vaginum caused by placenta praevia. She now has no bleeding. She has atypical antibodies in her blood.

How often should samples for crossmatching be sent?

- a) Twice per week
- b) Daily
- c) Once a week
- d) Once fortnightly
- e) Every 3 days

36. In monochorionic diamniotic (MCDA) twin pregnancy, monitoring to detect twin-to-twin transfusion syndrome (TTTS) starts at which gestational age?

- a) 12 weeks
- b) 24 weeks
- c) 16 weeks
- d) 28 weeks

37. An ultrasound picture shows a twin pregnancy at 14 weeks.

What is the best parameter to diagnose chorionicity?

- a) Concordance of fetal sex
- b) Number of placentae
- c) Thickness of intersecting membranes
- d) How the membrane is attached to the placenta
- e) Lambda sign

38. A pregnant lady, for the first time, was checked at 28 weeks and was found to have antibodies.

Which antibody at any level needs referral to the Fetal Medicine (FM) centre?

- a) Anti-D
- b) Anti-c
- c) Anti-K
- d) Anti-E

39. Which is the most common infection during early pregnancy responsible for symmetrical intrauterine growth restriction (IUGR), microcephaly, and calcium deposition in the brain?

- a) CMV
- b) Rubella
- c) Toxoplasmosis
- d) Syphilis

40. A primigravida with monochorionic diamniotic twin pregnancy presents with decreased fetal movements at 30 weeks. Ultrasound scan confirms death of one of the twins.

How will you manage her?

- a) Conservative management until delivery
- b) MRI for fetal brain
- c) Immediate delivery
- d) Reassure
- e) Emergency caesarean section

41. A pregnant woman has screening for Down syndrome at 11 weeks. Her laboratory results are as follows:

- Beta-hCG: Normal for gestation (values were given)
- Nuchal translucency (NT): Normal for gestation (values were given)
- PAPP-A: 0.39 (reference range: 0.25–0.40)
- Other values were also normal.

How will you manage her?

- a) Amniocentesis
- b) Chorionic villus sampling (CVS)
- c) Serial growth scans
- d) Cell-free fetal DNA (cffDNA)
- e) Reassurance

42. A woman presents for routine antenatal screening, which shows Anti-K antibodies positive with a titre of 1:64. The father of the baby is heterozygous for the K antigen.

What is the most appropriate next step?

- a) Amniocentesis
- b) Chorionic villus sampling (CVS)
- c) Cell-free fetal DNA (cffDNA)
- d) Ultrasound (US)
- e) Fetal blood sampling (FBS)

43. To which group of lymph nodes does a squamous cell carcinoma of the vulva initially spread?

- a) External iliac
- b) Femoral
- c) Inguinal
- d) Internal iliac
- e) Para-aortic

44. A 70-year-old woman presents with vulval itching and bleeding. On examination, a suspicious lesion is identified and an excision biopsy is performed. The lesion is confirmed as a squamous cell carcinoma with depth of invasion of <1 mm.

What is the likelihood of lymph node involvement?

- a) <1%
- b) 5%
- c) 10%
- d) 15%
- e) 20%

45. A 65-year-old woman presents with a history of vulval discomfort and soreness for 6 months. On examination, there is a 2.5 cm raised ulcerated area on the left labia majora which looks highly suspicious of vulval cancer.

What is the first-line investigation?

- a) Multiple punch biopsies with adjacent normal skin
- b) Sentinel lymph node biopsy
- c) Urgent CT scan
- d) Urgent MRI
- e) Wide local excision biopsy

46. Vulval cancers are relatively rare cancers with surgery as the mainstay of treatment. In recent years, a lot of emphasis has been given to sentinel node biopsy to decide management.

What is the role of sentinel node biopsy in the management of early vulval cancer?

- a) To decide interval of follow-up
- b) To decide on the need for lymph node resection
- c) To decide on the need for postoperative radiotherapy
- d) To evaluate for postoperative chemoradiotherapy
- e) To evaluate the need for radical vulvectomy

47. Primary vaginal cancer is rare. There were 281 cases of vaginal cancer in the United Kingdom in 2010. The most common causes of squamous cell vaginal cancer are HPV and irradiation.

What is the most common HPV type found in vaginal cancers?

- a) HPV 6
- b) HPV 11
- c) HPV 16
- d) HPV 18
- e) HPV 31

48. Recently, the prevalence of HPV-related VIN has increased significantly and consequently the incidence of vulval cancer in young women is rising.

What are the most common HPV serotypes found in vulval cancers?

- a) HPV 5 and 8
- b) HPV 6 and 11
- c) HPV 16 and 18
- d) HPV 31 and 33
- e) HPV 58 and 59

49. A 55-year-old patient has had a colposcopic examination of a suspicious well-circumscribed vulval lesion and vulvar intraepithelial neoplasia 3 is identified at histopathology.

What is the most appropriate next step in management? (Book – Magowan SBA)

- a) 5-Fluorouracil cream
- b) Imiquimod cream 5%
- c) Local excision
- d) Local destruction by laser
- e) Vulvectomy
- f) Cloquet or deep inguinal
- g) Internal iliac nodes
- h) External iliac nodes
- i) Superficial inguinal nodes
- j) Common iliac nodes

PAPER 5

1. A 74-year-old woman presents to rapid-access clinic with vulval soreness. Examination reveals a 2 cm mass on the right labia away from the midline. A biopsy of the lesion from the margin of the tumour reveals squamous cell carcinoma with depth of invasion <1 mm. The MRI of the pelvis reveals the same vulval mass with no other abnormality. Her case is subsequently discussed in the multidisciplinary team meeting.

The management of this patient involves which one of the following?

- a) Radical vulvectomy
 - b) Radical vulvectomy with bilateral groin lymphadenectomy
 - c) Radical vulvectomy with groin lymphadenectomy on the same side
 - d) Wide local excision of vulval lesion
 - e) Wide local excision of vulval lesion with groin lymphadenectomy on the same side
2. Which type of vulval intraepithelial neoplasia (VIN) is associated with the greatest risk of progression to vulval squamous cell carcinoma?
 - a) Differentiated type
 - b) Non-classical type
 - c) Undifferentiated type
 - d) Usual type (HPV-16)
 - e) Warty type (HPV-2)
 3. A 60-year-old woman is referred to the rapid access 2-week wait clinic with vulval itching and soreness. Vulval examination reveals small ivory-coloured slightly raised areas which join to form white patches in a figure-of-eight distribution. Vaginal introitus is narrowed with atrophy of the labia minora. Vulval mapping biopsies reveal lichen sclerosis.

Her associated risks include all of the following except which one condition?

- a) Increased risk of a personal history of autoimmune disorders
- b) Increased risk of a family history of autoimmune disorders
- c) An associated thyroid disorder
- d) An associated pernicious anaemia
- e) Vesiculobullous autoimmune disease of the anogenital site

4. A 40-year-old woman presents with severe vulval pruritus. Vulvoscopy reveals acetowhite areas following application of acetic acid. Vulval mapping biopsy reveals usual type (human papilloma virus [HPV] related) of VIN.

She can be treated with which one of the following methods?

- a) Radical vulvectomy
 - b) Simple vulvectomy
 - c) Therapeutic human papilloma virus vaccine
 - d) Interferon therapy
 - e) Local surgical excision
5. 176. A 26-year-old woman is seen in the combined obstetric cardiology booking clinic at 14 weeks of gestation. She has a history of tetralogy of Fallot that was repaired in childhood.

What is the main cardiac issue that she potentially faces in pregnancy?

- a) Left ventricular dysfunction
 - b) Paradoxical embolism
 - c) Profound cyanosis
 - d) Pulmonary hypertension
 - e) Right ventricular dysfunction
6. A 25-year-old woman is seen in the antenatal clinic at 7 weeks of gestation. She is seen regularly in the congenital heart disease clinic because of Eisenmenger's syndrome secondary to a ventricular septal defect.

What would be the most appropriate advice in terms of management?

- a) Bed rest and home oxygen therapy
- b) Commence oral labetalol
- c) Commence oral sildenafil
- d) Commence thromboprophylaxis with low-molecular-weight heparin (LMWH)
- e) Termination of pregnancy

7. A 28-year-old woman who is currently 12 weeks pregnant has been referred to a breast surgeon after finding a lump in the right breast. Following appropriate imaging and cellular analysis, she is thought to have a stage 1 cancer (no evidence of spread) that is positive for the human epidermal growth factor receptor 2 (HER2) and oestrogen receptor. She declines termination of pregnancy.

What first-line treatment is most likely to be offered?

- a) Conventional anthracycline chemotherapy
 - b) Local radioterapy with fetal shielding
 - c) Primary surgery
 - d) Tamoxifen
 - e) Trastuzumab
8. A woman presents at 28 weeks of gestation with itching. On examination, she is found to have urticarial-type papules and plaques on her abdomen and thighs. The woman states that she first noticed these lesions in her umbilicus. She also has four 1 cm blisters on her inner thighs. Liver function tests (LFTs) are normal. She is referred to a dermatologist.

What is the most likely diagnosis?

- a) Atopic eruption of pregnancy
 - b) Obstetric cholestasis
 - c) Pemphigoid gestationis
 - d) Polymorphic eruption of pregnancy
 - e) Psoriasis
9. A 36-year-old woman is seen in the booking clinic. She has a history of inflammatory bowel disease and is taking sulfasalazine 4 g/day and folic acid 5 mg/day.

What is the main fetal risk if she continues this treatment?

- a) Bloody diarrhoea in the newborn
- b) Exomphalos
- c) Intrauterine death
- d) Intrauterine growth restriction
- e) Nephrotoxicity

10. A woman who has sickle-cell disease is seen in the preconception clinic. Her vaccination history is reviewed.

How often should the pneumococcal vaccine be administered to ensure that she is protected?

- a) Annually
- b) Every 2 years
- c) Every 5 years
- d) Every 10 years
- e) Once only

11. A woman is screened within a clinical trial and is found to be positive for thyroid peroxidase antibodies but is euthyroid. She opts out of randomisation and becomes pregnant shortly afterwards.

By what factor is she at increased risk of preterm labour compared with women who do not have autoimmune thyroid disease?

- a) 1–1.5-fold
- b) 2–4-fold
- c) 6–8-fold
- d) 10–15-fold
- e) 20–30-fold

12. Which opiate should be avoided as analgesia in labour for pregnant women with epilepsy?

- a) Codeine
- b) Diamorphine
- c) Morphine
- d) Pethidine
- e) Tramadol

13. A 32-year-old woman with a body mass index (BMI) of 35 kg/m² has just delivered vaginally at term. She is a known carrier of a prothrombin gene mutation.

For how many days postnatally should she have thromboprophylaxis?

- a) Until mobile
- b) 3 days
- c) 7 days
- d) 10 days
- e) 6 weeks

14. 35-year-old woman is diagnosed with intrahepatic cholestasis of pregnancy and is commenced on therapy with ursodeoxycholic acid (UDCA). Unfortunately, there is no change in either symptoms or biochemical profile.

Which second-line drug should be considered?

- a) Chlorpheniramine
 - b) Cholestyramine
 - c) Dexamethasone
 - d) Rifampicin
 - e) Vitamin K
15. A woman with type 1 diabetes presents with suspected diabetic ketoacidosis (DKA) following a protracted period of vomiting.

Initial investigations gave the following results:

What would be the threshold value for serum ketones to confirm the diagnosis of DKA?

- a) 3 nmol/L
 - b) 30 nmol/L
 - c) 300 nmol/L
 - d) 3 mmol/L
 - e) 30 mmol/L
16. A 33-year-old woman who takes lithium for bipolar disorder is admitted in labour at 39 weeks of gestation. Vaginal examination reveals a fully effaced and 2 cm dilated cervix with intact membranes.

How should her lithium administration be managed in labour?

- a) Continue treatment with lithium throughout labour
 - b) Stop lithium and check plasma levels every 2 hours
 - c) Stop lithium and check plasma levels 12 hours after the last dose
 - d) Stop lithium and restart after birth
 - e) Substitute lithium with a benzodiazepine during labour
17. Which of the following is the most appropriate antihypertensive for a woman with chronic hypertension planning pregnancy?
- a) Ramipril
 - b) Labetalol
 - c) Enalapril
 - d) Losartan
 - e) Spironolactone

18. A 32-year-old woman at 16 weeks of gestation presents with a BP of 160/100 mmHg. Which is the first-line management?
- a) Aspirin 75–150 mg daily
 - b) Labetalol initiation
 - c) Bed rest and observation
 - d) Induction of labour
 - e) Hydralazine
19. When should aspirin be started in a pregnant woman with chronic hypertension to reduce the risk of pre-eclampsia?
- a) At 12 weeks
 - b) At 16 weeks
 - c) At 20 weeks
 - d) At 24 weeks
 - e) At 32 weeks
20. In a woman with pre-eclampsia at 34 weeks, which investigation is recommended to assess fetal wellbeing?
- a) Fetal MRI
 - b) Umbilical artery Doppler velocimetry
 - c) Amniocentesis
 - d) Serum AFP levels
 - e) CTG only
21. What is the advised duration for BP monitoring after delivery for women with pre-eclampsia?
- a) 1 week
 - b) 2 weeks
 - c) 4 weeks
 - d) 6 weeks
 - e) 12 weeks
22. Which blood test should be monitored weekly in a woman with pre-eclampsia managed conservatively at 34 weeks?
- a) Serum creatinine
 - b) Liver function tests
 - c) Platelet count
 - d) Coagulation profile
 - e) All of the above

23. A 32-year-old woman at 18 weeks' gestation with chronic hypertension is undergoing routine antenatal care. She is currently taking methyldopa. Her BP remains controlled at 135/85 mmHg. She expresses concerns about the effects of her medication. According to NICE NG133, what is the recommended plan for antihypertensive therapy as she approaches the third trimester?
- a) Continue methyldopa throughout pregnancy
 - b) Switch to labetalol after 20 weeks
 - c) Discontinue methyldopa and start nifedipine
 - d) Transition to enalapril at 28 weeks
 - e) Add amlodipine for better BP control
24. Which of the following management strategies is NOT recommended for IHCP?
- a) Weekly liver function tests
 - b) Vitamin K supplementation if indicated
 - c) Routine corticosteroids for inflammation
 - d) Consideration of early delivery if bile acids $>100 \mu\text{mol/L}$
 - e) Fetal monitoring
25. What is the recommended gestational age for delivery in women with IHCP and serum bile acids $>100 \mu\text{mol/L}$?
- a) 37 weeks
 - b) 38 weeks
 - c) 35–36 weeks
 - d) 39 weeks
 - e) 40 weeks
26. What is the most common cause of acute kidney injury in pregnancy?
- a) Haemorrhage
 - b) Hyperemesis gravidarum
 - c) Non-steroidal anti-inflammatory drugs (NSAIDs)
 - d) Pre-eclampsia
 - e) Urinary retention

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- d) Rifampicin
- e) Vitamin K

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- a) 3 nmol/L
- b) 30 nmol/L
- c) 300 nmol/L
- d) 3 mmol/L
- e) 30 mmol/L

39. What nodal involvement is a negative prognostic indicator of survival for cervical cancer?

- a) Axillary lymphadenopathy
- b) Inguinal lymphadenopathy
- c) Para-aortic lymphadenopathy
- d) Pelvic lymphadenopathy
- e) Supraclavicular lymphadenopathy

40. What is the treatment recommended for Stage IA1 cervical cancer?

- a) Cervical conisation (LLETZ, knife, LASER) in fertility-sparing subgroup
- b) Chemoradiotherapy
- c) Pelvic lymphadenectomy
- d) Radical hysterectomy with pelvic lymphadenectomy
- e) Radical trachelectomy

41. What FIGO stage does the following correspond to: “Invasive carcinoma ≥ 4 cm in greatest dimension” with the lesion limited to the cervix uteri?
- a) Stage IA1
 - b) Stage IB1
 - c) Stage IBIII (as shown in image)
 - d) Stage IBII
 - e) Stage IIA1
42. What imaging modality is the first line for staging of cervical cancer in pregnancy?
- a) Computed Tomography (CT)
 - b) Magnetic Resonance Imaging (MRI)
 - c) Positron Emission Tomography (PET)
 - d) Ultrasound Abd
 - e) omen & Pelvis
 - f) Ultrasound Pelvis
43. Which sub-type of cervical cancer is related to in utero exposure to Diethylstilbestrol?
- a) Adenosarcoma of cervix
 - b) Clear cell cervical carcinoma
 - c) Primary malignant melanoma of uterine cervix
 - d) Small cell cervical cancer
 - e) Squamous cell carcinoma
44. Which is not an important prognostic factor?
- a) Lympho-vascular space invasion (LVSI)
 - b) Metastases to pelvic or para-aortic nodes
 - c) Parity
 - d) Performance status of individual patient
 - e) Size of tumour
45. Gold standard treatment for Stage IAI to IBII
- a) Cervical conisation and pelvic lymphadenectomy
 - b) Chemoradiotherapy
 - c) Pelvic exenteration
 - d) Radical hysterectomy, bilateral salpingectomy $\pm$ bilateral oophorectomy with bilateral pelvic lymphadenectomy
 - e) Radical trachelectomy and pelvic lymphadenectomy

46. What would you advise a 28-year-old patient who is found to be HR-HPV positive with normal cytology?
- a) Re-screen for HR-HPV in 12 months
 - b) Re-screen for HR-HPV in 6 months
 - c) Refer to colposcopy
 - d) Routine recall in 3 years
 - e) Routine recall in 5 years
47. What is the treatment recommended for Stage IA1 cervical cancer?
- a) Cervical conisation (LLETZ, knife, LASER) in fertility-sparing subgroup
 - b) Chemoradiotherapy
 - c) Pelvic lymphadenectomy
 - d) Radical hysterectomy with pelvic lymphadenectomy
 - e) Radical trachelectomy
48. What would you advise a 25-year-old patient who is found to be HR-HPV positive with abnormal cytology?
- a) Re-screen for HR-HPV in 12 months
 - b) Re-screen for HR-HPV in 6 months
 - c) Refer to colposcopy
 - d) Routine recall in 3 years
 - e) Routine recall in 5 years
49. What would you advise a 31-year-old patient who has attended for her re-screen and is HR-HPV negative?
- a) Re-screen for HR-HPV in 12 months
 - b) Re-screen for HR-HPV in 6 months
 - c) Refer to colposcopy
 - d) Routine recall in 3 years
 - e) Routine recall in 5 years

PAPER 6

1. A 27-year-old nulliparous woman is seen in colposcopy following a smear report of severe dyskaryosis. Colposcopy reveals a transformation zone with large areas of dense acetowhite epithelium consistent with CIN3.

What is the most appropriate management for this patient?

- a) HPV testing of the smear
 - b) Loop excision of the cervical transformation zone
 - c) Repeat colposcopy in 12 months
 - d) Repeat smear in 6 months
 - e) Single punch biopsy from the transformation zone
2. A 34-year-old woman is referred for colposcopy by her GP with a cervical smear that shows 'mild dyskaryosis'. Her BMI is 35 and she has smoked 20 cigarettes a day since the age of 14. She has had four children, all normal vaginal deliveries, and has been using the combined oral contraceptive pill for the past 3 years. At colposcopy you note thin, smooth acetowhite lesions with well-demarcated margins. She is keen to discuss management with you.

Which of the following options is most suitable for her?

- a) Hysterectomy
- b) Knife cone biopsy
- c) Large loop excision of the transformation zone
- d) Laser cone biopsy
- e) Punch biopsy

3. A 29-year-old woman is referred to colposcopy by her GP. Her cervical smear shows 'moderate dyskaryosis'. Her BMI is 29. She has had two children, all normal vaginal deliveries, and has been using the combined oral contraceptive pill for the past 2 years. At colposcopy you note coarse vascular patterns with punctation and mosaicism and large dense acetowhite lesions with irregular margins. She is keen to discuss management with you.

Which of the following options is most suitable for her?

- a) Follow up in colposcopy clinic
 - b) Hysterectomy
 - c) Knife cone biopsy
 - d) Large loop excision of the transformation zone
 - e) Punch biopsy
4. Ovarian torsion should best be managed by:
- a) Conservative management with antibiotics, fluids and analgesia
 - b) Oophorectomy
 - c) Untwisting
 - d) Untwisting and fixation of the ovary to the pelvic side wall
5. A 35-year-old woman develops a fever and hypotension following a cesarean section. You suspect sepsis. What organism is most commonly associated with rapid deterioration in postpartum sepsis?
- a) *Escherichia coli*
 - b) *Staphylococcus epidermidis*
 - c) Group A *Streptococcus*
 - d) *Klebsiella pneumoniae*
 - e) *Candida albicans*
6. Which of the following is not included in the Sepsis 6 bundle?
- a) Administer high-flow oxygen
 - b) Give IV fluids
 - c) Prescribe thromboprophylaxis
 - d) Take blood cultures
 - e) Monitor urine output

7. A woman presents with signs of maternal sepsis. Her serum lactate is 3.5 mmol/L despite fluid resuscitation, and she remains hypotensive. What is the next best step?
- a) Continue IV fluids and monitor
 - b) Start LMWH and discharge
 - c) Repeat MEOWS in 4 hours
 - d) Refer to critical care
 - e) Start oral antibiotics
8. Which of the following is the most important predictor of poor outcome in maternal sepsis?
- a) Presence of fever
 - b) Anaemia in pregnancy
 - c) Delay in antibiotic administration
 - d) Raised WCC
 - e) Multiparity
9. Which of the following is true regarding the Modified Obstetric Early Warning Score (MEOWS)?
- a) It is only used in the postpartum period
 - b) Red triggers indicate that MEOWS should be discontinued
 - c) It should be recorded every 6 hours
 - d) Red triggers prompt urgent senior review
 - e) It includes fetal heart rate monitoring
10. A woman 3 days postpartum has ongoing fever and right iliac fossa pain. What investigation is most appropriate to detect retained products of conception?
- a) CT abdomen
 - b) MRI pelvis
 - c) Plain abdominal X-ray
 - d) Transvaginal ultrasound
 - e) Chest X-ray
11. What is the recommended initial fluid resuscitation dose in maternal sepsis?
- a) 5 mL/kg
 - b) 10 mL/kg
 - c) 15 mL/kg
 - d) 20 mL/kg
 - e) 30 mL/kg

12. Which of the following antibiotic practices is correct in maternal sepsis?
- a) Wait for cultures before starting antibiotics
 - b) Use oral antibiotics if mild symptoms
 - c) Delay antibiotics until imaging is complete
 - d) Start broad-spectrum IV antibiotics immediately
 - e) Continue antibiotics only if cultures are positive
13. Which of the following is most appropriate to reduce the incidence of puerperal sepsis?
- a) Universal GBS treatment in all pregnancies
 - b) Routine antibiotics for all vaginal deliveries
 - c) Aseptic technique during vaginal examinations
 - d) Postpartum antibiotics for all women
 - e) Daily MEOWS for 7 days post-partum
14. Women with various medical conditions were seen in an antenatal clinic. Which condition would pose the highest risk of serious maternal morbidity or maternal death?
- a) Wolff-Parkinson-White syndrome
 - b) Repaired tetralogy of Fallot
 - c) Heart transplant recipient
 - d) Marfan syndrome with an aortic root measurement of 4 cm
 - e) Mechanical prosthetic heart valve
15. A 25-year-old primiparous woman is referred to the antenatal clinic for booking at 12 weeks of gestation. The reason for referral is that her father and brother have a history of severe haemophilia A. She wishes to be investigated to see if her baby is affected. What is the most appropriate initial investigation to determine the risk of the baby having haemophilia A?
- a) Amniocentesis at 16 weeks of gestation
 - b) Chorionic villus sampling as soon as possible
 - c) Factor VIII assay of the woman's blood to determine her carrier status
 - d) Free fetal DNA in maternal circulation to determine fetal sex
 - e) Quantitative PCR to determine if the woman is a carrier of the haemophilia A gene

16. A woman presents to the antenatal clinic with palpitations. She describes these as episodes of a fast heartbeat which last about 5–10 minutes and occur roughly once a week. They can come on suddenly at any time. She hasn't blacked out with them, but feels anxious when they happen. She hasn't had any heart problems before, but her father has had a heart attack aged 55. There is no other family history of note.
- a) Atrial fibrillation
 - b) Supraventricular tachycardia
 - c) Ventricular tachycardia
 - d) Ectopic beats
 - e) Anxiety
17. An obese 39-year-old smoker is admitted with chest pain at 34 weeks' gestation. She had been offered LMWH thromboprophylaxis but declined as she doesn't want to self-inject. The pain came on suddenly and has been present for 90 minutes so far. It radiates to her back, between her shoulder blades. She also has some pins and needles in one arm. The midwife noticed that her blood pressure is different in the two arms. On examination a harsh systolic murmur is heard. What is the most likely diagnosis?
- a) Costochondritis
 - b) Aortic dissection
 - c) Indigestion
 - d) Myocardial ischaemia
 - e) Myocardial ischaemia
18. A woman with mitral stenosis and atrial fibrillation asks your advice about contraception. She is anticoagulated because of her atrial fibrillation. What would you advise?
- a) Long-acting progesterone implant, e.g. Nexplanon
 - b) Depo-Provera
 - c) Progesterone-only pill
 - d) Mirena IUS
 - e) Combined oral contraceptive pill

19. A 40-year-old woman presents to the emergency department with acute chest pain. She is 28 weeks pregnant with DCDA twins conceived through IVF. She has a BMI of 40.

Which ECG change will best support a diagnosis of myocardial infarction?

- a) Infero-lateral T wave inversion
- b) Q wave in lead III
- c) Right bundle branch block
- d) ST depression
- e) ST elevation

20. A 20-year-old woman attends the obstetric cardiology clinic with her partner for pre-pregnancy counselling. She has a repaired tetralogy of Fallot (ToF) and is contemplating her first pregnancy. She is asymptomatic and her recent echocardiogram showed mild pulmonary regurgitation.

What advice would you give her regarding her likely pregnancy outcome?

- a) A planned caesarean section at term is recommended
- b) Likely to tolerate pregnancy well
- c) May develop arrhythmias and left heart failure
- d) There is a significant chance of needing admission for bed rest and diuretics
- e) Will require a fetal cardiac scan as the overall risk of the fetus having a congenital heart disease is 25%

21. Five women come to a maternal medicine clinic.

- a) Alice has had a bioprosthetic aortic valve replacement.
- b) Bushra has mitral regurgitation.
- c) Camelia has aortic regurgitation.
- d) Della has mild aortic stenosis.
- e) Elaine has a mechanical prostheti...

22. A 20-year-old woman attends the obstetric cardiology clinic with her partner for pre-pregnancy counselling. She has a repaired tetralogy of Fallot (ToF) and is contemplating her first pregnancy. She is asymptomatic and her recent echocardiogram showed mild pulmonary regurgitation.

What advice would you give her regarding her likely pregnancy outcome?

- a) A planned caesarean section at term is recommended
- b) Likely to tolerate pregnancy well
- c) May develop arrhythmias and left heart failure
- d) There is a significant chance of needing admission for bed rest and diuretics
- e) Will require a fetal cardiac scan as the overall risk of the fetus having a congenital heart disease is 25%

23. A 25-year-old primigravida at 8 weeks of gestation presents to your clinic. She has well-controlled epilepsy and has been taking lamotrigine (antiepileptic drug) for the last year. She asks you for advice on continuing her antiepileptic drug during pregnancy.

During counselling, what is the most appropriate advice?

- a) Change lamotrigine to another antiepileptic drug
- b) Increase the dose of lamotrigine during her current pregnancy and reduce it again postnatally
- c) Keep the woman on the same dose of lamotrigine
- d) Reduce the dose of lamotrigine during pregnancy and increase again postnatally

24. A 35-year-old woman, P1+4, had a normal delivery 17 days ago. She now presents to A&E with a sudden onset of severe headache which started 2 hours ago. She had a seizure an hour ago and now has hemiparesis. Her level of consciousness is slightly impaired. Background history includes four early miscarriages and a family history deep vein thrombosis in her mother. She has a BMI of 44. An urgent CT showed multiple collateral veins with an 'empty delta sign'.

What is the most likely diagnosis?

- a) Cerebral venous thrombosis
- b) Epilepsy
- c) Idiopathic Intracranial Hypertension
- d) Migraine
- e) Subarachnoid Haemorrhage

25. A 28-year-old woman in her third trimester presents with weakness on one side of the face for 24 hours. On examination, there are signs of unilateral seventh cranial nerve weakness. There are no vesicular lesions in the external auditory meatus or soft palate.

What is the most likely treatment option?

- a) Acyclovir
- b) Antibiotics
- c) Anticoagulants
- d) Aspirin
- e) Prednisolone

26. You have been asked to prescribe the therapeutic dose of LMWH for a 25-year-old woman who gave birth vaginally 6 hours ago. She had a DVT 6 weeks ago. Her labour was induced at 40 weeks because of recurrent episodes of reduced fetal movement. She needed syntocinon for slow progress in the first stage and used Entonox, diamorphine and epidural for analgesia. When is the safest time to restart her on LMWH after removing the epidural catheter (there are no concerns with bleeding)?
- a) 2 hours
 - b) 3 hours
 - c) 4 hours
 - d) 6 hours
 - e) 8 hours
27. A woman with known sickle cell trait attends an antenatal booking clinic. What antenatal complication is significantly more common compared to uncomplicated pregnancies?
- a) Chest infection
 - b) Intrauterine growth restriction
 - c) Major postpartum haemorrhage
 - d) Placental abruption
 - e) Urinary tract infection
28. A primigravida with a BMI of 34 kg/m² presents at 21 weeks' gestation with severe throbbing headache and vomiting. She gives a history of similar headaches in the past. On examination, her blood pressure is found to be normal with no proteinuria and the deep tendon reflexes are normal. A neurological review is arranged as there are no localising neurological signs except mild bilateral sixth nerve paresis.
- What is the most likely diagnosis?
- a) Benign idiopathic intracranial hypertension
 - b) Depression
 - c) Migraine
 - d) Pre-eclampsia
 - e) Space occupying lesion

29. A 39-year-old Type 2 diabetic of Asian origin presents with an acute onset of epigastric pain, chest pain and breathlessness at 30 weeks' gestation. She is gravida 5 para 4 (four normal vaginal deliveries), and has a BMI of 41 kg/m². This was an unplanned pregnancy. Her diabetes is poorly controlled and her haemoglobin was 85 g/L at 28 weeks. She is on oral iron and there is a history of familial hyperlipidaemia.

What is the most likely working diagnosis for this mother?

- a) Acute myocardial infarction (AMI)
- b) Chest infection
- c) Pulmonary embolism
- d) Pulmonary oedema
- e) Rib flaring/musculoskeletal pain

30. An 18-year-old primigravida, a recent immigrant from West Africa, is admitted at 30 weeks' gestation with severe pain in her hips. A diagnosis of acute painful sickle cell crisis has been made.

What is the most important immediate management?

- a) Admission and rapid assessment followed by morphine for pain relief
- b) Admission and rapid assessment followed by non-steroidal anti-inflammatory drugs
- c) Admission and rapid assessment followed by oxygen and hydration without any analgesics
- d) Admission and rapid assessment followed by pethidine for pain relief
- e) Observation and discharge home with codeine and paracetamol

31. You see a 23-year-old woman, who is known to have beta thalassaemia major. She underwent splenectomy at the age of 7. Her platelet count is $660 \times 10^9/L$ at booking.

What antenatal thromboprophylaxis is recommended?

- a) Low-dose aspirin 75 mg/day
- b) LMWH
- c) Low-dose aspirin 75 mg/day and LMWH
- d) LMWH for 6 weeks postnatally

32. You see a 30-year-old para 1 in the antenatal clinic. She is found to have a platelet count of $85 \times 10^9/L$ on routine screening at 28 weeks' gestation. This is her second pregnancy; her first child was delivered at term by caesarean section for breech presentation. She reports good fetal movements and has no history of bruising or bleeding.

Which of the following conditions could not explain her thrombocytopenia?

- a) Alloimmune thrombocytopenia
 - b) Gestational thrombocytopenia
 - c) Immune thrombocytopenic purpura
 - d) Pre-eclampsia
 - e) Antiphospholipid syndrome
33. The midwife on the postnatal ward asks you to make a thromboprophylaxis plan for a 21-year-old woman with sickle cell disease. She is day 1 postnatal following an elective caesarean section for intrauterine growth restriction and has no other risk factors.

Which of the following is the correct plan?

- a) LMWH while in hospital
 - b) LMWH while in hospital and 7 days post-discharge
 - c) LMWH while in hospital and 6 weeks post-discharge
 - d) UFH while in hospital
 - e) UFH while in hospital and for 7 days post-discharge
34. A 28-year-old nulliparous woman with sickle cell disease (SCD) attends the preconception clinic for advice as she wishes to start her family. Her husband's haemoglobinopathy screen was normal (HbAA). You have reviewed her vaccination history and noted that she had Haemophilus influenzae type b, conjugated meningococcal C vaccine, pneumococcal vaccine and hepatitis B vaccines previously (5 years ago), and influenza vaccine 8 months ago.

Which one of the vaccines would you recommend her to have preconceptually?

- a) Haemophilus influenzae type b vaccine
- b) Conjugated meningococcal C vaccine
- c) Hepatitis B vaccine
- d) Pneumococcal vaccine
- e) Influenza vaccine

35. A 30-year-old nulliparous woman with sickle cell disease (SCD) attends your clinic for preconception advice. You have requested the following tests to assess for the chronic disease complications prior to stopping contraception.

Which one of these screening tests is not indicated yearly?

- a) Pulmonary function tests
- b) Renal function tests
- c) Liver function tests
- d) Retinal screening
- e) Red cell antibody screening

36. A 25-year-old woman with transfusion-dependent beta thalassaemia has been trying to conceive and undergoing ovulation induction.

Which one of the following statements is true with regards to young women with beta thalassaemia major?

- a) Diabetes is the most common endocrine complication
- b) Hyperthyroidism is a known complication
- c) Desferrioxamine can be safely used throughout pregnancy
- d) Pneumococcal vaccine should be given annually
- e) Cardiac failure is the primary cause of death in more than 50% of cases

37. A 26-year-old nulliparous woman at 36 weeks' gestation was diagnosed as having idiopathic immune thrombocytopenia (ITP). Her recent platelet count was $70 \times 10^9/L$.

Which one of the following statements is true?

- a) Should be treated with immunosuppressants
- b) Regional anaesthesia is contraindicated
- c) Instrumental delivery is contraindicated
- d) Deliver by caesarean section at 37 weeks
- e) Neonatal thrombocytopenia occurs in 25% of cases

38. A 28-year-old woman with sickle cell disease is 16 weeks pregnant. She attends the antenatal clinic and is seen jointly by the haematologist and the obstetrician. She has been taking folic acid since the beginning of her pregnancy. She is advised to attend her general practitioner to obtain a substance that is a prophylactic measure that she has not had in the last 12 months.

- a) Penicillin
- b) Influenza vaccine
- c) Refer to haematologist
- d) Folic acid 5 mg
- e) Hydroxycarbamide (hydroxyurea)

39. A 24-year-old woman with sickle cell disease is admitted for induction of labour at 38 weeks' gestation in her first pregnancy that is otherwise uncomplicated. Three hours after commencement of intravenous oxytocin, her oxygen saturation drops to 93%.

What is the most appropriate immediate management?

- a) Administer oxygen therapy and check arterial blood gases
 - b) Administer oxygen therapy and intravenous antibiotics
 - c) Category 1 caesarean section with general anaesthesia (GA)
 - d) Category 2 caesarean section with regional analgesia
 - e) Stop the oxytocin infusion
40. You see a 22-year-old para 0 with systemic lupus erythematosus for preconception counselling. She has had no flares for the last 12 months. Her antibodies screen is negative for anti-Ro/La antibodies, and there is no concurrent antiphospholipid syndrome. She is keen to be pregnant and asks you about the safety of immunosuppressant drugs during pregnancy.

Which one of the following drugs does not cross the placenta?

- a) Azathioprine
 - b) Methotrexate
 - c) Mycophenolate mofetil
 - d) Cyclophosphamide
 - e) Ciclosporin
41. You see a 30-year-old para 3 at 31 weeks' gestation in your day assessment unit. She presents with skin rash and itching. On examination, there are erythematous papules and vesicles all over the abdomen including the umbilicus, limbs, palms and soles.

What is the most likely diagnosis?

- a) Atopic eruption of pregnancy
- b) Pemphigoid gestationis
- c) Polymorphic eruption of pregnancy
- d) Erythema nodosum
- e) Pityriasis rosea

42. A 21-year-old woman comes to the outpatient clinic requesting testing for gonorrhoea as she read a poster about gonorrhoea infection. She has had three sexual partners in the last year but uses condoms for contraception.

What tests should you offer her?

- a) Gonorrhoea only.
 - b) Gonorrhoea and chlamydia.
 - c) Gonorrhoea, chlamydia, HIV and syphilis.
 - d) Gonorrhoea, chlamydia, HIV and human papilloma virus (HPV).
 - e) Gonorrhoea, chlamydia, HIV and hepatitis C virus (HCV).
43. A 21-year-old woman comes to the genitourinary medicine clinic complaining of vaginal discharge. Vaginal high-swab results show that she has bacterial vaginosis. She asks you about treatment of her sexual partner.

Which infection needs treatment of an asymptomatic sexual partner?

- a) Bacterial vaginosis.
 - b) Candidiasis.
 - c) Human papilloma virus.
 - d) Herpes simplex virus.
 - e) Trichomonas vaginalis.
44. A 24-year-old woman comes to the genitourinary medicine clinic complaining of small multiple groups of painful vulval ulcers. On examination, the base of the ulcer was erythematous and inguinal lymph nodes were painful.

What is the most likely diagnosis?

- a) Chancroid.
 - b) Granuloma inguinale.
 - c) Herpes simplex virus (HSV).
 - d) Lymphogranuloma venereum.
 - e) Syphilis.
45. A 24-year-old woman comes to the genitourinary medicine clinic complaining of multiple painful ulcers on the vulval area. On examination, the ulcers are sharply circumscribed with a yellow exudate in the base. There are also painful inguinal lymph nodes on the left side.

What is the most likely causative organism?

- a) Calymmatobacterium granulomatis.
- b) Chlamydia trachomatis.
- c) Haemophilus ducreyi.
- d) HSV-type 2.
- e) Treponema pallidum

46. A young woman presents to the genitourinary medicine clinic. After a swab was taken from the endocervix, microscopic examination reveals a Gram-negative diplococcus.

What organism looks like this under a microscope?

- a) *Actinomyces israelii*.
 - b) *Chlamydia trachomatis*.
 - c) *Haemophilus ducreyi*.
 - d) *Neisseria gonorrhoea*.
 - e) *Trichomonas vaginalis*.
47. A 20-year-old pregnant woman presented to the genitourinary medicine clinic with anogenital warts. She is diagnosed with human papillomavirus (HPV) infection—type 11.

What are her treatment options?

- a) 5-fluorouracil.
- b) Cryotherapy.
- c) Imiquimod.
- d) Podophylline.
- e) Trichloroacetic acid.

PAPER 7

1. A 20-year-old pregnant woman presented to the genitourinary medicine clinic two weeks previously and was found to have a chlamydia infection. She received azithromycin 1 g as a single dose. You arranged for contact tracing.

What is the next step?

- a) Follow-up after six months.
 - b) Full STI screen.
 - c) Nothing to be done.
 - d) Test of cure during this visit.
 - e) Test of cure after five weeks.
2. Gonorrhoea most commonly causes the following except for which one?
- a) Urethritis.
 - b) Proctitis.
 - c) Conjunctivitis.
 - d) Pharyngitis.
 - e) Endocarditis.
3. A 28-year-old woman attends antenatal clinic at 29 weeks of gestation. She recently had visited a sexual health clinic for investigation of her painless vulval ulcer and inguinal lymphadenopathy.

What treatment would be appropriate for her from the following options?

- a) Benzathine penicillin G single dose as first-line therapy.
- b) Azithromycin single dose as first-line therapy.
- c) Two doses of benzathine penicillin G to be given 1 week apart.
- d) Benzathine penicillin G three weekly doses as first-line therapy.
- e) Tetracycline 100 mg three times a day for 14 days.

4. A 29-year-old woman attends antenatal clinic at 28 weeks of gestation. She gives a history of syphilis 2 years ago. She has recently been diagnosed with late syphilis and now advised to have a cerebrospinal fluid (CSF) examination test.

The indications for CSF examination include all of the following except for which one?

- a) Ophthalmic signs and symptoms.
 - b) Syphilis treatment failure.
 - c) Neurological signs and symptoms.
 - d) Cardiovascular signs and symptoms.
 - e) HIV infection with late latent syphilis.
5. Year-old woman comes to the accident and emergency unit complaining of bilateral lower abdominal pain. On examination, her temperature is 38.5°C with bilateral adnexal tenderness. She tested negative for gonorrhoea and chlamydia the previous week.

What is the management for this woman?

- a) Reassure and discharge her.
 - b) Reassure, give pain killers and ask to repeat gonorrhoea and chlamydia testing in one week.
 - c) Repeat tests for gonorrhoea and chlamydia, and start treatment according to the results.
 - d) Start empirical IV antibiotic treatment.
 - e) Start empirical oral antibiotic treatment.
6. Vasectomy failure rate is quoted as approximately 1 in 2000 (0.05%) after clearance has been given. By how many months postprocedure should the vasectomy be considered a failure if motile sperm are still observed in a fresh semen sample?
- a) 3 months
 - b) 4 months
 - c) 5 months
 - d) 6 months
 - e) 7 months
7. A 21-year-old woman comes to the accident and emergency unit complaining of bilateral lower abdominal pain and fever. On examination, her temperature is 38.2°C with bilateral adnexal tenderness.

What is your first line of investigation?

- a) Endocervical swab for gonorrhoea and chlamydia.
- b) HIV antibody test.
- c) Pelvic ultrasound.
- d) Pregnancy test.
- e) Total leucocyte count.

8. A 21-year-old woman comes to the accident and emergency unit complaining of bilateral lower abdominal pain. On examination, her temperature is 38.5°C with bilateral adnexal tenderness. She tested negative for gonorrhoea and chlamydia the previous week.

What is the management for this woman?

- a) Reassure and discharge her.
 - b) Reassure, give pain killers and ask to repeat gonorrhoea and chlamydia testing in one week.
 - c) Repeat tests for gonorrhoea and chlamydia, and start treatment according to the results.
 - d) Start empirical IV antibiotic treatment.
 - e) Start empirical oral antibiotic treatment.
9. A 28-year-old patient is referred from the A&E department with lower abdominal pain and vaginal discharge. On examination she has a temperature of 37.3°C, a pulse of 86 bpm and a BP of 120/83 mmHg. Her abdomen is slightly tender in the LIF region. On vaginal examination there is a mild corresponding adnexal tenderness, the IUCD threads are seen and a swab of mucopurulent discharge is taken. She mentions that she has a new sexual partner and has not used barrier contraception.

What is the most appropriate next step in her management?

- a) Intravenous PID-targeted antibiotics + IUCD removal immediately.
 - b) Oral PID-targeted antibiotics + IUCD removal immediately.
 - c) Oral PID-targeted antibiotics and, if no improvement in symptoms, remove IUCD in 24 hours.
 - d) Oral PID-targeted antibiotics and, if no improvement in symptoms, remove IUCD in 48 hours.
 - e) Oral PID-targeted antibiotics and, if no improvement in symptoms, remove IUCD in 72 hours.
10. To which group of lymph nodes does a squamous cell carcinoma of the vulva initially spread?
- a) External iliac
 - b) Femoral
 - c) Inguinal
 - d) Internal iliac
 - e) Para-aortic

11. A 70-year-old woman presents with vulval itching and bleeding. On examination, a suspicious lesion is identified and an excision biopsy is performed. The lesion is confirmed as a squamous cell carcinoma with depth of invasion of <1 mm.

What is the likelihood of lymph node involvement?

- a) <1%
 - b) 5%
 - c) 10%
 - d) 15%
 - e) 20%
12. From which type of tumour does a secondary tumour of the ovary most commonly originate?
- a) Breast
 - b) Colon
 - c) Endometrium
 - d) Lung
 - e) Pancreas
13. A 65-year-old woman presented with lower abdominal pain and bloating. A pelvic ultrasound scan demonstrated a complex ovarian cyst and this, with a serum CA125, gave a Risk of Malignancy Index (RMI) score of 280.
- What further imaging is now required?
- a) CT of abdomen and pelvis
 - b) CT of pelvis
 - c) MRI of abdomen and pelvis
 - d) MRI of pelvis
 - e) Positron emission tomography (PET)-CT of thorax, abdomen and pelvis
14. Which type of vulval intraepithelial neoplasia (VIN) is associated with the greatest risk of progression to vulval squamous cell carcinoma?
- a) Differentiated type
 - b) Non-classical type
 - c) Undifferentiated type
 - d) Usual type (HPV-16)
 - e) Warty type (HPV-2)

15. A 62-year-old woman is taking tamoxifen following surgery for breast cancer. She has experienced some vaginal bleeding. A transvaginal ultrasound scan measures her endometrial thickness as 7 mm.

How should this be investigated?

- a) Dilatation and curettage
- b) Hysteroscopy and targeted biopsy
- c) MRI scan
- d) No investigation required
- e) Pipelle endometrial biopsy

16. What is the estimated reduction in risk of ovarian cancer for each year of use of the combined oral contraceptive pill (COCP)?

- a) A. 2%
- b) B. 7%
- c) C. 12%
- d) D. 17%
- e) E. 22%

17. In which age group do malignant ovarian germ cell tumours (MOGCTs) most commonly occur?

- a) 0–20 years
- b) 21–40 years
- c) 41–60 years
- d) 61–80 years
- e) **≥81 years**

18. What is the strongest known risk factor for ovarian cancer?

- a) Family history of breast cancer
- b) Family history of ovarian cancer
- c) Fertility treatment
- d) Nulliparity
- e) Smoking

19. What is the current recommendation regarding screening for ovarian cancer in women with no family history of the disease?
- a) Annual calculation of RMI
 - b) Annual pelvic ultrasound scan
 - c) Annual serum CA125
 - d) Annual serum CA125 and pelvic ultrasound scans on alternate years
 - e) No screening recommended
20. For women who are carriers of a BRCA gene mutation and go on to have risk-reducing surgery (bilateral salpingo-oophorectomy), what is the likelihood of the subsequent development of a primary peritoneal cancer?
- a) 0.5%
 - b) 2%
 - c) 7%
 - d) 12%
 - e) 15%
21. Which subtype of ovarian cancer is most commonly associated with bowel obstruction?
- a) Brenner tumour
 - b) Dysgerminoma
 - c) Epithelial cancer
 - d) Sex-cord stromal tumour
 - e) Teratoma
22. Timing of colposcopy in pregnancy in suspected Ca Cx.
- a) Late first trimester or late second trimester
 - b) Early first trimester or early second trimester
 - c) Early first trimester or late second trimester
 - d) Late first trimester or late second trimester
23. Investigation of choice for staging Ca Cx in pregnancy is:
- a) USG whole abdomen
 - b) USG of pelvis
 - c) MRI of pelvis
 - d) CT whole abdomen
 - e) MRI of whole abdomen

24. Treatment of choice in stage IA1 without LVSI in pregnancy with Ca Cx is:
- a) Simple trachelectomy
 - b) Radical trachelectomy
 - c) Cone biopsy
 - d) Radical hysterectomy with bilateral salpingectomy
 - e) Radical hysterectomy without bilateral salpingectomy
25. Timing of cone biopsy in pregnancy:
- a) Between 20–24 weeks
 - b) 14–20 weeks
 - c) 14–18 weeks
 - d) 10–14 weeks
 - e) 18–24 weeks
26. How much gap should be between chemotherapy and caesarean section?
- a) 6 weeks
 - b) 4 weeks
 - c) 3 weeks
 - d) 8 weeks
 - e) 2 weeks
27. Breast-feeding allowed after how many weeks after chemotherapy?
- a) 6 weeks
 - b) 4 weeks
 - c) 3 weeks
 - d) 8 weeks
 - e) 2 weeks
28. A compound belonging to the transforming growth factor- β (TGF- β) superfamily, produced by both the Sertoli cells of the testis and granulosa cell tumours of the ovary.
- Options:
- a) Cancer antigen 19-19
 - b) Epithelial tumor antigen
 - c) Inhibin
 - d) Oestriol
 - e) LDH

29. A steroid that is almost undetectable in the non-pregnant female, but whose levels rise >1000-fold during pregnancy.

Options:

- a) CA 19-9
- b) Inhibin
- c) Oestriol
- d) Estradiol
- e) CEA

30. A 90-year-old woman is diagnosed with vulval cancer. Imaging suggests metastases to both inguinofemoral and pelvic lymph nodes.

Options:

- a) 4B
- b) IC3
- c) 1A
- d) 4A

31. A 60-year-old woman has a laparoscopic bilateral oophorectomy for a persistent ovarian cyst. Her serum CA125 is 50 IU/ml. The ovarian capsule is noted to be intact, but during the course of the operation, the cyst ruptures. Peritoneal washings prior to the rupture are clear. The contralateral ovary is normal. Histology confirms an ovarian carcinoma.

Options:

- a) 1C1
- b) 3A2
- c) 1C3
- d) 1B

32. A 28-year-old woman attends her GP surgery for a routine cervical smear. The examination is difficult and an 'inadequate' result is returned.

Options:

- a) Refer to colposcopy
- b) Repeat cervical cytology in 3 months' time
- c) Repeat cervical cytology in 6 months' time
- d) Return to routine recall

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33. A 35-year-old woman attends her GP surgery for a cervical smear having never had a smear in the past. A result of high-grade dyskaryosis is returned.

What is the most appropriate management?

- a) Perform colposcopic treatment
- b) Perform human papillomavirus (HPV) test of cure
- c) Perform HPV triage testing
- d) Refer to colposcopy

34. A 45-year-old woman complains of intermenstrual bleeding for the past 6 months. Past history includes 6 normal vaginal deliveries and hypertension and last smear was over 5 years ago. On speculum examination, there is a raised 2 cm friable area on the cervix.

What is the most likely diagnosis?

- a) Cervical cancer
- b) Cervical ectropion
- c) Cervical polyp
- d) Cervical warts

35. A 53-year-old woman is diagnosed with stage IA1 cervical squamous cell carcinoma after histological, clinical and radiological assessment.

What is the most appropriate management plan?

- a) Conisation
- b) Modified radical hysterectomy with removal of lymph nodes
- c) Radical trachelectomy
- d) Total abdominal hysterectomy with bilateral salpingo-oophorectomy
- e) Total abdominal hysterectomy with conservation of ovaries

36. A 35-year-old woman is diagnosed with stage IB1 cervical squamous cell carcinoma of the cervix on histological and clinical assessment.

What is the most appropriate radiological investigation for this patient?

- a) CT scan of abdomen and pelvis
- b) CT scan of chest, abdomen and pelvis
- c) MRI of abdomen and pelvis
- d) PET CT scan

37. A 25-year-old para 0, who wished to preserve future fertility, underwent a cervical conization after an unsatisfactory colposcopy. The conization specimen demonstrated an invasive carcinoma of the cervix infiltrating 2.5 mm below the basement membrane. There was no evidence of lymphovascular space involvement, and the margins of the cone were free of dysplasia or carcinoma.

What would be the best strategy of management for this patient?

- a) External beam radiotherapy
- b) External beam radiotherapy followed by brachytherapy
- c) No further therapy
- d) Radical hysterectomy
- e) Simple hyst

38. Jane Smith, a 35-year-old patient with a positive BRCA1 mutation and no previous surgeries. At what age should risk-reducing ovarian surgery be considered in this patient to minimize the risk of developing ovarian cancer?

- a) 30 to 35 years
- b) 35 to 40 years
- c) 45 to 50 years
- d) 33 to 37 years

39. During pregnancy, what investigations would you recommend for Sarah Johnson, a 32-year-old woman with a history of breast cancer treated with doxorubicin before her pregnancy, to monitor her health and ensure the well-being of both her and her baby?

- a) Echo
- b) Mammography
- c) CT Scan
- d) MRI of breast

40. Emily Thompson, a 13-year-old girl presents with a solid ovarian tumor on the left ovary, a normal right ovary, and laboratory findings showing normal β -hCG and CA-125 levels but elevated AFP and LDH. What is the most likely diagnosis for her condition?

- a) Mature teratoma
- b) Yolk sac tumour
- c) Seminoma
- d) Dysgerminoma

41. Emily Thompson, a primigravida at 32 weeks of gestation, who was diagnosed during routine cervical screening. The tumor is confined to the cervix and measures 4 cm in greatest dimension. There is no involvement of the lower uterine segment or parametrial invasion. How would you manage her case to ensure both her well-being and the optimal management of her cervical cancer in consideration of her pregnancy?
- a) Trachelectomy and LSCS
 - b) Continue pregnancy and deliver by CS then lymphadenectomy
 - c) Immediate CS and hysterectomy
 - d) Immediate CS and radical hysterectomy and pelvic LN dissection
42. Linda Davis, 50 years old, underwent Total Abdominal Hysterectomy (TAH) + bilateral salpingo-oophorectomy. Her histopathology confirmed endometrioid grade 2 cancer with invasion of more than 50% of the myometrium only. What would be the next appropriate step in the management of Linda Davis's condition?
- a) ERB plus brachytherapy
 - b) Brachytherapy
 - c) Nothing
 - d) Radiotherapy
43. In the case of Mrs. Johnson, a post-menopausal woman presenting with a suspected ovarian mass, what would be the best imaging modality to detect and evaluate the ovarian mass?
- a) PET scan
 - b) USG
 - c) MRI
 - d) Pelvic examination
44. A woman in her 40s with a BRCA mutation who underwent bilateral salpingo-oophorectomy as a risk-reducing surgery and is now experiencing hot flushes, but has no personal history of breast cancer, what would be the appropriate treatment option to manage her symptoms?
- a) Estrogen patch
 - b) Oral estrogen
 - c) Estrogen plus progesterone
 - d) Tibolone

45. A 35-year-old woman presented for genetic counselling due to a family history of breast and ovarian cancer. Genetic testing revealed that she is at high risk for the BRCA gene mutation. What type of ovarian cancers is she at an increased risk for?
- a) Mucinous tumor
 - b) High-risk serous tumour
 - c) Low-risk serous tumour
 - d) Yolk sac tumour
46. Ms. XY underwent laparotomy for ovarian cancer, and during the procedure, there was an intraoperative surgical spill. What would be the appropriate next step in the treatment management for her condition?
- a) Intraperitoneal chemotherapy
 - b) External beam RT
 - c) Chemotherapy
 - d) Brachytherapy plus chemotherapy
47. A 30-year-old pregnant woman presented with a breast lump that was detected at 20 weeks of gestation. What would be the appropriate initial imaging modality to evaluate the breast lump?
- a) USG
 - b) MRI
 - c) Fine needle biopsy
 - d) Mammography
48. A 54-year-old female presented with complaints of abdominal pain and bloating. On evaluation, she was found to have a 4 cm right bilocular ovarian cyst and a 5 cm left ovarian cyst with septations, but no free fluid. What would be the appropriate next management approach for her condition?
- a) Measure CA-125
 - b) Unilateral salpingo-oophorectomy
 - c) Bilateral salpingo-oophorectomy
 - d) Reassure

49. A 54-year-old female presented with complaints of abdominal pain and bloating. On evaluation, she was found to have a 4 cm right bilocular ovarian cyst and a 5 cm left ovarian cyst with septations, but no free fluid. What would be the appropriate next management approach for her condition?
- a) Reassure
 - b) Bilateral salpingo-oophorectomy
 - c) Staging laparotomy
 - d) CA-125
50. Mrs. Johnson, a post-menopausal woman, presented with symptoms of bloating and mild abdominal pain. Her TVS shows bilateral ovarian cysts and ascites. Her CA-125 level is elevated, and the RMI (Risk of Malignancy Index) calculation resulted in a score of 296. What is the appropriate next step in management?
- a) CT scan
 - b) Staging laparotomy
 - c) Bilateral salpingo-oophorectomy
 - d) Consider intervention

PAPER 8

1. A 35-year-old woman presented with a warty lesion that was excised and histopathological examination revealed condyloma acuminata and VIN1 up to the margin. What would be the appropriate next step in the management of her condition?
 - a) Re-excision
 - b) Colposcopy
 - c) Refer to oncology OPD
 - d) Refer to gynae OPD
2. A 70-year-old woman presented with a vulval lesion that was excised and later diagnosed as basal cell carcinoma. The excised lesion has a clear margin of 1 cm. What would be the appropriate next step in the management of her condition?
 - a) Reassure
 - b) Vulvectomy
 - c) Refer to oncology
 - d) Wide local radical excision
3. A 52-year-old woman presents with the following symptoms: abdominal bloating, discomfort, and a feeling of fullness. On further evaluation, she is found to have a 6 cm simple cyst in her ovaries and a retroverted uterus with a 2 cm calcified fibroid. What would be the appropriate treatment option considering these clinical findings?
 - a) Observation
 - b) Laparoscopic bilateral salpingo-oophorectomy
 - c) Laparoscopic unilateral salpingo-oophorectomy
 - d) Total abdominal hysterectomy and bilateral salpingo-oophorectomy

4. In the case of Mrs. JH, a patient who presented with ovarian cancer that extended to the fallopian tube and underwent a laparotomy, what would be the appropriate next step in the treatment management for her condition?
- a) Surgical treatment
 - b) Brachytherapy
 - c) External beam radiotherapy
 - d) Chemotherapy
5. Mrs. Thompson, a post-menopausal woman, presented with lower abdominal pain. Imaging revealed the presence of an 8 mm simple cyst. What would be the appropriate management approach for her condition?
- a) Reassure and discharge
 - b) To follow by 4–6 months apart
 - c) Laparoscopic unilateral salpingo-oophorectomy
 - d) Laparoscopic bilateral salpingo-oophorectomy
6. A 50-year-old woman presents with abdominal bloating, pelvic pain and urinary frequency for the past two months. She has a family history of breast cancer in her mother and sister. She undergoes a pelvic ultrasound that shows a complex ovarian mass measuring 10 cm in diameter. A blood test shows elevated levels of CA-125, a tumor marker for ovarian cancer. She is diagnosed with ovarian cancer which has extended up to the fallopian tubes and referred to a gynecologic oncologist. Which of the following is the most appropriate treatment?
- a) Surgical treatment
 - b) Brachytherapy
 - c) Brachytherapy plus chemotherapy
 - d) Surgery plus chemotherapy
7. A 38-year-old woman presents with mild right lower abdominal pain. She has a history of regular menstrual cycles and was diagnosed with a 3.5 cm × 3.5 cm × 4.5 cm right ovarian cyst on pelvic ultrasound two days ago. She is anxious about her scan finding. What is the most appropriate management plan for her?
- a) Follow-up after 4 months
 - b) Follow-up after 6 months
 - c) Discharge
 - d) Follow-up MRI

8. A 10-year-old girl with an ovarian cyst of 7 cm which was suspended to the broad ligament and she had excessive breast development. What is your diagnosis?
- a) Teratoma
 - b) Dysgerminoma
 - c) Yolk sac tumor
 - d) Juvenile granulosa cell tumor
 - e) Mucinous tumour
9. During laparotomy for ovarian cancer, surgical spill occurred intraoperatively. What's the next treatment?
- a) Intraperitoneal chemotherapy
 - b) Brachytherapy
 - c) Brachytherapy plus chemotherapy
 - d) External beam radiotherapy
 - e) Surgery + chemotherapy
10. During laparotomy for ovarian cancer which extended to fallopian tubes. What's the next treatment?
- a) Surgical treatment
 - b) Brachytherapy
 - c) Brachytherapy plus chemotherapy
 - d) D. External beam
 - e) Surgery and chemotherapy
11. The very important initial investigation to rule out ovarian pathology is?
- a) TAS
 - b) MRI
 - c) CT Scan
 - d) TVS with Doppler
 - e) Per vaginal examination
12. You saw a 32-year-old woman with breast cancer come for counselling before pregnancy. What's the investigation you will ask during pregnancy?
- a) CT scan
 - b) Echocardiography
 - c) Mammography
 - d) MRI of the breast
 - e) USG

13. A 13-year-old girl with solid ovarian tumour in the left ovary and the right ovary is normal. β -hCG and CA-125 are normal, AFP and LDH are raised. Diagnosis?
- a) Immature teratoma
 - b) Mature teratoma
 - c) Yolk sac tumor
 - d) Seminoma
 - e) Dysgerminoma
14. A transgender man refuses screening for cervical cancer. What is your management?
- a) Refer to transgender services
 - b) Cervical screening program
 - c) Ask by national screening
 - d) No need for screening
 - e) Accept request
15. Primigravida at 32 weeks. Discover she has cervical cancer stage IB1 at cervical screening. How to manage?
- a) Immediately CS and hysterectomy
 - b) Continue pregnancy and trachelectomy after delivery
 - c) Continue pregnancy and deliver then lymphadenectomy
 - d) Trachelectomy and deliver by CS
 - e) Counsel to terminate pregnancy
16. Patient carrier BRCA1 did mastectomy. What's the risk of ovarian cancer?
- a) 20%
 - b) 40%
 - c) 80%
 - d) 50%
 - e) 33%Q
17. patient underwent hysterectomy for a large fibroid (20 weeks' size). After surgery, histology revealed it was a leiomyosarcoma. What investigation is to be done now?
- a) Chest X-ray
 - b) CT abdomen and pelvis
 - c) CT abdomen, pelvis and chest
 - d) MRI
 - e) PET

18. Risk-reducing surgery should be performed in Lynch syndrome by what time such that it is most cost-effective?
- a) 30 years
 - b) 35 years
 - c) 40 years
 - d) 45 years
 - e) 50 years
19. A woman came for genetic counselling. From the following, what puts her at the highest risk for breast cancer?
- a) BRCA1 mutation
 - b) BRCA2 mutation
 - c) Family with Lynch 2 syndrome
 - d) 2 first-degree relatives with breast cancer
 - e) 1 first-degree relative with lung cancer
20. Patient is pregnant with breast cancer and needs chemotherapy. Which is the safest drug for her?
- a) Cyclophosphamide
 - b) Steroid
 - c) Etoposide
 - d) Anthracycline
 - e) Methotrexate
21. A 50-year-old woman in her cervical screening showed mild dyskaryosis and HPV negative. What is the next step?
- a) Colposcopy
 - b) Routine recall in 3 years
 - c) Routine recall in 5 years
 - d) Hysterectomy
 - e) Repeat HPV in 6 months
22. A woman with a history of Hodgkin's lymphoma was given bleomycin and neck/mediastinum radiotherapy 4 years ago. What test in future pregnancy should be advised?
- a) Respiratory function test
 - b) Thyroid function test
 - c) Both respiratory function test and thyroid function test
 - d) Echocardiography
 - e) Renal function test

23. A 17-week pregnant woman has stage IA cervical cancer on colposcopy. What is the next step of management in such a scenario?
- a) LLET
 - b) Simple hysterectomy
 - c) Radical trachelectomy
 - d) TAH BSO with elective CS at viability
 - e) Cone biopsy
24. A 55-year-old patient with cancer cervix stage 2B with morbid obesity and smoking 20 to 30 cigarettes per day. What is the immediate complication that can be there in this woman?
- a) Severe anemia
 - b) Cardiovascular accident
 - c) Vesico-vaginal fistula
 - d) Renal failure
 - e) Intestinal obstruction
25. What is the percentage of bilaterality of dermoid?
- a) 5%
 - b) 10%
 - c) 15%
 - d) 20%
 - e) 25%
26. Ms. Rodriguez, a 52-year-old woman, recently underwent a Large Loop Excision of the Transformation Zone (LLETZ) procedure for the treatment of cervical intraepithelial neoplasia grade 1 (CIN 1) with concurrent cervical glandular intraepithelial neoplasia (cGIN). The biopsy results indicate that the lesions extend to the excisional margins.
- What is the most appropriate next step in managing Ms. Rodriguez?
- a) Repeat LLETZ procedure for further excision
 - b) Cone biopsy
 - c) Monitor with HPV testing at 6 months
 - d) HPV after 6 months. If negative annually for 9 years
 - e) Hysterectomy

27. Ms. Anderson, a 45-year-old woman, presents to her gynecologist with a long history of pelvic discomfort and irregular menstrual cycles. After a series of investigations, including imaging studies, it is discovered that she has an ovarian tumor. The pathology report following the tumor removal surgery reveals the presence of Call-Exner bodies. What is the diagnosis?
- a) Ovarian teratoma
 - b) Ovarian cystadenoma
 - c) Mucinous ovarian carcinoma
 - d) Granulosa cell tumour
 - e) Endometrioma
28. Malignant growth involving the hood of the clitoris. Most appropriate management?
- a) Wide local excision
 - b) Wide local excision + unilateral groin LN dissection
 - c) Wide local excision + bilateral groin LN dissection
 - d) Radical vulvectomy
 - e) Radiotherapy
29. VIN caused by which strain of HPV predominantly?
- a) 16
 - b) 18
 - c) 6
 - d) 11
 - e) 8
30. A 48-year-old woman presented with abnormal uterine bleeding. A biopsy revealed complex atypical hyperplasia of the endometrium. Following this diagnosis, she underwent a total abdominal hysterectomy (TAH) for definitive treatment. The excised uterine specimen was sent for histopathological examination.
- What are the chances of concomitant malignancy in a specimen?
- a) 27%
 - b) 33%
 - c) 43%
 - d) 10%
 - e) 48%

31. 35-year-old premenopausal woman presents to the gynecology clinic for a routine pelvic examination. During the pelvic ultrasound, a simple cyst is identified on one of her ovaries.

What is the most appropriate counselling regarding the risk of malignancy in a simple ovarian cyst?

- a) 0.3%
- b) 0.1%
- c) 0.5%
- d) 1%
- e) 3%

32. 80-year-old woman complains of a sore, itchy vulval lesion. On examination, a 3 cm ulcer with irregular, raised edges with induration around the ulcer is noted on the left labium majus. What is the most likely diagnosis for the vulval lesion?

- a) VIN
- b) Squamous cell carcinoma
- c) Syphilis
- d) Keratoacanthoma
- e) Verrucous carcinoma

33. A woman with a personal history of breast cancer, recurrence-free and just finished 5 years of tamoxifen treatment. Asking when she can conceive.

- a) Immediately
- b) After 6 months
- c) After 1 year
- d) After 2 years
- e) After 3 months

34. A patient aged 45 years complains of a pruritic lesion. Biopsy shows VIN 2 and excision was done. Specimen shows VIN reaching margin. Next step?

- a) Re-excision
- b) Colposcopy
- c) Vulvectomy
- d) Do nothing
- e) Repeat biopsy

35. A 40-year-old woman who is found to be a BRCA1 carrier has opted for risk-reducing bilateral salpingo-oophorectomy. What is the chance of finding an occult malignancy during this surgery?
- a) 3%
 - b) 5%
 - c) 10%
 - d) 15%
 - e) 40%
36. A 22-year-old woman is found to be a BRCA1 carrier. What is her lifetime risk for developing ovarian cancer?
- a) 10%
 - b) 20%
 - c) 40%
 - d) 50%
 - e) 60%
37. Management option after treatment (LLETZ), for CIN 3 with biopsy showing unclear margins in a 52-year-old woman.
- a) Repeat LLETZ procedure for further excision
 - b) Perform a cervical conization for comprehensive evaluation
 - c) Monitor with HPV testing at 6 months
 - d) Plan hysterectomy
 - e) Initiate a watchful waiting approach without additional interventions
38. woman with type 1 diabetes presents at 11 weeks of gestation with diabetic ketoacidosis following several days of vomiting. What is the intravenous fluid of choice for initial fluid replacement?
- a) 5% albumin solution
 - b) 20% albumin solution
 - c) 5% dextrose
 - d) Hartmann's solution
 - e) 0.9% saline

39. A woman with type 1 diabetes presents with suspected diabetic ketoacidosis (DKA) following a protracted period of vomiting. Initial investigations gave the following results:

- Serum bicarbonate: 13 mmol/L
- Serum glucose: 18 mmol/L

What would be the threshold value for serum ketones to confirm the diagnosis of DKA?

- a) 3 mmol/L
- b) 30 nmol/L
- c) 300 nmol/L
- d) 3 mmol/L
- e) 30 mmol/L

40. What is the most common cause of acute kidney injury in pregnancy?

- a) Haemorrhage
- b) Hyperemesis gravidarum
- c) Non-steroidal anti-inflammatory drugs (NSAIDs)
- d) Pre-eclampsia
- e) Urinary retention

41. What proportion of cases of HELLP syndrome will result in an acute kidney injury?

- a) 0.3–1.5%
- b) 3–15%
- c) 23–35%
- d) 43–55%
- e) 63–75%

42. A woman attends clinic for preconceptual counselling after previously being treated for breast carcinoma. She is planning a pregnancy. How long after completion of the treatment is it recommended to wait before conceiving?

Options:

- a) 1 month
- b) 6 months
- c) 1 year
- d) 2 years
- e) 3 years

43. A woman with type 2 diabetes was taking sitagliptin prior to pregnancy, as she could not tolerate the gastrointestinal side effects of metformin. She was switched to insulin therapy during the antenatal period. She has now delivered and wishes to breastfeed. If oral hypoglycaemic agents are required, what treatment would be recommended?

Options:

- a) Insulin aspart
- b) Insulin detemir
- c) Insulin glargine
- d) Insulin lispro
- e) Isophane insulin (NPH insulin)

44. A 25-year-old woman known to have hyperthyroidism is going for radioactive iodine therapy. She has been trying to conceive for the last 6 months. How long should she avoid pregnancy after this treatment?

Options:

- a) 3 months
- b) 6 months
- c) 9 months
- d) 12 months
- e) 15 months

45. A 28-year-old para 1 woman at 40 weeks' gestation delivered a baby with a skin condition, diagnosed as "Aplasia cutis congenita." She is known to have hyperthyroidism secondary to Graves' disease and has been on anti-thyroid medication throughout the pregnancy. Which one of the medications below is known to cause the above condition?

Options:

- a) Carbimazole
- b) Hydouracil
- c) Levothyroxine
- d) Methythiouracil
- e) Propylthiouracil

46. Early decelerations on CTG signify:

- a) Fetal head compression
- b) Cord compression
- c) Uteroplacental insufficiency
- d) Fetal hypoxi

47. Which of the following is not an explanation for decreased variability of the fetal heart rate tracing?
- a) Fetal sleep cycle
 - b) Prematurity
 - c) Fetal stimulation
 - d) Maternal drug intake
48. Which among the following is the single most reliable sign of fetal compromise on CTG?
- a) Absence of accelerations
 - b) Decreased beat-to-beat variability
 - c) Late decelerations
 - d) Variable decelerations
49. Repeated variable decelerations are associated with all except:
- a) Post term pregnancy
 - b) Oligohydramnios
 - c) Cord compression
 - d) Fetal head compression

ANSWERS

PAPER 1 ANSWER

1--Answer: C. Gonorrhoea, chlamydia, HIV and syphilis

Why?

- * Multiple sexual partners increase the risk of several STIs.
- * Testing should not be restricted only to the infection the patient is worried about.
- * A sexual-health assessment should include chlamydia, gonorrhoea, HIV and syphilis according to risk.
- * Condom use reduces risk but does not eliminate STI transmission.

Exam point:

When a patient presents for STI testing, think “complete STI screen according to risk,” not just the suspected infection.

Q2. Which STI requires treatment of an asymptomatic sexual partner?

Answer: D. Trichomonas vaginalis

Why?

- * Trichomoniasis is frequently asymptomatic in men and women, so asymptomatic partner can still carry and transmit the infection. Treating only asymptomatic pts may lead to a ping pong infection

Question 3

Correct answer: d) HSV (Herpes simplex virus)

Explanation

The key clues are:

- * Multiple painful, grouped vulval ulcers
- * Erythematous base
- * Painful inguinal lymphadenopathy

This is classic for genital herpes, usually caused by HSV-2 (although HSV-1 can also cause genital infection).

Genital herpes typically begins as multiple grouped vesicles on an erythematous base. The vesicles rupture and form multiple small, painful ulcers. Tender inguinal lymph nodes are common, particularly with a primary episode.

Question 4

Correct answer: b) *Haemophilus ducreyi*

This describes chancroid.

Explanation

The important clues are:

- * Multiple painful vulval ulcers
- * Ulcers are sharply circumscribed
- * Yellow/purulent exudate at the base
- * Painful inguinal lymphadenopathy

Chancroid is caused by *Haemophilus ducreyi*, a Gram-negative coccobacillus.

The ulcers are typically painful, with a purulent yellow-gray base and ragged/undermined edges. Approximately half of patients develop painful, tender inguinal lymphadenopathy, which may progress to fluctuant buboes.

Why the other options are incorrect

a) HSV type 2

→ Causes painful grouped vesicles/ulcers, but the question emphasizes the characteristic yellow purulent ulcer base and painful lymphadenopathy, pointing toward chancroid.

c) *Treponema pallidum*

→ Causes syphilitic chancre, which is classically painless, clean-based and indurated.

d) Chlamydia

→ *C. trachomatis* L1–L3 causes lymphogranuloma venereum (LGV). The initial genital lesion is usually small and painless, followed later by painful lymphadenopathy.

e) *Calymmatobacterium granulomatis*

→ Now called *Klebsiella granulomatis*; causes granuloma inguinale, characterized by painless, beefy-red, friable ulcers and typically absence of true regional lymphadenopathy.

Exam pearl

Painful genital ulcer + purulent/yellow base + painful inguinal buboes = Chancroid → *Haemophilus ducreyi*

Q5. Gram-negative diplococci from an endocervical swab

Answer: D. Neisseria gonorrhoeae

Why?

The classic microbiological description of N. gonorrhoeae is:

Gram-negative, kidney-bean-shaped diplococci

They may be seen intracellularly within neutrophils.

Exam association:

Gram-negative diplococci → Neisseria.

Yes. I'll keep the question numbers unchanged and explain the reasoning for each.

Q 6. Pregnant woman with anogenital warts due to HPV type 11

Correct answer(s): b) Cryotherapy and e) Trichloroacetic acid (TCA)

Explanation

HPV types 6 and 11 are the common causes of anogenital condylomata acuminata (genital warts). During pregnancy, warts may become larger, more numerous and friable.

For a pregnant woman, provider-administered destructive treatment can be used when treatment is required:

- * Cryotherapy → liquid nitrogen destroys the wart by freezing.
- * TCA (80–90%) → chemically coagulates proteins and destroys the wart.

CDC guidance specifically lists cryotherapy and TCA among provider-administered treatments for anogenital warts.

Why the other options are wrong

a) 5-Fluorouracil ✗

It is not used for genital warts in pregnancy because of potential fetal toxicity and lack of an appropriate safety profile.

c) Imiquimod ✗

Although available for genital warts in non-pregnant patients, CDC recommends avoiding imiquimod during pregnancy because pregnancy safety data are insufficient.

d) Podophylline/podophyllin ✗

Contraindicated/should not be used during pregnancy because of systemic toxicity and potential fetal harm.

☆ Exam point

Genital warts in pregnancy → Cryotherapy or TCA

Cryotherapy is first choice >TCA>Surgical removal.

Q 7. Pregnant woman treated for Chlamydia with azithromycin

Correct answer: e) Test of cure after 5 weeks

Explanation

The patient is:

- * Pregnant
- * Diagnosed with Chlamydia trachomatis
- * Treated with azithromycin 1 g orally as a single dose
- * Now presents 2 weeks after treatment

In pregnancy, a test of cure (TOC) is recommended because persistent chlamydial infection can have important maternal and neonatal consequences.

The current CDC recommendation is:

NAAT test of cure approximately 4 weeks after completion of treatment.

Therefore, 2 weeks is too early.

Since the question's options give 5 weeks rather than 4 weeks, option (e) is the best available answer.

Why not the other options?

a) Follow-up after 6 months ✗

Too late for the required test of cure.

b) Nothing to be done ✗

Incorrect because she is pregnant and requires a test of cure.

c) Full STI screening ✗

Patients diagnosed with chlamydia should be assessed for other STIs, but this does not replace the required test of cure during pregnancy.

d) Test of cure during this visit ✗

She is only 2 weeks after treatment. NAAT performed too early can detect residual nonviable chlamydial organisms and produce a false-positive result.

e) Test of cure after 5 weeks 

Best answer among the choices. The guideline target is approximately 4 weeks, so 5 weeks is an acceptable exam-option approximation.

Important additional point

After treatment, pregnant women should also be retested approximately 3 months later because reinfection is common.

☆ Exam point

Chlamydia + pregnancy → Test of cure at ~4 weeks

Q 8----. Gonorrhoea most commonly causes the following EXCEPT

Correct answer: e) Endocarditis

Explanation

Gonorrhoea is caused by *Neisseria gonorrhoeae*.

Common clinical manifestations include:

- * Urethritis
- * Cervicitis
- * Proctitis
- * Pharyngitis
- * Conjunctivitis, particularly gonococcal conjunctivitis
- * Pelvic inflammatory disease/salpingitis

CDC describes gonorrhoea as causing urethritis, proctitis and pharyngitis, among other syndromes.

Why endocarditis is the exception

Endocarditis is a rare complication of disseminated gonococcal infection (DGI) rather than a common manifestation of uncomplicated gonorrhoea.

DGI usually produces:

Bacteraemia → arthritis/tenosynovitis/skin lesions

and, rarely, can cause:

- * Endocarditis
- * Meningitis
- * Osteomyelitis

Q 9. --- 28-year-old pregnant woman at 29 weeks with inguinal lymphadenopathy

Best answer: c) Two doses of Benzathine penicillin G given 1 week apart

Explanation

The clinical picture is most consistent with early syphilis, particularly primary syphilis if the inguinal lymphadenopathy is associated with a genital chancre.

In pregnancy, penicillin G is the only treatment with proven efficacy for preventing congenital syphilis.

For primary, secondary or early latent syphilis in pregnancy, the standard treatment is benzathine penicillin G, and an additional 2.4 million-unit dose 1 week after the first dose can be given during pregnancy.

Therefore:

First dose → Day 0

Second dose → Day 7

Why the other options are incorrect

a) Benzathine penicillin G single dose ✗

A single dose is the standard regimen for early syphilis in many non-pregnant patients, but in pregnancy an additional dose 1 week later is recommended/considered for primary, secondary and early latent disease.

b) Azithromycin single dose ✗

Azithromycin should not be used to treat syphilis during pregnancy because it does not reliably cure maternal infection or treat fetal infection.

d) Tetracycline 100 mg three times daily for 2 weeks ✗

Tetracyclines are not appropriate in pregnancy, particularly in the second and third trimesters.

e) Benzathine penicillin G three weekly doses ✗

Three weekly doses are used for late latent syphilis or syphilis of unknown duration, not uncomplicated early syphilis.

☆ Exam pearl

Pregnancy + early syphilis → Benzathine penicillin G + consider/add second dose after 1 week.

Q 10. 29-year-old at 28 weeks with late syphilis — indications for CSF examination EXCEPT

Best answer: e) HIV infection with late latent syphilis

Explanation

CSF examination is primarily used to investigate neurosyphilis and is indicated when there are neurological manifestations or certain specific situations suggesting CNS involvement.

Important indications include:

- * Neurological signs/symptoms
- * Ocular manifestations, particularly when associated with cranial nerve dysfunction
- * Treatment failure, particularly when reinfection is unlikely or neurological findings are present
- * Tertiary syphilis, including cardiovascular or gummatous disease, where CSF examination is recommended before treatment.

Why option E is the exception

HIV infection + late latent syphilis alone does NOT automatically require CSF examination.

Current CDC guidance states that people with HIV and latent syphilis should have a thorough neurologic, ocular and otic examination, but CSF examination is not recommended in the absence of neurological signs or symptoms.

So:

HIV + late latent syphilis alone → no routine CSF examination.

Option-wise

a) Ophthalmic signs and symptoms → indication/assessment required

Ocular syphilis requires prompt ophthalmologic assessment. CSF examination depends on the ocular/neurological findings; particularly if cranial nerve dysfunction is present, CSF evaluation is indicated.

b) Syphilis treatment failure → indication

When treatment failure is suspected, especially without a likely explanation of reinfection, CSF examination may be considered to look for unrecognized CNS infection.

c) Neurological signs and symptoms → definite indication

Examples include cranial nerve dysfunction, meningitis, stroke, altered mental status and other neurological abnormalities.

d) Cardiovascular signs and symptoms → indication

Cardiovascular syphilis is a manifestation of tertiary syphilis, and CDC guidance recommends CSF examination before treatment for tertiary syphilis.

e) HIV infection with late latent syphilis → EXCEPT ☒

HIV alone does not justify routine lumbar puncture in an asymptomatic patient.

☆ Exam pearl

HIV + syphilis ≠ automatic LP.

Think:

Neurological signs → CSF

Tertiary syphilis → CSF

Q 11. 25-year-old woman with painful vulval ulcers and painful inguinal lymphadenopathy

Correct answer: d) Chancroid

Explanation

The description is highly characteristic of chancroid caused by *Haemophilus ducreyi*.

Key clues:

- * Painful vulval ulcers
- * Multiple ulcers
- * Ragged, undermined edges
- * Necrotic base
- * Purulent exudate
- * Bleeding on contact
- * Painful inguinal lymphadenopathy

This combination is classic for chancroid. CDC describes chancroid as deep, painful genital ulcers with tender/suppurative inguinal adenopathy.

Why the other options are wrong

a) Lymphogranuloma venereum ✗

Caused by *Chlamydia trachomatis* L1–L3. The initial genital lesion is usually small and painless, followed later by painful inguinal lymphadenopathy.

b) Donovanosis ✗

Caused by *Klebsiella granulomatis*. It produces painless, beefy-red, friable ulcers and usually does not produce painful regional lymphadenopathy.

c) Syphilis gummata ✗

Tertiary syphilis can cause gummatous lesions, but these are not the classic multiple, painful, purulent genital ulcers described here.

d) Chancroid ✓

The combination of pain + purulent/necrotic base + ragged undermined edges + tender inguinal nodes is characteristic.

e) Type 2 HSV ✗

HSV causes multiple painful grouped vesicles that ulcerate, often with tender lymphadenopathy. However, the deep necrotic ulcers with ragged undermined edges and purulent base are much more characteristic of chancroid.

Q 12--Correct answer: e) 50%

Explanation

The history of chronic pelvic pain with worsening during menstruation (cyclical pelvic pain/dysmenorrhoea) is strongly suggestive of endometriosis.

Endometriosis affects approximately 10% of women of reproductive age worldwide. Typical symptoms include severe menstrual pain and chronic pelvic pain.

Therefore, among the options:

* 2% ✗

* 5% ✗

* 10% ✗

* 20% ✗

* 50%

☆ Exam pearl

Endometriosis → affects approximately 50% of reproductive-age women with chronic pelvic pain. Asymptomatic 10% pts have endometriosis in reproductive age group.

Q 13. Premenstrual syndrome with severe mood swings, breast pain and headache

Correct answer: d) SSRIs

Explanation

The important feature here is severe mood swings, together with physical symptoms su...

SSRIs (selective serotonin reuptake inhibitors) are one of the first-choice treatments for severe PMS, particularly when prominent emotional symptoms such as irritability, mood swings, anxiety or depression are present. They can be given continuously or during the luteal phase.

Importantly, the patient does not need to have a separate psychiatric disorder for SSRIs to be useful in severe PMS.

Why the other options are less appropriate

a) CBT ✗

CBT can be helpful for PMS and should be offered as an option, but for severe PMS with prominent mood symptoms, SSRIs are a first-choice pharmacological treatment.

b) Combined pill ✗/alternative

Combined hormonal contraception can improve PMS symptoms, particularly formulations containing drospirenone, and is another first-choice option in some patients. However, the presence of severe mood symptoms makes an SSRI the best answer in this question.

c) Progestogens ✗

Progestogens alone are not generally considered a first-line treatment for PMS and may worsen symptoms in some women.

e) Danazol ✗

Danazol can reduce breast tenderness but has androgenic adverse effects and is not first-line treatment for severe PMS.

☆ Exam pearl

Severe PMS + prominent mood symptoms → SSRI

Q 14. Endometrial hyperplasia without atypia — risk of progression to cancer

Correct answer: a) <1% (depending on the terminology/source used in the question)

Important clarification

This question needs careful attention because the options show <1%, 2%, 4%, 10%, 27%.

Current RCOG information states that the overall long-term risk of endometrial hyperplasia without atypia progressing to endometrial cancer is <5% over 20 years.

Older studies showed approximately:

- * Simple hyperplasia → about 1%
- * Complex hyperplasia → about 3%

over the studied long-term follow-up.

Therefore, if this question is based on the older classification, the expected answer is:

a) <1%

However, remember the modern exam concept:

Endometrial hyperplasia WITHOUT atypia → <5% risk of progression over 20 years.

By contrast, hyperplasia WITH atypia has a much higher risk—RCOG estimates approximately 28% over 20 years.

☆ Exam pearl

Without atypia = low malignant potential (<5% over 20 years).

With atypia = substantially higher risk (~28% over 20 years).

Q 15. First-line management according to NICE guidelines for Heavy Menstrual Bleeding

Correct answer: c) Mirena

Mirena = LNG-IUS (levonorgestrel-releasing intrauterine system).

Explanation

For women with heavy menstrual bleeding where an appropriate uterine pathology is absent or suitable, NICE recommends considering an LNG-IUS as the first-line treatment. NICE lists LNG-IUS, tranexamic acid, NSAIDs, combined hormonal contraception and cyclical oral progestogens among pharmacological options.

The LNG-IUS releases levonorgestrel directly into the uterine cavity, causing:

- * Endometrial suppression
- * Reduced endometrial proliferation
- * Marked reduction in menstrual blood loss
- * Often lighter periods and, in some women, amenorrhoea

Why the other options are not the best answer

a) Mefenamic acid ✗

An NSAID that can reduce menstrual blood loss and dysmenorrhoea, but it is not the preferred first-line option when LNG-IUS is suitable.

b) Tranexamic acid ✗

Very effective non-hormonal treatment for heavy bleeding, particularly when hormonal treatment is unsuitable or unwanted. It reduces menstrual blood loss but does not provide contraception or treat the underlying endometrial proliferation.

c) Mirena/LNG-IUS ✓

First-line NICE option when appropriate.

d) OCPs ✗

Combined hormonal contraception is an alternative medical treatment but generally comes after/alongside consideration of LNG-IUS depending on the clinical situation and patient preference.

e) DMPA ✗

Depot medroxyprogesterone acetate can reduce bleeding and eventually produce amenorrhoea in some women, but it is not the NICE first-line choice when LNG-IUS is suitable.

☆ Exam pearl

NICE HMB → think LNG-IUS (Mirena) first-line.

Q 16 Correct answer: C) Estradiol patch with Mirena

This woman is postmenopausal, obese, and a smoker, with troublesome vasomotor symptoms (hot flushes) and wants HRT.

Why this is the best option

* Estradiol patch = transdermal estrogen

* Transdermal estradiol is preferred in women with increased risk of venous thromboembolism (VTE), including those who are obese and/or have other VTE risk factors.

* It avoids the hepatic first-pass effect seen with oral estrogen and has a lower impact on coagulation factors.

- * Mirena (52-mg LNG-IUS) = endometrial protection
 - * If the woman has a uterus, systemic estrogen must be accompanied by a progestogen to prevent endometrial hyperplasia/cancer.
 - * Mirena provides the required progestogen locally to the endometrium.

Why the other options are incorrect

A) COC ✗

- * Combined oral contraceptive pills are not appropriate routine therapy for a postmenopausal woman.
- * They contain relatively higher doses of estrogen than standard menopausal HRT and are inappropriate particularly with significant VTE/cardiovascular risk factors.

B) COC + estradiol ✗

- * Unnecessary additional estrogen and inappropriate in a postmenopausal smoker with obesity.

D) Estrogen with Mirena ⚠

- * The concept is close, but the route of estrogen matters here.
- * Because she is obese and a smoker, transdermal estradiol (patch) is preferred over oral estrogen.

E) POP ✗

- * Progestogen-only pill does not adequately treat vasomotor symptoms such as hot flushes.
- * It is not the appropriate systemic treatment for menopausal symptoms.

☆ MRCOG exam point

Menopausal woman + uterus + needs systemic HRT → Estrogen + progestogen.

If increased VTE risk such as obesity, smoking or previous VTE risk factors → prefer transdermal estrogen.

So remember:

Uterus present → add progestogen

VTE risk → choose transdermal estrogen

Mirena → can provide endometrial protection

Answer: C — Estradiol patch + Mirena.

Q 17 Correct answer: D) Endometrial biopsy now

The key word in this question is “2 episodes of postmenopausal bleeding (PMB)”.

Even though the endometrial thickness is only 3 mm, recurrent/persistent PMB requires further investigation.

Why?

For a woman with postmenopausal bleeding:

- * First episode + endometrial thickness ≤ 4 mm $\rightarrow$ endometrial cancer is very unlikely $\rightarrow$ reassurance/discharge may be appropriate if bleeding stops.
- * Recurrent or persistent bleeding, even with ET ≤ 4 mm $\rightarrow$ endometrial sampling is required because a thin endometrium does not completely exclude focal lesions or endometrial malignancy.

Therefore, this woman has:

- * Age 58
- * PMB $\times 2$
- * ET = 3 mm
- * No HRT

☒ Endometrial biopsy should be performed now.

Why not the other options?

A) Follow-up in 6 months 

Not appropriate because she has already had recurrent PMB.

B) Reassure and discharge 

This can be appropriate after a single episode with ET ≤ 4 mm when bleeding has stopped, but not with recurrent bleeding.

C) TVS in 3 months 

Repeating ultrasound delays tissue diagnosis. Recurrent bleeding is the indication for sampling.

D) Endometrial biopsy now 

Best answer. Provides histological assessment for hyperplasia/malignancy.

E) Hysteroscopy and biopsy  /not first choice

Hysteroscopy is particularly useful when there is suspicion of a focal intracavitary lesion, an abnormality on ultrasound, or an inadequate/negative biopsy despite ongoing bleeding. Initial sampling can usually be done with an endometrial biopsy.

F) Come back if bleeding recurs ✗

It has already recurred—that is precisely why further assessment is indicated.

🔗 MRCOG exam rule

PMB + ET $\leq$ 4 mm + FIRST episode → reassure if bleeding stops.

PMB + recurrent/persistent bleeding → ENDOMETRIAL SAMPLING, regardless of endometrial thickness.

Answer: D — Endometrial biopsy now.

Q 18

Correct answer: B) Refer to cancer centre ✓

This is a 55-year-old postmenopausal woman with a 6.5-cm septated/complex adnexal mass. Although her CA-125 is 35 U/mL (not markedly elevated), the ultrasound morphology and size are concerning enough to require specialist assessment.

Why B is correct

Important features are:

- * Postmenopausal woman
- * Complex/septated ovarian/adnexal lesion
- * Size 6.5 cm (>5 cm)
- * There is no clear normal ovarian tissue surrounding the mass, making its origin less reassuring.
- * CA-125 = 35 does not exclude ovarian cancer. CA-125 can be normal in ovarian malignancy, particularly in early-stage disease.

Therefore, this should not simply be followed up at 6 months.

Why the other options are less appropriate

A) Follow-up after 6 months ✗

Follow-up is appropriate for selected simple, small, unilateral cysts in postmenopausal women with reassuring features. A 6.5-cm septated/complex lesion does not fit that low-risk category.

C) Cystectomy ✗

Cystectomy is not the preferred approach when malignancy is a possibility in a postmenopausal woman.

D) Oophorectomy ✗

If surgery is eventually undertaken, the surgical approach depends on the specialist assessment and malignancy risk. The first step here is referral to an appropriate specialist/cancer centre rather than proceeding directly to simple oophorectomy.

E) TAH ✗

Total abdominal hysterectomy is not automatically indicated solely because an adnexal mass is present.

F) BSO ✗

Bilateral salpingo-oophorectomy may form part of definitive surgery depending on the risk assessment, but you should not jump directly to BSO without specialist evaluation when malignancy is suspected.

🧠 MRCOG pearl

For a postmenopausal adnexal mass, don't be falsely reassured by a normal/near-normal CA-125.

Complex/septated mass + >5 cm in a postmenopausal woman → specialist assessment/referral.

Answer: B — Refer to cancer centre.

Q19- Tumour marker for granulosa cell tumour

Answer: B. Inhibin

Why?

Granulosa cell tumours are sex-cord stromal tumours and commonly produce inhibin.

Inhibin is therefore useful in:

- * Diagnosis/supportive assessment
- * Monitoring treatment
- * Detecting recurrence

Exam association:

Granulosa cell tumour → Inhibin

Q20. Long-term complication of PCOS

Answer: D. Diabetes mellitus type 2

Why?

PCOS is associated with:

- * Insulin resistance
- * Impaired glucose tolerance
- * Type 2 diabetes
- * Dyslipidaemia
- * Hypertension
- * Cardiovascular risk

Therefore, type 2 diabetes mellitus is a classic long-term metabolic complication.

Important: Cardiovascular disease is also associated with PCOS, so the question is somewhat broad. For a single-best-answer examination question, T2DM is the classic intended answer.

Q21. NICE first-line management of heavy menstrual bleeding

Answer: A. Mirena

This is essentially the same principle as Q14.

Why?

The LNG-IUS (Mirena) is the recommended first-line treatment for HMB when there is no significant structural pathology or when fibroids are small and do not distort the cavity.

Remember:

HMB → LNG-IUS first line in the appropriate patient.

Q22. Best indicator for ovarian cancer to help management/triage

Answer: B. RMI

RMI = Risk of Malignancy Index

It combines:

$RMI = \text{Ultrasound score} \times \text{Menopausal score} \times \text{CA125}$

Thus, it integrates:

- * Ultrasound morphology
- * Menopausal status
- * CA125

This makes it useful for deciding who needs specialist/oncology referral.

NICE recommends calculating RMI I after ultrasound in secondary care.

Exam pearl:

$$\text{RMI} = \text{U} \times \text{M} \times \text{CA125}$$

Q23. 65-year-old PMB + endometrial thickness 5 mm

Answer: C. Outpatient endometrial sampling

Why?

A postmenopausal woman with bleeding and an endometrial thickness >4 mm requires endometrial assessment.

Therefore, at 5 mm:

PMB + >4 mm → endometrial sampling.

Outpatient sampling is generally preferred where feasible.

Amenorrhoea / Ovarian pathology

Q24. 14-year-old with primary amenorrhoea, normal pubic hair, Tanner breast stage 3

Answer: A. USG pelvis

Why?

She has:

- * Normal growth
- * Breast development → estrogen exposure is present
- * Normal pubic hair → androgen action is present
- * Primary amenorrhoea

The first useful investigation is pelvic ultrasound to determine:

- * Whether the uterus is present
- * Uterine morphology
- * Ovarian appearance
- * Possible outflow tract abnormality

It helps distinguish causes such as:

- * Müllerian agenesis
- * Outflow obstruction
- * Gonadal disorders

Exam pearl:

Primary amenorrhoea + secondary sexual characteristics → pelvic ultrasound first.

Q25. Postmenopausal woman with 6 months of abdominal bloating; ovaries not visualised on TVS

Answer: D

Q 26. Severe endometriosis despite GnRH therapy; completed family and wants definitive treatment

Answer: c) TAH + BSO

Why?

She has:

- * Severe persistent pain
- * Failed medical treatment
- * Completed family
- * Wants definitive management

Therefore hysterectomy with removal of ovaries is the most definitive option in this examination scenario.

Removing ovaries eliminates ovarian estrogen stimulation and reduces recurrence risk, although the risks of surgical menopause and long-term consequences must be considered in real clinical practice.

Q 27. Chronic abdominal pain, bloating and altered bowel habit relieved by defecation

Answer: b) Rome III

Why?

This is typical of irritable bowel syndrome (IBS):

- * Recurrent abdominal pain
- * Associated with defecation
- * Altered stool frequency/form
- * Bloating
- * Normal examination

The Rome criteria are used for diagnosis of functional gastrointestinal disorders.

Exam clue: Pain related to defecation + altered bowel habit + normal examination → IBS.

Q28. 18-year-old with normal breast development + clitoromegaly + labial fusion

Answer: a) Late-onset congenital adrenal hyperplasia

Why?

Clitoromegaly and labial fusion suggest excess androgen exposure.

Congenital adrenal hyperplasia, particularly 21-hydroxylase deficiency, can produce excess adrenal androgens and genital virilisation.

AIS is unlikely because androgen-insensitive patients typically have scant/absent pubic hair, whereas this clinical picture suggests androgen excess.

Q 29. Postmenopausal woman with incidental simple ovarian cyst 2 cm; CA-125 = 22

Answer: a) Discharge and send back to GP

Why?

A small, simple ovarian cyst in a postmenopausal woman with a normal CA-125 and no concerning features is usually benign and does not require prolonged specialist follow-up.

Exam principle:

Small + simple + asymptomatic + normal CA-125 → reassure/discharge.

Q 30. Appropriate HRT advice

Answer: e) Transdermal HRT has lower VTE risk compared with oral therapy

Why?

Transdermal estrogen avoids significant first-pass hepatic metabolism and has a lower associated VTE risk than oral estrogen.

The other statements are too absolute:

- * Combined HRT does not simply “increase VTE four times after 5 years”.
- * Family history of breast cancer is not an absolute contraindication.
- * HRT is not routinely contraindicated in sickle-cell disease.
- * HRT is not necessarily contraindicated in every woman previously treated for breast cancer—but systemic HRT generally requires specialist consideration and is usually avoided.

Q 31 40-year-old with HMB and suspected adenomyosis

Answer: c) Insertion of LNG-IUS

Why?

NICE specifically recommends LNG-IUS as first treatment for HMB associated with suspected or diagnosed adenomyosis.

It reduces endometrial proliferation and menstrual blood loss and may improve adenomyosis-associated symptoms.

Q 32. How long should a woman wait for maximum benefit after LNG-IUS insertion?

Answer: b) Six cycles

Why?

The bleeding pattern can be irregular for the first few months after LNG-IUS insertion.

Patients should be counselled that bleeding may change initially and that significant improvement can take approximately 6 months.

Exam pearl:

Don't remove the LNG-IUS too early simply because bleeding is irregular during the initial months.

Q 33. Three most prevalent symptoms in women with peritoneal endometriosis

Answer: B

The three symptoms represented by option B are:

- * Chronic pelvic pain
- * Deep dyspareunia
- * Dysmenorrhoea

Why?

These are classic symptomatic manifestations of endometriosis.

Exam triad:

Dysmenorrhoea + chronic pelvic pain + deep dyspareunia → endometriosis.

Q 34. Percentage of women developing PAEC with ulipristal acetate

Answer: d) 60%

Why?

Ulipristal acetate is a selective progesterone receptor modulator. It can produce characteristic benign progesterone receptor modulator-associated endometrial changes (PAEC).

Studies have reported PAEC in approximately 50–60% of women after treatment, with the changes generally reversible after stopping treatment.

Important: PAEC is not the same as endometrial hyperplasia or cancer.

Q 35. Hormone implicated in development of endometrial polyps in obese postmenopausal women

Answer: d) Oestrone

Why?

After menopause, peripheral conversion of adrenal androgens in adipose tissue becomes an important source of estrogen.

In obesity, increased adipose tissue promotes conversion to estrone, resulting in increased estrogenic stimulation of the endometrium.

Exam pearl:

Postmenopause + obesity → peripheral estrogen mainly estrone.

Q 36. Most common benign tumour of women

Answer: e) Uterine leiomyoma

Why?

Uterine fibroids/leiomyomas are the most common benign tumours of the female reproductive tract.

They are benign smooth-muscle tumours of the myometrium.

Exam association:

Fibroid → benign smooth muscle tumour → leiomyoma.

Q 37. Most commonly used pharmacological first-line therapy for endometriosis with chronic pelvic pain

Answer: b) COC

Why?

Combined oral contraceptives suppress ovulation and reduce cyclic ovarian hormonal stimulation of endometriotic implants.

They are commonly used as an initial hormonal treatment when contraception is acceptable.

Other options:

- * GnRH analogues → generally second-line/specialist use because of hypoestrogenic effects.
- * Aromatase inhibitors → refractory disease.
- * LNG-IUS → useful particularly for pain/dysmenorrhoea but the classic MCQ answer here is COC.
- * Oral progestogens → also effective and an important alternative.

Current NICE recommends analgesia initially and hormonal treatment according to symptoms/preferences.

Q 38. Percentage of postmenopausal women with bleeding who have co-existing cervical and endometrial polyps

Answer: b) 14–17%

Why?

The question is testing the recognized association/coexistence of cervical and endometrial polyps. The approximate examination figure is 14–17%.

Exam point: Polyps can coexist, so finding one polyp should not automatically exclude another intrauterine lesion.

Q 39. Depth of myometrium that needs to be destroyed during endometrial ablation

Answer: d) 4 mm

Why?

The basal endometrial glands extend into the superficial myometrium. Adequate destruction of the endometrial layer and superficial myometrium is necessary to reduce regeneration.

For examination purposes, approximately 4 mm is the expected answer.

Q 40. 48-year-old with persistent bleeding, hyperplasia without atypia, LNG-IUS removed, repeated biopsy normal

Answer: b) Offer hysterectomy

Why?

She has persistent troublesome bleeding despite conservative management and has already had repeated reassuring biopsies.

Hysterectomy can be considered when:

- * Hyperplasia persists/recurs
- * Medical therapy is unsuccessful or not tolerated
- * Abnormal bleeding continues despite treatment

RCOG specifically recognizes persistent bleeding as a reason hysterectomy may be considered in hyperplasia without atypia.

Q41. Primary aim of medical intervention in HMB

Answer: c) To improve woman's quality of life

Why?

Heavy menstrual bleeding is not defined purely by measured blood volume. The important issue is how the bleeding affects the woman's physical, social, emotional and quality-of-life functioning.

Therefore treatment aims primarily to improve quality of life, rather than simply achieving a particular haemoglobin or menstrual blood-loss measurement.

Q 42. Second most common cause of postmenopausal bleeding after atrophy

Answer: E

Q43. Proportion of circulating testosterone in women produced by ovaries

Answer: c) 25%

Why?

In reproductive-age women, approximately:

- * 25% testosterone directly from ovaries
- * 25% from adrenals
- * 50% from peripheral conversion, especially conversion of androstenedione

Therefore the answer is 25%.

Q 44. 55-year-old with PMB; Pipelle shows hyperplasia without atypia — treatment most likely to give normal histology at 6 months

Answer: e) Insertion of LNG-IUS

Why?

The LNG-IUS provides continuous local progestogen and is highly effective at causing regression of endometrial hyperplasia without atypia.

RCOG recommends progestogen treatment, and the LNG-IUS has a high regression rate.

Exam pearl:

Hyperplasia without atypia → progestogen.

Among choices → LNG-IUS is particularly effective.

Q45. Pregnant woman with persistent vomiting; Na 130, K 3.0

Answer: c) IV KCl 0.3% with normal saline

Why?

She has hypokalaemia associated with vomiting.

Potassium replacement is required, and normal saline is appropriate for volume replacement.

Glucose-containing fluid can stimulate insulin release and drive potassium intracellularly, potentially worsening hypokalaemia.

Important clinical point: IV potassium must be diluted appropriately and administered with monitoring; never give concentrated KCl as an IV bolus.

Q 46. MRSA carrier undergoing elective caesarean section — antibiotic prophylaxis

Answer: d) Vancomycin

Why?

MRSA is resistant to β -lactam antibiotics such as standard cephalosporins.

Vancomycin provides appropriate coverage against MRSA when MRSA-directed prophylaxis is required.

Exam association:

MRSA → Vancomycin.

Q 47. Caesarean section under spinal anaesthesia with intrathecal morphine — minimum postoperative observation

Current answer: d) Continue observations every hour for 24 hours

Why?

This is an important correction to the marked answer in the photograph.

The question specifically says intrathecal morphine, not diamorphine.

NICE guidance distinguishes the two:

* Intrathecal diamorphine → minimum hourly observations for at least 12 hours

* Intrathecal morphine → minimum hourly observations for 24 hours

Therefore, with intrathecal morphine, 24 hours is the appropriate exam answer.

Q 48. Single best determinant of expertise in a subject

Answer: b) Knowledge

Why?

Expertise requires a strong knowledge base, which underpins clinical reasoning and decision-making.

Communication, organisation, technical skills and role modelling are all important attributes of a good clinician, but the single best determinant of subject expertise among these options is knowledge.

Q 49. Which two levels of Miller’s pyramid are best assessed using workplace-based assessment?

Answer: E — “Shows how” and “Does”

Why?

Miller’s pyramid:

1. Knows → factual knowledge
2. Knows how → application of knowledge
3. Shows how → demonstrates competence
4. Does → performs in real clinical practice

Workplace-based assessments evaluate actual clinical performance and therefore target the upper two levels: “shows how” and “does.”

Easy memory:

WBA = Shows how + Does

Q 50 Correct answer: A) Polydioxanone (PDS) ✓

PDS (polydioxanone) has the greatest tensile strength among the absorbable sutures listed and also retains its strength for a relatively long period.

Suture

Material

Tensile strength retention

PDS

Polydioxanone

☆ Highest / longest-lasting

Vicryl Rapide

Rapidly absorbed polyglactin

Low, short duration

Vicryl

Polyglactin 910

Moderate

Monocryl

Poliglecaprone 25

Moderate, relatively rapid loss

Dexon

Polyglycolic acid

Moderate, loses strength faster than PDS

Why PDS is important

PDS is a monofilament, synthetic, absorbable suture.

- * Excellent initial tensile strength
- * Retains significant tensile strength for weeks
- * Absorbed by hydrolysis
- * Absorption is approximately 180–210 days
- * Useful where prolonged wound support is required, such as fascial closure

🧠 MRCOG memory trick

PDS = Prolonged Durability Suture

Think:

PDS → strongest + longest tensile-strength retention among these absorbables.

Therefore, Answer = A. Polydioxanone (PDS) ☒

Q 51. Nerve particularly susceptible to self-retaining retractors in gynaecological surgery

Answer: a) Femoral nerve

Why?

Self-retaining retractors can compress the femoral nerve against the pelvic sidewall/inguinal ligament.

Femoral neuropathy can produce:

- * Weak hip flexion
- * Weak knee extension
- * Reduced patellar reflex
- * Anterior thigh/medial leg sensory symptoms

Femoral nerve injury is a recognized complication of pelvic surgery involving retractors.

Exam pearl:

Self-retaining retractor → femoral nerve injury.

Q 52. Most appropriate suture for anorectal mucosa in a fourth-degree perineal tear

Answer: c) Polyglactin (Vicryl)

Why?

The anorectal mucosa should be repaired with an absorbable suture, classically 3-0 polyglactin (Vicryl).

Do not confuse Vicryl with Vicryl Rapide. Vicryl Rapide loses tensile strength too quickly for this repair.

Current guidance supports 3-0 polyglactin or poliglecaprone for anorectal mucosa; among the options shown, Vicryl/polyglactin 910 is the best answer.

PAPER 2 ANSWERS

Q1. 32-year-old woman with sudden severe lower abdominal pain; USG shows ovarian cyst with internal echoes. Most likely complication?

Correct answer: d) Rupture

Explanation:

- * An ovarian cyst containing internal echoes commonly represents a hemorrhagic cyst, due to bleeding into the cyst.
- * If such a cyst ruptures, it can produce sudden, severe lower abdominal/pelvic pain.
- * There may also be free fluid in the pelvis/abdomen, sometimes representing hemoperitoneum.
- * Torsion also causes sudden severe pain, but ultrasound typically shows an enlarged ovary, peripheral follicles and reduced/absent Doppler flow rather than simply emphasizing internal echoes within a cyst.

Why not the others?

- * Malignancy: Usually presents more insidiously; complex solid components, papillary projections, ascites etc. are concerning features.
- * Infection: Usually associated with fever, leukocytosis and inflammatory symptoms.
- * Rupture: Best explanation for sudden severe pain in a woman with a cyst, particularly a hemorrhagic cyst.

Exam point:

☞ Sudden severe pain + ovarian cyst → think rupture or torsion.

☞ Cyst with internal echoes → hemorrhagic cyst; sudden pain → rupture is likely.

Q2. 23-year-old woman with severe dysmenorrhea, dyspareunia, infertility, fixed retroverted uterus and tender nodularity in pouch of Douglas. Diagnosis?

Correct answer: c) Endometriosis

Explanation:

This is a classic clinical picture of endometriosis.

Important clues:

- * Severe dysmenorrhea → very characteristic.
- * Deep dyspareunia → suggests endometriosis involving the uterosacral ligaments/cul-de-sac.
- * Infertility → common association due to pelvic inflammation, adhesions and distortion of pelvic anatomy.
- * Fixed retroverted uterus → suggests pelvic adhesions.
- * Tender nodularity in the pouch of Douglas → highly suggestive of deep infiltrating endometriosis, particularly involvement of the uterosacral ligaments/rectovaginal region.

Why not the others?

- * Fibroid uterus: May cause menorrhagia, pressure symptoms and infertility, but does not typically cause tender nodularity in the pouch of Douglas.
- * PID: Can cause infertility and pelvic adhesions, but the combination of severe dysmenorrhea + deep dyspareunia + pouch of Douglas nodularity strongly favors endometriosis.
- * Adenomyosis: Causes dysmenorrhea and heavy menstrual bleeding, usually with a bulky, tender uterus; it is less typical in a 23-year-old and does not explain pouch-of-Douglas nodularity as well.

Exam point:

☞ Dysmenorrhea + deep dyspareunia + infertility + fixed retroverted uterus + POD nodularity = Endometriosis.

Q3. 27-year-old woman with infertility; USG shows septate uterus. Best management?

Correct answer: d) Septoplasty

Explanation:

A septate uterus is a congenital Müllerian anomaly caused by failure of resorption of the uterine septum.

A septum can interfere with implantation and is associated with:

- * Infertility/subfertility
- * Recurrent miscarriage
- * Adverse pregnancy outcomes

The preferred treatment in a woman with reproductive problems attributable to a septate uterus is hysteroscopic septoplasty (hysteroscopic metroplasty).

The septum is divided hysteroscopically, thereby creating a single uterine cavity.

Why not the others?

- * OCP: Does not correct the anatomical abnormality.
- * Metroplasty: The term can describe surgical correction, but for a septate uterus the preferred modern approach is specifically hysteroscopic septoplasty.
- * Hysterectomy: Completely inappropriate in a 27-year-old woman desiring fertility.

Important distinction:

☞ Septate uterus → hysteroscopic septoplasty

☞ Bicornuate uterus → generally not treated by hysteroscopic septoplasty.

Q 4 30-year-old with infertility and bilateral chocolate cysts in ovaries — Most likely diagnosis?

Correct answer: d) Endometrioma

Explanation:

- * A chocolate cyst (endometrioma) is an ovarian cyst caused by endometriosis.
- * Repeated cyclical bleeding within an endometriotic cyst causes accumulation of old blood, giving the characteristic “chocolate” appearance.
- * Bilateral ovarian endometriomas are common.
- * Endometriosis can cause infertility because of:
 - * Pelvic adhesions
 - * Distortion of tubo-ovarian anatomy
 - * Inflammation
 - * Impaired ovarian function

Why not the others?

- * Luteal cyst: Functional cyst; does not characteristically contain old blood producing a chocolate cyst.
- * Dermoid cyst: Usually contains fat, hair, calcification; ultrasound may show echogenic components.
- * Serous cystadenoma: Usually a thin-walled, predominantly simple cyst and does not produce a chocolate appearance.

Exam point:

☞ Chocolate cyst = ovarian endometrioma = endometriosis.

Q5. 48-year-old with abnormal uterine bleeding and endometrial thickness of 4 mm on USG — Most likely diagnosis?

Correct answer: a) Atrophic endometrium

Explanation:

An endometrial thickness of ≤ 4 mm is classically considered reassuring in a postmenopausal woman with bleeding, because an atrophic endometrium is the commonest cause of postmenopausal bleeding.

Atrophic endometrium becomes:

- * Thin
- * Fragile
- * Poorly vascularized

This can result in vaginal bleeding despite a very thin endometrium.

Why not the others?

- * Hyperplasia: Usually produces a thickened endometrium, often associated with unopposed estrogen.
- * Endometrial cancer: May produce irregular/thickened endometrium; a thickness ≤ 4 mm in a postmenopausal woman has a very low likelihood of endometrial cancer, although persistent/recurrent bleeding still requires evaluation.
- * Polyp: Usually appears as a focal intracavitary lesion rather than simply a uniformly thin 4-mm endometrium.

⚠ Important exam nuance: The 4-mm cutoff is specifically most useful in postmenopausal bleeding. At age 48, menopausal status matters; if she is still premenopausal, endometrial thickness varies considerably with the menstrual cycle.

Exam point:

👉 Postmenopausal bleeding + endometrium ≤ 4 mm $\rightarrow$ atrophic endometrium is most likely.

Q6. 29-year-old with secondary amenorrhea for 6 months, UPT negative; withdrawal bleeding occurs after progesterone challenge. Most likely diagnosis?

Correct answer: b) Anovulation

Explanation:

The progesterone challenge test helps determine whether there is sufficient endogenous estrogen and whether the outflow tract is patent.

The patient develops withdrawal bleeding after progesterone.

This tells us:

1. Estrogen is present → the endometrium has been adequately proliferated.
2. Outflow tract is patent → blood can exit the uterus.
3. The likely problem is failure of ovulation, resulting in inadequate endogenous progesterone.

Therefore, anovulation is the best answer.

A common cause is PCOS, although other causes of chronic anovulation are possible.

Why not the others?

- * Asherman syndrome: Intrauterine adhesions prevent normal endometrial shedding; typically no withdrawal bleeding after progesterone.
- * Outflow tract obstruction: Blood cannot exit → no withdrawal bleeding.
- * Estrogen deficiency: Insufficient estrogen means the endometrium is not adequately proliferated → usually no withdrawal bleeding.

Very important exam rule:

Progesterone challenge → bleeding = estrogen present + patent outflow tract → anovulation likely.

Q7. 35-year-old woman with PID, adnexal mass, fever, severe pain; USG showing tubo-ovarian abscess — Initial management?

Most likely answer: Antibiotic therapy with broad-spectrum IV antibiotics

Explanation:

A tubo-ovarian abscess (TOA) is a severe complication of pelvic inflammatory disease in which the fallopian tube and ovary become involved in an inflammatory mass/abscess.

The combination of:

- * PID
- * Fever
- * Severe pelvic pain
- * Adnexal mass
- * USG showing TOA

strongly suggests tubo-ovarian abscess.

Initial treatment

The first step is hospital admission and broad-spectrum antibiotics, particularly because the patient has fever and severe pain.

Treatment needs to cover:

- * Gonorrhea
- * Chlamydia
- * Anaerobes
- * Gram-negative organisms
- * Other polymicrobial pelvic organisms

Drainage/surgery is considered when:

- * Abscess is large or unlikely to resolve with antibiotics
- * No clinical improvement after approximately 48–72 hours
- * Abscess ruptures
- * There is sepsis or clinical deterioration
- * Diagnosis is uncertain

Why not immediate hysterectomy?

- * Hysterectomy is not the initial treatment for TOA.
- * Fertility-preserving medical treatment is preferred in a 35-year-old whenever clinically appropriate.

Exam point:

☞ TOA → broad-spectrum antibiotics first.

☞ Failure to respond/large or ruptured abscess → drainage or surgery.

Q8. 26-year-old with amenorrhea, galactorrhoea and headache — Most appropriate investigation?

Correct answer: d) Prolactin

Explanation:

The combination of:

Amenorrhea + galactorrhoea + headache strongly suggests hyperprolactinaemia, potentially due to a prolactinoma.

Prolactin inhibits hypothalamic GnRH, leading to reduced LH and FSH secretion. This results in:

↑ Prolactin → ↓ GnRH → ↓ LH/FSH → anovulation → amenorrhea

The headache raises additional concern for a pituitary mass.

Therefore, the appropriate initial hormonal investigation is serum prolactin.

If prolactin is elevated, the next steps include excluding physiological/drug-related causes and, when appropriate, performing pituitary MRI.

Why not the others?

- * Oestradiol: May be low secondary to hyperprolactinaemia but is not the first investigation.
- * TSH: Hypothyroidism can cause hyperprolactinaemia, so TSH is important in the subsequent evaluation, but the clinical picture points first toward prolactin.
- * FSH: May help distinguish ovarian failure from hypothalamic/pituitary causes, but is not the best first test here.

Exam point:

☞ Galactorrhoea + amenorrhea → check serum prolactin.

☞ Galactorrhoea + headache → think pituitary adenoma/prolactinoma.

Q9. 24-year-old with irregular cycles, acne, obesity and infertility; USG shows multiple peripheral follicles — First-line ovulation-inducing drug?

Correct answer: b) Clomiphene citrate

Explanation:

The clinical picture is typical of PCOS with anovulatory infertility:

- * Irregular menstrual cycles → oligo/anovulation
- * Acne → hyperandrogenism
- * Obesity → common metabolic association
- * Infertility → usually due to anovulation
- * Multiple peripheral follicles → polycystic ovarian morphology

For the exam-style question, the expected answer is clomiphene citrate, a selective estrogen receptor modulator.

Clomiphene blocks estrogen receptors at the hypothalamus, reducing estrogen negative feedback:

↓ Estrogen feedback → ↑ GnRH → ↑ FSH/LH → follicular development → ovulation

Important modern update

For current infertility management in women with PCOS, letrozole is generally preferred over clomiphene as first-line pharmacological ovulation induction when there are no other infertility factors.

However, letrozole is not included among the options in this question. Therefore, among the listed options, clomiphene citrate is the correct answer.

Why not the others?

- * Progesterone: Produces withdrawal bleeding but does not induce ovulation.
- * GnRH analogues: Not first-line for PCOS ovulation induction.
- * Oestrogen therapy: Does not correct the underlying anovulation and is not an ovulation-inducing treatment.

Exam point:

☞ PCOS + anovulatory infertility → ovulation induction.

☞ Modern first-line: letrozole.

☞ If letrozole is not an option and clomiphene is offered → choose clomiphene citrate.

Q10. 34-year-old with heavy menstrual bleeding; biopsy shows simple hyperplasia without atypia. Management?

Correct answer: c) Progesterone therapy

Explanation:

- * Endometrial hyperplasia without atypia is usually caused by unopposed estrogen, commonly associated with anovulatory cycles.
- * The risk of progression to endometrial carcinoma is low, so hysterectomy is generally not the first-line treatment in a young woman who may desire fertility.
- * Progestogen therapy counteracts estrogen-induced endometrial proliferation and causes endometrial shedding/regression.
- * Options include:
 - * Levonorgestrel-releasing intrauterine system (LNG-IUS) – often preferred.
 - * Oral cyclic or continuous progestogens.

Why the others are wrong:

- * Hysterectomy: Too radical as first-line treatment in a 34-year-old with hyperplasia without atypia.
- * Chemotherapy: Used for advanced malignancy, not simple hyperplasia.
- * Radiotherapy: Not indicated for benign endometrial hyperplasia.

Exam point:

Endometrial hyperplasia WITHOUT atypia → Progestogen, preferably LNG-IUS.

Q11. 50-year-old with uterine prolapse; cervix is outside the introitus but uterus remains inside the vagina. Degree?

Correct answer: c) Second degree

Explanation:

In the traditional classification:

- * First degree: Cervix descends into the vagina but remains above the introitus.
- * Second degree: Cervix reaches or protrudes through the introitus, while the uterus/body remains inside the vagina.
- * Third degree / procidentia: The entire uterus, including the body, is outside the introitus.

Here, the cervix is outside the introitus but the uterus is still inside the vagina, therefore it is second-degree uterine prolapse.

Exam memory:

1st → cervix inside vagina

2nd → cervix outside, uterus inside

3rd/procidentia → uterus completely outside

Q12. 31-year-old with severe dysmenorrhoea not relieved by NSAIDs; desires fertility. Best next step?

Correct answer: b) Laparoscopy

Explanation:

Severe dysmenorrhoea that does not respond adequately to NSAIDs raises suspicion of endometriosis, particularly in a reproductive-age woman.

Diagnostic laparoscopy allows:

- * Direct visualization of endometriotic lesions.
- * Confirmation of diagnosis.
- * Simultaneous treatment, such as ablation/excision of endometriotic deposits.
- * Assessment of pelvic anatomy and fertility-related factors.

Because she desires fertility, definitive surgery such as hysterectomy is inappropriate.

Why the others are wrong:

- * DMPA: Can suppress endometriosis symptoms but prevents conception while being used; not the best next step when diagnosis is uncertain and fertility is desired.
- * GnRH analogues: Can suppress endometriosis but are generally not the initial diagnostic step and are temporary.
- * Hysterectomy: Definitive treatment but inappropriate for a woman desiring fertility.

Exam point:

Severe dysmenorrhoea + poor response to NSAIDs + reproductive age → suspect endometriosis → laparoscopy.

Q13. 60-year-old with postmenopausal bleeding; cervix shows ulcerative proliferative growth that bleeds on touch. Diagnosis?

Correct answer: a) Cervical carcinoma

Explanation:

A friable, ulcerative, proliferative cervical growth that bleeds on touch is highly characteristic of carcinoma of the cervix.

Typical features include:

- * Postcoital/contact bleeding
- * Postmenopausal bleeding
- * Foul-smelling vaginal discharge
- * Friable/ulcerative cervical lesion
- * Bleeding on examination

Why endometrial carcinoma is less likely:

Endometrial carcinoma commonly presents with postmenopausal bleeding, but the lesion originates in the endometrial cavity, not as an obvious ulcerative growth on the cervix.

Exam point:

Friable/ulcerative cervical mass + bleeding on touch → Cervical carcinoma.

Q14. 55-year-old postmenopausal woman with bleeding; TVS shows endometrial thickness of 9 mm. Next step?

Correct answer: c) Endometrial biopsy

Explanation:

- * Postmenopausal bleeding (PMB) must always be evaluated for endometrial carcinoma.
- * An endometrial thickness of >4 mm on transvaginal ultrasound in a woman with postmenopausal bleeding warrants endometrial sampling.
- * Here, the endometrium is 9 mm, which is clearly abnormal.
- * Therefore, endometrial biopsy is the appropriate next investigation.

Why the others are wrong:

- * CA-125: Not a diagnostic test for endometrial cancer and not the next step in PMB.
- * Pap smear: Screens for cervical cancer, not endometrial pathology.

- * Repeat USG after 3 months: Inappropriate because the endometrium is significantly thickened and the woman has bleeding.

Exam point:

Postmenopausal bleeding + endometrial thickness >4 mm → endometrial sampling.

Q15. 45-year-old with progressively increasing dysmenorrhoea and menorrhagia; uterus uniformly enlarged and tender. Diagnosis?

Correct answer: c) Adenomyosis

Explanation:

The classic clinical picture of adenomyosis is:

- * Dysmenorrhoea – often progressively worsening
- * Menorrhagia/heavy menstrual bleeding
- * Uniformly enlarged uterus
- * Tender, often “boggy” uterus

Adenomyosis occurs when endometrial glands and stroma are present within the myometrium.

Why the others are less likely:

- * Fibroid: Can cause menorrhagia and an enlarged uterus, but the uterus is often irregular or nodular, depending on the location and size of fibroids.
- * PID: Usually associated with pelvic pain, cervical motion tenderness, fever/discharge or other infective features rather than progressively increasing menorrhagia.
- * Endometriosis: Classically causes severe dysmenorrhoea and pelvic pain, but does not characteristically produce a uniformly enlarged, tender uterus.

Exam point:

Heavy bleeding + progressive dysmenorrhoea + uniformly enlarged tender/boggy uterus = Adenomyosis.

Q16. 40-year-old with intermenstrual bleeding; cervix healthy on examination. Best initial investigation?

Answer marked in the question: a) Hysteroscopy

Explanation:

Intermenstrual bleeding suggests possible endometrial pathology, particularly:

- * Endometrial polyp
- * Submucous fibroid
- * Endometrial hyperplasia

- * Endometrial malignancy

Hysteroscopy directly visualizes the uterine cavity and can identify focal lesions such as polyps or submucous fibroids. Importantly, a biopsy can be taken at the same time.

Why the other options are less appropriate in the context of this question:

- * Endometrial biopsy: Useful for detecting diffuse endometrial pathology but may miss a focal lesion such as a polyp.
- * Pap smear: Evaluates the cervix; the cervix is already described as healthy.
- * TVS: Useful for assessing uterine and endometrial pathology, but hysteroscopy provides direct visualization of the uterine cavity and allows targeted biopsy/treatment.

Important exam nuance:

In many contemporary abnormal uterine bleeding algorithms, TVS is commonly used as an initial imaging investigation, while hysteroscopy is particularly valuable when endometrial cavity pathology is suspected, especially focal lesions or when tissue diagnosis is required. The question's marked answer is therefore based on the direct assessment of the endometrial cavity.

Exam point:

Intermenstrual bleeding → think endometrial cavity lesion → hysteroscopy allows direct visualization ± biopsy.

Q17. Germ cell tumour marker among the following?

Correct answer: c) AFP

Explanation:

Alpha-fetoprotein (AFP) is an important tumour marker for ovarian germ cell tumours, particularly:

- * Yolk sac tumour (endodermal sinus tumour) → markedly elevated AFP
- * Some embryonal carcinomas → AFP may be elevated

Why the others are wrong:

- * LH: Reproductive hormone, not a germ cell tumour marker.
- * TSH: Thyroid-stimulating hormone; not an ovarian tumour marker.
- * CA-125: Associated primarily with epithelial ovarian carcinoma, although it is not specific.

Q18. A woman with PCOS is at increased risk of all the following EXCEPT:

Answer: a) Osteoporosis ☒

Explanation:

PCOS is associated with insulin resistance, hyperandrogenism and chronic anovulation. Important long-term risks include:

- * Diabetes mellitus – ↑ risk because of insulin resistance.
- * Hypertension – ↑ risk due to the metabolic/cardiovascular association.
- * Endometrial carcinoma – ↑ risk because chronic anovulation → prolonged unopposed oestrogen → endometrial hyperplasia → carcinoma.
- * Osteoporosis – not classically an increased risk in PCOS. Hyperandrogenism and, in many women, relatively preserved oestrogen exposure may be associated with preserved bone density.

Exam point:

PCOS → ↑ metabolic syndrome + endometrial hyperplasia/cancer; osteoporosis is NOT a typical increased risk.

Q19. High-risk HPV types:

Answer: d) 16, 18 ☒

Explanation:

The most important high-risk oncogenic HPV types are:

- * HPV 16
- * HPV 18

They are responsible for a large proportion of cervical cancers and are also associated with other anogenital and oropharyngeal cancers.

Low-risk HPV types:

- * HPV 6 and 11 → genital warts/condyloma acuminata; generally non-oncogenic.

Exam memory:

6, 11 → warts

16, 18 → cancer

Q20. The most common benign ovarian tumour:

Answer: b) Dermoid cyst (mature cystic teratoma) 

Explanation:

The mature cystic teratoma (dermoid cyst) is classically regarded as the most common benign ovarian neoplasm, particularly in reproductive-age women.

It is a germ-cell tumour and may contain tissues from all three germ-cell layers, commonly including:

- * Hair
- * Sebaceous material
- * Teeth/bone

The serous cystadenoma is the commonest benign epithelial ovarian tumour, which is an important distinction.

Exam point:

PCOS → ↑ metabolic syndrome + endometrial hyperplasia/cancer; osteoporosis is NOT a typical increased risk.

Q21. 55-year-old with urinary incontinence associated with urgency; urine dipstick negative. First-line treatment?

Correct answer: a) Bladder training

Explanation:

This is urge urinary incontinence (UUI), usually due to overactive bladder (OAB).

The first-line management is conservative behavioural treatment, particularly bladder training.

Bladder training involves:

- * Voiding at scheduled intervals.
- * Gradually increasing the interval between voids.
- * Suppressing urgency using pelvic-floor contraction and distraction techniques.
- * Avoiding excessive bladder irritants such as caffeine.

Why the other options are not first-line:

- * Botulinum toxin A: Used for refractory overactive bladder after conservative/medical treatment.
- * Mirabegron: β_3 -adrenoceptor agonist; pharmacological treatment, generally considered after or alongside conservative measures when needed.

- * Oxybutynin: Antimuscarinic; also a pharmacological option, not the initial conservative treatment.
- * Pelvic floor muscle training: Useful, particularly for stress incontinence; it can also help urgency, but bladder training is the key first-line intervention for urgency-predominant symptoms.

Exam point:

Urgency/urge incontinence → bladder training first.

Q22. 60-year-old with urinary leakage on coughing and sneezing; urine dipstick negative. First-line treatment?

Correct answer: e) Supervised pelvic floor muscle training

Explanation:

Leakage with coughing and sneezing is typical of stress urinary incontinence (SUI).

The increased intra-abdominal pressure during coughing, sneezing, laughing or exercise exceeds urethral closure pressure, causing urine leakage.

First-line treatment is supervised pelvic floor muscle training (PFMT).

PFMT strengthens the pelvic floor muscles and improves urethral support and closure.

For stress urinary incontinence, a supervised programme is generally recommended for at least 3 months.

Why the other options are wrong:

- * Bladder training: Primarily used for urgency/overactive bladder.
- * Desmopressin: May reduce urine production in selected situations but is not routine first-line treatment for SUI.
- * Duloxetine: Can be used for SUI in selected patients but is not first-line compared with PFMT.
- * Systemic HRT: Not a treatment for stress urinary incontinence.

Exam point:

Cough/sneeze/exercise leakage → Stress UI → supervised pelvic floor muscle training.

Q23. What percentage of women using vaginal pessaries for pelvic organ prolapse report satisfactory symptom relief?

Correct answer: e) 92%

Explanation:

A vaginal pessary provides mechanical support to the prolapsed pelvic organs and can produce substantial improvement in prolapse symptoms.

A prospective study of women successfully fitted with a pessary found that 92% were satisfied with the pessary after 2 months. Nearly all major prolapse symptoms, particularly the sensation of vaginal bulge, improved.

Therefore, among the options given:

* 47% ✗

* 58% ✗

* 69% ✗

* 80% ✗

* 92% ✓

Important correction: In my previous response I said approximately 80%. For this particular MCQ, the expected answer is 92%.

Exam point:

Successful pessary fitting → ~92% patient satisfaction in the commonly cited study.

Q24. Incidence of asymptomatic bacteriuria in pregnancy is 2–5%. If left untreated, what proportion will proceed to lower UTI?

Best answer from the given options: A) 20%

Explanation:

Asymptomatic bacteriuria (ASB) means significant bacteriuria without urinary symptoms.

Pregnancy predisposes to progression of bacteriuria because of:

- * Progesterone-mediated ureteric dilatation
- * Reduced ureteric tone
- * Urinary stasis
- * Mechanical compression of the ureters by the enlarging uterus

Historically, untreated ASB in pregnancy has been associated with progression to symptomatic UTI/pyelonephritis in approximately 20–35% of cases.

Therefore, among the choices:

- * 20% ☒
- * 40% ☐
- * 60% ☐
- * 80% ☐
- * 90% ☐

Important terminology point

The question specifically says “lower UTI.” Classic data often quote 20–35% progressing to symptomatic UTI, including pyelonephritis, rather than specifically lower UTI alone. So 20% is the closest/expected MCQ answer.

Current evidence also shows that the risk may be considerably lower in some modern low-risk populations; ACOG notes contemporary untreated rates of pyelonephritis around 2.2–2.4% in some trials.

MRCOG-style exam point:

Untreated ASB in pregnancy → historically ~20–35% develop symptomatic UTI/pyelonephritis.

Q25. Which aetiological factor is associated with the greatest risk of developing pelvic organ prolapse?

Correct answer: d) Parity

The key distinction here is that parity, particularly repeated vaginal childbirth, is the strongest factor among the options shown.

Pregnancy and childbirth can damage/stretch:

- * Levator ani muscles
- * Endopelvic fascia
- * Pelvic ligaments
- * Pudendal nerve

The risk increases with increasing number of deliveries. Evidence identifies parity and vaginal delivery as confirmed risk factors for pelvic organ prolapse.

Why not the others?

- * Age: Important risk factor, but not the greatest in this question.
- * Connective tissue disorder: Can predispose to prolapse but is less common.
- * Menopausal status: Loss of estrogen contributes to tissue weakening.

- * Weight: Obesity increases intra-abdominal pressure and risk, but parity is the expected answer here.

Exam point:

POP → Parity/vaginal childbirth is the major risk factor.

Q26. By what factor are obese women at increased risk of anal incontinence compared with non-obese women?

Correct answer: a) 2-fold

A study comparing obese and non-obese women found that obesity was associated with approximately:

- * 4-fold increased risk of urinary incontinence
- * 2-fold increased risk of anal incontinence

The mechanism is probably related to increased chronic intra-abdominal pressure and mechanical stress on the pelvic floor and anorectal continence mechanisms.

Important memory:

Obesity → UI 4×, AI 2×

So:

- * 2-fold ☒
- * 3-fold ☐
- * 4-fold ☐ — this is for urinary, not anal, incontinence.
- * 6-fold ☐
- * 8-fold ☐

Q27. Which antimuscarinic drug used in management of overactive bladder should be avoided in frail older women?

Correct answer: d) Oxybutynin

Why?

Oxybutynin is an antimuscarinic/anticholinergic drug. It blocks muscarinic receptors and reduces involuntary detrusor contractions.

However, in frail older people, anticholinergic drugs can cause:

- * Confusion
- * Cognitive impairment
- * Constipation

- * Dry mouth
- * Blurred vision
- * Urinary retention

Immediate-release oxybutynin is particularly problematic in older/frail women, and NICE specifically advises against offering it to older women who may be at increased risk of sudden deterioration in physical or mental health.

Why the others?

- * Darifenacin: Antimuscarinic but relatively M3 selective.
- * Desmopressin: Not an antimuscarinic; mainly used for selected nocturia situations.
- * Mirabegron: β_3 agonist, not antimuscarinic.
- * Tolterodine: Antimuscarinic, but the classic exam answer for frail elderly patients is oxybutynin because of its prominent anticholinergic effects.

Exam point:

Frail elderly + OAB → avoid oxybutynin because of cognitive/anticholinergic adverse effects.

Q28. What is the mode of action of duloxetine?

Correct answer: e) Serotonin–noradrenaline reuptake inhibitor

Duloxetine is an SNRI — serotonin-noradrenaline reuptake inhibitor.

It increases serotonin and noradrenaline activity in the spinal pathways involved in urethral sphincter control. This enhances pudendal nerve-mediated urethral sphincter activity during bladder storage, increasing urethral closure pressure.

Therefore, it can reduce episodes of stress urinary incontinence.

Why the others are wrong?

- * M3 receptor antagonist → antimuscarinic drugs such as oxybutynin.
- * Monoamine oxidase inhibitor → different antidepressant class.
- * Alpha-2 receptor agonist → not duloxetine.
- * Beta-3 receptor agonist → mirabegron.

Easy memory:

Duloxetine = SNRI = Stress urinary incontinence

However, clinically, it is not first-line treatment for stress UI; pelvic-floor muscle training is preferred. NICE recommends duloxetine only selectively when pharmacological treatment is preferred or surgery is unsuitable.

Q29. What is the only true contraindication to cystoscopy?

Correct answer: b) Untreated UTI

An active untreated urinary tract infection is the classic true contraindication to elective diagnostic cystoscopy because instrumentation can potentially worsen/spread the infection.

Therefore, if a patient has an active UTI, it should generally be treated before cystoscopy.

Why the other options are not true contraindications:

- * Congenital urinary tract anomalies: Cystoscopy may actually be useful for evaluation.
- * Urethral stricture: Cystoscopy may be used diagnostically, although access may be technically difficult.
- * Vesicovaginal fistula: Cystoscopy is useful to assess the bladder and ureteric orifices.
- * Visible haematuria: This is actually an important indication for cystoscopic evaluation, particularly when investigating possible bladder pathology.

Guidance also notes that diagnostic cystoscopy is not routinely required for uncomplicated urinary incontinence, but this is different from saying it is contraindicated.

Exam point:

Cystoscopy + untreated UTI = contraindication.

Haematuria = indication, not contraindication.

Q30. After insertion of a trans-obturator tape for stress urinary incontinence, when should follow-up with vaginal examination be offered?

Correct answer: d) Within 6 months

Explanation:

After continence surgery with a synthetic mid-urethral tape, follow-up is needed to assess:

- * Persistence/recurrence of urinary incontinence
- * Voiding dysfunction
- * Pain
- * Vaginal mesh exposure or extrusion
- * Other mesh-related complications

NICE recommends offering a follow-up appointment within 6 months to all women who have undergone surgery for stress urinary incontinence. The follow-up should include vaginal examination when appropriate to assess for mesh exposure/extrusion.

Therefore, among the options:

- * Within 1 month ✗
- * Within 2 months ✗

- * Within 3 months ✗
- * Within 6 months ✓
- * Within 12 months ✗

MRCOG point:

Continence surgery → follow-up within 6 months.

Q31. Correct statement regarding establishing chorionicity in twin pregnancy?

Options visible:

- a) Best detected after 16 weeks of pregnancy
- b) Thick membrane is monochorionic
- c) Same sex ensures dichorionicity
- d) Twin peak is dichorionic

Correct answer: d) Twin peak is dichorionic

Explanation

Chorionicity should ideally be determined in the first trimester, preferably around 11–14 weeks, because the ultrasound signs are most reliable at this stage. RCOG recommends assessment around 11+2 to 14+1 weeks.

The important ultrasound signs are:

Dichorionic diamniotic (DCDA):

- * Thick intertwin membrane
- * Lambda/twin-peak sign
- * Two chorionic layers + two amniotic layers

Monochorionic diamniotic (MCDA):

- * Thin intertwin membrane
- * T-sign
- * Only two amniotic layers

Why the other options are wrong?

- a) Best detected after 16 weeks ✗

No. Chorionicity is best established before 14 weeks, when the membrane insertion and lambda/T signs are most easily assessed.

- b) Thick membrane is monochorionic ✗

The opposite. A thick membrane suggests dichorionicity.

c) Same sex ensures dichorionicity ✗

Same-sex twins can be either:

- * Monochorionic, or

- * Dichorionic.

d) Twin peak is dichorionic ✓

Easy memory:

Lambda = DCDA

T-sign = MCDA

Q32. The presenting diameter in face presentation is?

Correct answer: a) Submentobregmatic

Explanation:

In face presentation, the fetal head is completely extended.

The presenting/engaging diameter is:

Submentobregmatic = 9.5 cm

It extends from the submentum (under the chin) to the centre of the bregma.

Q33. The smallest diameter in the female pelvis is?

Correct answer: a) Interspinous diameter

Explanation:

The interspinous diameter is the distance between the two ischial spines.

It is approximately 10 cm and represents the narrowest transverse diameter of the mid-pelvis.

This is clinically important because the ischial spines can form the limiting point for descent of the fetal head.

Compare the options:

- * Interspinous diameter → ~10 cm ✓

- * Obstetric conjugate → ~10.5–11 cm

- * Diagonal conjugate → ~12.5–13 cm

- * True/anatomical conjugate → ~11 cm

Exam point:

Narrowest transverse diameter of the pelvis = interspinous diameter.

Q34. Commonest cause of non-engagement in a primigravida at term?

Correct answer: c) CPD — cephalopelvic disproportion

Explanation:

Engagement means that the widest transverse diameter of the presenting part has passed through the pelvic inlet.

In a primigravida at term, failure of the fetal head to engage raises concern about a mismatch between the fetal head and maternal pelvis.

The classic exam answer is:

Cephalopelvic disproportion (CPD)

This may occur because:

- * Maternal pelvis is relatively small/contracted
- * Fetal head is large
- * Fetal head is poorly flexed
- * There is a combination of maternal and fetal factors

Why the others are wrong?

- * Breech: Abnormal presentation, but not the commonest cause of failure of cephalic engagement in a primigravida.
- * Brow: Can cause difficult engagement because the presenting diameter is very large, but it is uncommon.
- * Hydramnios: Excess liquor can result in a high/mobile presenting part, but is not the commonest cause.

High-yield revision

Primigravida + head not engaged at term → think CPD.

Q35. Best method of evacuation of missed abortion >12 weeks uterus?

Correct answer: a) Vaginal misoprostol followed by evacuation

Explanation:

For a missed miscarriage beyond the first trimester, medical cervical preparation/induction with misoprostol is preferred rather than immediately performing suction evacuation.

Misoprostol:

- * Softens and dilates the cervix.
- * Produces uterine contractions.
- * Facilitates expulsion of the pregnancy.
- * Reduces the difficulty and complications associated with surgical evacuation.

At >12 weeks, the uterus is larger and the cervix usually requires preparation before evacuation.

Why the others are less appropriate:

- * Intramuscular prostaglandin: Not the preferred route/regimen.
- * Oxytocin infusion: Less effective for cervical preparation and evacuation of a missed miscarriage.
- * Suction evacuation: Commonly used for early pregnancy loss, but becomes less suitable as gestational size increases.

Exam point:

Missed abortion >12 weeks → misoprostol for cervical preparation/uterine evacuation.

Q36. With oral iron therapy, rise in Hb% can be seen after:

Correct answer: d) 3 weeks

Explanation:

With effective oral iron therapy, the haematological response does not produce an immediate substantial rise in haemoglobin.

Initially:

1. Iron is absorbed and utilized for erythropoiesis.
2. Reticulocyte production increases.
3. Haemoglobin subsequently begins to rise.

A clinically detectable rise in Hb is traditionally expected after approximately 2–3 weeks, and in this MCQ the expected answer is 3 weeks. This is also consistent with the referenced obstetric teaching material.

Important distinction:

- * Reticulocyte response: occurs earlier.
- * Significant Hb rise: generally becomes apparent over the following weeks.

Exam point:

Oral iron → Hb rise $\approx$ 3 weeks.

Q37. TORCH infection involves all except:

Correct answer: a) HIV

Explanation:

The classical TORCH group consists of:

- * T – Toxoplasmosis

- * O – Other infections
- * R – Rubella
- * C – Cytomegalovirus (CMV)
- * H – Herpes simplex virus (HSV)

Therefore:

- * CMV → included ✓
- * Toxoplasmosis → included ✓
- * Rubella → included ✓
- * HIV → not part of the classical TORCH acronym ✗

Exam point:

TORCH = Toxoplasma + Other + Rubella + CMV + Herpes

The “O” (Other) category can include infections such as syphilis, varicella-zoster, parvovirus B19, and others depending on the classification.

Q38. The most common site of placental implantation is:

Correct answer: c) Fundus of the uterus

Explanation:

Normally, implantation occurs in the upper uterine cavity, most commonly on the posterior or anterior wall of the upper uterine segment/fundal region.

The upper uterine segment is preferred because it provides:

- * Good vascular supply.
- * Adequate space for placental growth.
- * Better conditions for continued pregnancy.

Why the others are wrong?

- * Cornual region: Not the commonest site; implantation here can result in interstitial pregnancy.
- * Cervix: Abnormal implantation → placenta previa if the placenta lies near/over the internal os.
- * Lower uterine region: Abnormally low implantation is associated with placenta previa.

Exam point:

Normal implantation → upper uterine segment/fundal region.

Q39. Vaginal birth after caesarean section (VBAC) is contraindicated in all except:

Correct answer: b) No previous vaginal birth

Explanation:

Having no previous vaginal birth is NOT a contraindication to VBAC.

A woman can be offered a trial of labour after caesarean (TOLAC) even if she has never previously delivered vaginally, provided there are no other contraindications.

True contraindications include:

a) Previous uterine rupture ✗

* Major contraindication because of the substantially increased risk of recurrent uterine rupture.

c) Previous classical caesarean section ✗

* A classical vertical incision involves the contractile upper uterine segment and carries a high risk of rupture during labour.

d) Suspected CPD ✗

* Significant suspected cephalopelvic disproportion may make planned vaginal birth inappropriate.

b) No previous vaginal birth ✓

* This may reduce the probability of successful VBAC but is not itself a contraindication.

Exam point:

No previous vaginal delivery $\neq$ contraindication to VBAC.

Q40. Formula used for estimation of total iron requirement?

The options visible are:

* a) $3.3 \times \text{body weight} \times \text{Hb deficit}$

* b) $0.3 \times \text{body weight} \times \text{Hb deficit}$

* c) $4 \times \text{body weight} \times \text{Hb deficit}$

* d) $4.4 \times \text{body weight} \times \text{Hb deficit}$

Correct answer: d) $4.4 \times \text{body weight} \times \text{Hb deficit}$

Formula:

Total iron requirement $\approx 4.4 \times \text{body weight (kg)} \times \text{Hb deficit (g/dL)}$

This is a commonly taught formula for estimating parenteral iron requirements, particularly in obstetric teaching material.

For example, if:

* Weight = 50 kg

* Hb deficit = 2 g/dL

Then:

Iron requirement = $4.4 \times 50 \times 2 = 440$ mg

Important nuance

The modern Ganzoni formula is different:

Iron deficit = body weight $\times$ Hb deficit $\times$ 2.4 + iron stores

So don't confuse the 4.4 obstetric exam formula with the 2.4 Ganzoni coefficient used in many current IV-iron product calculations.

For this MCQ, however, the expected answer is clearly:

$4.4 \times \text{body weight} \times \text{Hb deficit} \rightarrow \text{option D.}$

Q41. Lochia alba lasts till:

Correct answer: c) 3–6 weeks

Explanation:

Lochia is the normal postpartum vaginal discharge resulting from shedding of decidual tissue and blood from the placental site.

It progresses through three stages:

1. Lochia rubra

- * Red/bloody discharge
- * Mainly blood, decidual tissue and fetal membranes
- * Usually lasts about 3–4 days

2. Lochia serosa

- * Pinkish/brown discharge
- * Contains less blood and more leukocytes
- * Usually lasts approximately day 4 to day 10–14

3. Lochia alba

- * Yellowish/whitish discharge
- * Predominantly leukocytes, mucus and epithelial cells
- * Can continue for several weeks, commonly up to 3–6 weeks

Therefore:

Lochia alba → 3–6 weeks → Option C

Q42. Uterine rupture risk is highest in:

Correct answer: d) Previous caesarean section

Explanation:

The most important risk factor for uterine rupture during labour is a previous uterine scar, particularly a previous caesarean section.

During subsequent labour, the scarred uterus is exposed to the stress of contractions. The risk depends strongly on the type of uterine incision.

Risk is particularly high with:

- * Previous classical caesarean section — vertical incision in the upper uterine segment
- * Previous uterine rupture
- * Multiple previous caesarean sections
- * Excessive uterine stimulation/induction or augmentation in a scarred uterus

A previous low-transverse caesarean scar has a much lower rupture risk than a classical scar, but it remains an important risk factor.

Why the others are wrong?

- * Multiparity: Not the major risk factor compared with a uterine scar.
- * Young age: Not a major direct risk factor.
- * Primigravida: No previous scar, so the specific risk associated with scar rupture is absent.

Previous CS → think uterine scar → increased rupture risk.

Q43. True regarding abruptio placenta with DIC is:

The options shown include decreased fibrinogen, decreased factor V, and decreased factor VIII.

Key concept: Abruptio placentae can cause DIC

Placental abruption releases large amounts of tissue factor/thromboplastin into the maternal circulation. This activates the coagulation cascade, producing widespread thrombin generation.

This results in:

- * Consumption of fibrinogen
- * Consumption of clotting factors
- * Consumption of platelets

- * Secondary fibrinolysis
- * Increased fibrin degradation products/D-dimer

Therefore, fibrinogen decreases.

Important obstetric point

In pregnancy, fibrinogen is normally physiologically elevated. Therefore, a “normal” fibrinogen level in a woman with severe abruption can actually be concerning, while a low fibrinogen strongly suggests significant consumptive coagulopathy.

Factor V and factor VIII may also fall in severe DIC, because clotting factors are consumed.

If the intended option in your document is “decreased fibrinogen,” that is the clearest classic answer.

Abruption + DIC → ↓ fibrinogen + ↓ platelets + prolonged PT/APTT + ↑ D-dimer/FDP.

RCOG recognizes placental abruption as an important obstetric cause of disseminated intravascular coagulation.

Q44. Newborn at term: HR 110/min, irregular breathing, grimaces on stimulation, flexed limbs, bluish limbs. APGAR at 1 minute?

Correct answer: b) 7

Let’s calculate it systematically.

APGAR = Appearance + Pulse + Grimace + Activity + Respiration

Component

Finding

Score

Appearance

Bluish limbs, presumably pink body = acrocyanosis

1

Pulse

110/min

2

Grimace

Grimaces on stimulation

1

Activity

Flexed limbs

1

Respiration

Irregular breathing

1

Total

6

Therefore, based strictly on the findings visible in the question, the score is actually 6, not 7.

So the question appears to have a problem/ambiguity in the answer key if it marks 7.

Let's look carefully:

* HR 110 → 2

* Irregular breathing → 1

* Grimaces with stimulation → 1

* Flexed limbs → 1

* Bluish extremities → 1

Total = 6.

Correct calculation:

$$\text{APGAR} = 2 + 1 + 1 + 1 + 1 = 6$$

Therefore, option d) 6 is the logically correct answer based on the information given.

High-yield APGAR:

* HR $\geq$ 100 → 2

* HR <100 → 1

* No pulse → 0

* Good cry → 2

* Irregular/weak breathing → 1

* Apnoea → 0

* Active movement → 2

* Some flexion → 1

* Limp → 0

* Cough/cry/withdrawal → 2

* Grimace → 1

* No response → 0

* Completely pink → 2

* Acrocyanosis → 1

* Completely blue/pale → 0

Q45. Biophysical profile assessment in pregnancy includes all EXCEPT:

Correct answer: a) Maternal blood pressure

A standard biophysical profile (BPP) assesses fetal well-being using five components:

1. Fetal breathing movements
2. Gross fetal body movements
3. Fetal tone
4. Amniotic fluid volume
5. Non-stress test (NST)

Each component is generally scored 0 or 2, giving a maximum score of 10.

Therefore:

- * Maternal blood pressure ✗ Not part of BPP
- * Amniotic fluid volume ✓
- * Fetal breathing movements ✓
- * Non-stress test ✓

BPP = Breathing + Movement + Tone + Liquor + NST

Memory trick: “B-M-T-L-N”

- * Breathing
- * Movement
- * Tone
- * Liquor
- * NST

Q46. High-risk factors for choriocarcinoma in vesicular mole EXCEPT:

From the image, the options are:

- a) Bilateral theca lutein cysts in ovaries
- b) Features of thyrotoxicosis
- c) Serum β -hCG >100,000
- d) Uterus >16 weeks

Expected answer: b) Features of thyrotoxicosis

Explanation:

Features suggesting a large/high-risk complete hydatidiform mole and increased risk of persistent GTN include:

- * Very high β -hCG, traditionally >100,000 IU/L
- * Uterus larger than expected for gestational age

- * Theca-lutein ovarian cysts
- * Maternal complications such as pre-eclampsia and hyperthyroidism can accompany very high hCG levels.

The RCOG notes that very high hCG levels are characteristic of molar pregnancy and that hCG can produce gestational thyrotoxicosis because it can stimulate the TSH receptor.

Important nuance for this MCQ

Thyrotoxicosis itself is not usually listed as a formal FIGO prognostic risk factor for GTN. The question is therefore testing the distinction between clinical complications of a large mole and established prognostic/high-risk features.

The established FIGO scoring system for GTN uses factors such as:

- * Age
- * Type of antecedent pregnancy
- * Interval from pregnancy
- * β -hCG level
- * Largest tumour size
- * Site and number of metastases
- * Previous chemotherapy.

So for the options shown, B is the intended EXCEPT answer.

Q47. The placental barrier is thinnest during:

Correct answer: d) Third trimester

The placental barrier becomes progressively thinner as pregnancy advances.

Early in pregnancy, the barrier contains several layers, including:

- * Syncytiotrophoblast
- * Cytotrophoblast
- * Basement membrane/interstitial tissue
- * Fetal capillary endothelium

With advancing gestation:

- * Cytotrophoblast becomes very thin and largely disappears from many areas.
- * Fetal capillaries move closer to the trophoblast.
- * The maternal–fetal diffusion distance becomes shorter.

By late pregnancy, some exchange areas are extremely thin, facilitating efficient transfer of oxygen, nutrients and waste products.

Exam point:

Placental barrier thickness decreases with gestational age → thinnest in the 3rd trimester.

Q48. Amniotic fluid is mainly produced by:

Correct answer: d) Fetal urine

After approximately 16–20 weeks, fetal urine becomes the major contributor to amniotic fluid volume.

Important changes with gestation

Early pregnancy:

- * Amniotic fluid is largely derived from maternal plasma/transmembranous movement.

Later pregnancy:

- * Fetal urine becomes the major source.

- * Fetal lung fluid also contributes.

The fetus continuously:

swallows amniotic fluid → absorbs it → excretes urine → replenishes amniotic fluid.

Therefore:

- * Fetal lungs → contribute, but not the major source.

- * Maternal plasma → important earlier.

- * Placenta → involved in fluid exchange, but not the main source.

- * Fetal urine → major source in later pregnancy ✓

Memory:

Amniotic fluid after mid-pregnancy = mainly fetal urine.

Q49. Uterus is enlarged more than the period of amenorrhoea in all of the following EXCEPT:

Options:

- * IUGR

- * Molar pregnancy

- * Multiple pregnancy

- * Polyhydramnios

Correct answer: a) IUGR

Why?

In IUGR (fetal growth restriction), the fetus is smaller than expected for gestational age. Therefore, the uterine size is generally smaller than expected for the period of amenorrhoea.

In contrast, the uterus may be larger than expected with:

Molar pregnancy

- * Abnormal trophoblastic proliferation
- * Excessive villous swelling
- * Very high β -hCG
- * Uterus may be larger than gestational age.

Multiple pregnancy

- * Two or more fetuses → increased uterine size.

Polyhydramnios

- * Excessive amniotic fluid → increased uterine distension.

Easy memory:

Large uterus for dates → Mole, Multiple, More liquor.

Small uterus for dates → IUGR.

So IUGR is the EXCEPT.

Q50. The following drugs are used in management and prevention of PPH EXCEPT:

Options:

- * Mifepristone
- * Carboprost
- * Misoprostol
- * Oxytocin

Correct answer: a) Mifepristone

Why?

Oxytocin, misoprostol and carboprost are uterotonic/prostaglandin agents used in the prevention or treatment of postpartum haemorrhage.

Oxytocin

First-line uterotonic for prevention of PPH and also first-line pharmacological treatment of uterine-atony PPH.

Misoprostol

A prostaglandin E1 analogue. It can be used for:

- * PPH prevention

* Treatment when appropriate alternatives are unavailable or ineffective.

Carboprost

A PGF2 α analogue used for treatment of PPH due to uterine atony, particularly when oxytocin is insufficient. It is not routinely recommended for prevention in current WHO guidance, but it remains a treatment option.

Mifepristone

Mifepristone is a progesterone receptor antagonist used mainly for:

- * Medical abortion
- * Management of certain pregnancy-related indications

It is not a standard uterotonic for PPH prevention or treatment.

Therefore:

Mifepristone = EXCEPT → Answer A.

Important current-guideline nuance: WHO 2025 recommends oxytocin as the preferred uterotonic for PPH prevention; misoprostol or carbetocin are alternatives in appropriate settings. Injectable carboprost is not recommended for routine prophylaxis but may be used in treatment.

Q51. What proportion of circulating testosterone in females is produced by the ovaries?

Correct answer: e) 25%

In reproductive-age women, approximately:

- * 25% → ovaries
- * 25% → adrenal glands
- * 50% → peripheral conversion, mainly from androstenedione.

So the answer is:

25% — Option E

Why is this important?

The ovary produces testosterone directly, particularly through theca/stromal cells. However, a substantial amount of circulating testosterone is generated by peripheral conversion of androstenedione.

PAPER 3 ANSWERS

Q1. 55-year-old postmenopausal woman with bleeding; biopsy shows simple endometrial hyperplasia without atypia. Treatment for 6 months. Which treatment is most likely to result in a histologically normal endometrium?

Best answer: e) Insertion of LNG-IUS

Explanation:

Endometrial hyperplasia without atypia is usually treated with a progestogen. The levonorgestrel-releasing intrauterine system (LNG-IUS) is preferred because it delivers a high concentration of progestogen directly to the endometrium and has a higher regression rate than oral progestogens. RCOG recommends LNG-IUS as the first-line medical treatment.

A randomized trial found histological regression after 6 months in approximately 95% of women using LNG-IUS, compared with about 96% with continuous oral progestogen and only 69% with cyclic oral progestogen.

Why the other options?

- * Conservative management: Some cases regress spontaneously, but progesterone treatment is more effective.
- * Continuous oral medroxyprogesterone: Effective, but generally less preferred than LNG-IUS.
- * Cyclical medroxyprogesterone: Less effective than continuous treatment and LNG-IUS.
- * GnRH analogues: Not standard first-line treatment.
- * LNG-IUS: Best answer.

Exam point:

Hyperplasia without atypia → LNG-IUS first line.

If LNG-IUS is declined → continuous, not cyclic, oral progestogen.

Q2. 48-year-old with irregular heavy bleeding and hyperplasia without atypia. LNG-IUS inserted for 6 months. Biopsy is normal before and after removal, but she continues to have bleeding. Appropriate management?

Correct answer: d) Reinsert LNG-IUS and reassess after 1 year

Explanation:

The important information is:

- * Hyperplasia without atypia → responded to treatment.
- * Biopsy is now normal → no evidence of persistent hyperplasia.
- * She continues to have abnormal bleeding.
- * The LNG-IUS was removed.

The LNG-IUS provides both endometrial protection and excellent control of heavy menstrual bleeding. Therefore, reinsertion is appropriate.

The RCOG guideline recommends retaining the LNG-IUS for up to 5 years when tolerated because it reduces the risk of relapse and can improve abnormal uterine bleeding.

Why not hysterectomy?

Hysterectomy is not first-line for hyperplasia without atypia. It becomes appropriate in situations such as progression to atypia, failure of regression despite treatment, relapse, or persistent bleeding when medical management is unsuccessful or unacceptable.

Why not endometrial ablation?

Endometrial ablation is generally not appropriate in a woman with a history of endometrial hyperplasia because it can make subsequent endometrial surveillance more difficult.

Exam point:

Normal biopsy + persistent bleeding after LNG-IUS removal → consider replacing LNG-IUS.

Q3. What is the most common congenital abnormality of fusion in the female genital tract?

Correct answer: a) Bicornuate uterus

This question specifically says “abnormality of fusion.” That wording is very important.

A bicornuate uterus results from incomplete fusion of the two Müllerian ducts. It produces two uterine horns/cavities with an external fundal cleft.

Don't confuse this with a septate uterus

A septate uterus results from failure of resorption of the tissue between the two fused Müllerian ducts, rather than a failure of fusion.

Therefore:

- * Bicornuate uterus → fusion defect
- * Septate uterus → resorption defect

The literature distinguishes these mechanisms clearly.

Why the other options are wrong?

- * MRKH syndrome: Failure/agenesis of Müllerian structures, not a fusion defect.
- * Transverse vaginal septum: Abnormal canalization/fusion involving the vaginal tract.
- * Uterine septum: Failure of resorption, not failure of fusion.
- * Uterus didelphys: Complete failure of Müllerian duct fusion, but less common than bicornuate uterus among the fusion anomalies.

Exam memory:

Bicornuate = incomplete fusion

Didelphys = complete non-fusion

Septate = failure of resorption

Q4. During an endometrial ablation procedure, what depth of myometrium needs to be destroyed to prevent regeneration from basal glands?

Correct answer: d) 4 mm

Explanation:

The basal endometrial glands can extend into the superficial myometrium. If these glands remain viable, they can regenerate endometrium after ablation.

Therefore, endometrial ablation aims to destroy the endometrium plus the superficial myometrium containing the basal glands.

The commonly quoted depth is approximately 4–6 mm; among the options given, 4 mm is the appropriate answer. Ablation techniques typically coagulate tissue to approximately 3–6 mm.

Why not 1–3 mm?

These depths may not reliably destroy the basal glands.

Why 4 mm?

It reaches the superficial myometrium where basal glands may extend and therefore reduces the possibility of endometrial regeneration.

Exam point:

Endometrial ablation → destroy endometrium + superficial myometrium containing basal glands → approximately 4 mm.

Q5. Pharmacological treatment most commonly used as first-line therapy for endometriosis with chronic pelvic pain

Correct answer: b) COCP — Combined oral contraceptive pill

NICE recommends hormonal treatment, such as a combined oral contraceptive or a progestogen, for suspected or confirmed endometriosis. In an exam question asking for the commonly used first-line pharmacological treatment, the COCP is the expected answer.

How COCP helps

COCP suppresses ovarian activity and reduces endometrial stimulation, resulting in:

- * Reduced ovulation
- * Reduced cyclical hormonal stimulation
- * Decidualisation/atrophy of endometriotic deposits
- * Reduced menstrual flow
- * Reduced pelvic pain and dysmenorrhoea

Continuous use can be particularly useful when the major problem is cyclical pelvic pain.

Why the others are not first choice?

- * Aromatase inhibitors: Usually reserved for refractory/severe disease and generally used with ovarian suppression.
- * GnRH analogues: Effective but usually second-line because of hypoestrogenic adverse effects.
- * LNG-IUS: Excellent option, especially for endometriosis-associated pain and heavy bleeding, but the question's conventional first-line answer is COCP.
- * Oral progestogens: Also an accepted first-line hormonal option; therefore, in modern practice, COCP or a progestogen may be offered depending on patient preference and contraindications.

Exam point:

Endometriosis + chronic pelvic pain → hormonal suppression → COCP/progestogen first-line.

Q6. What is the most common benign tumour in females?

Correct answer: e) Uterine leiomyoma

Uterine leiomyoma, commonly called fibroid, is the most common benign tumour of the female genital tract.

Why?

Leiomyomas arise from smooth muscle cells of the myometrium and are estrogen/progesterone responsive.

They are particularly common during the reproductive years and may cause:

- * Heavy menstrual bleeding
- * Pelvic pressure
- * Dysmenorrhoea
- * Abdominal mass
- * Infertility/subfertility
- * Pregnancy complications

Why not breast fibroadenoma?

Fibroadenoma is the commonest benign breast tumour, but the question is asking about the commonest benign tumour in females overall, and in an O&G context the expected answer is uterine leiomyoma.

Exam point:

Most common benign tumour of female genital tract = Leiomyoma/fibroid.

Q7. 50-year-old with bloating, loss of appetite and lower abdominal discomfort; CA-125 = 40 IU/mL; ultrasound normal. Symptoms persist. Management?

Correct answer: c) Assess for other clinical causes of her symptoms

This is an important NICE-style clinical reasoning question.

Step 1 — Interpret CA-125

A CA-125 of 40 IU/mL is only mildly elevated above the commonly used 35 IU/mL threshold.

CA-125 is not specific for ovarian cancer. It can be elevated in several benign conditions, including:

- * Endometriosis
- * Fibroids
- * Adenomyosis
- * Pelvic infection

* Liver disease

* Other inflammatory conditions

Therefore, an isolated mild elevation does not diagnose ovarian cancer.

Step 2 — Ultrasound is normal

The patient has already had an urgent ultrasound, and it shows:

No ovarian or uterine pathology.

Therefore, there is no current imaging evidence of an adnexal mass or other pelvic malignancy.

Step 3 — Symptoms continue

Persistent symptoms should not simply be ignored, but the next step is to consider other causes.

NICE guidance emphasizes considering alternative diagnoses when CA-125 is raised but ultrasound does not suggest ovarian cancer, with appropriate safety-netting if symptoms persist or change.

Therefore:

Assess for other clinical causes of her symptoms → C

Why not the other options?

a) Urgent CT scan ✗

Not automatically indicated solely because CA-125 is 40 when ultrasound is normal.

b) Urgent MRI ✗

MRI is not the routine next investigation for this scenario.

d) Repeat CA-125 in 3 months ✗

A repeat marker alone does not adequately investigate persistent symptoms.

e) Refer to gynaecological oncology MDT ✗

A mildly raised CA-125 with a normal ultrasound does not by itself meet the threshold for cancer MDT referral.

Exam point:

Raised CA-125 + normal ultrasound → think of alternative causes; don't diagnose ovarian cancer from CA-125 alone.

Q8. Which hormone is implicated in development of endometrial polyps in obese postmenopausal women?

Options include:

- * Androstenedione
- * Oestradiol
- * Oestriol
- * Oestrone
- * Testosterone

Correct answer: d) Oestrone

Why?

After menopause, ovarian estrogen production falls markedly. However, adipose tissue contains aromatase, which converts adrenal androgens into estrogens.

The important pathway is:

Androstenedione → aromatase → Oestrone

This becomes particularly important in obesity, because increased adipose tissue provides greater aromatase activity and therefore increased peripheral estrogen production.

Oestrone provides unopposed estrogenic stimulation of the endometrium in postmenopausal women who are not taking adequate progesterone.

This can contribute to:

- * Endometrial proliferation
- * Endometrial hyperplasia
- * Endometrial polyps
- * Increased risk of endometrial carcinoma

Peripheral conversion of androstenedione to oestrone is particularly associated with obesity.

Easy pathway to remember

Postmenopausal obesity

Adrenal androstenedione

↓ aromatase in adipose tissue

Oestrone

↓ Endometrial stimulation

Exam point:

Obese postmenopausal woman → peripheral aromatisation → oestrone.

Q9. Where in the vagina is a transverse vaginal septum most commonly found?

Best answer: e) Upper vagina

A transverse vaginal septum results from abnormal vertical fusion/canalization of the Müllerian-derived upper vagina with the urogenital sinus-derived lower vagina.

The septum can occur at different levels, but upper and middle vaginal septa are the commonest locations. Some older exam references specifically describe the upper third as the commonest site, which is why upper vagina is the expected answer in this MCQ.

Clinical presentation:

- * Primary amenorrhoea
- * Cyclical pelvic pain
- * Hematocolpos/hematometra if the septum is imperforate
- * Sometimes infertility

Exam point:

Transverse vaginal septum → usually upper/middle vagina; for this MCQ → Upper vagina.

Q10. What is the most common subtype of vulval lichen planus causing vulval symptoms?

Correct answer: b) Erosive

Why?

Erosive vulvovaginal lichen planus is the clinically important symptomatic form. It produces:

- * Pain and burning
- * Erosions/ulceration
- * Vaginal discharge
- * Dyspareunia
- * Dysuria
- * Scarring and adhesions
- * Loss of normal vulval architecture

The affected vulval mucosa is often bright red, raw and painful. Erosive disease can extend into the vagina and cause desquamative vaginitis.

It is important to distinguish this from lichen sclerosus, which classically causes porcelain-white atrophic plaques and intense itching.

Exam point:

Symptomatic vulval lichen planus → think EROSIVE type.

Q11. A 35-year-old with heavy menstrual bleeding chooses an LNG-IUS. How long should she be advised to wait to see maximum benefit?

Correct answer: b) 6 cycles

The LNG-IUS is an excellent treatment for heavy menstrual bleeding.

However, the woman should be warned that the bleeding pattern may initially become irregular or unpredictable.

What happens after insertion?

First few months:

- * Irregular bleeding/spotting is common.
- * This may be frustrating for the patient.

By around 6 months:

- * Bleeding generally becomes much lighter.
- * The therapeutic benefit becomes clearer.

NICE specifically recommends advising women to wait for at least 6 cycles to see the benefits of an LNG-IUS for heavy menstrual bleeding.

Therefore:

LNG-IUS → persevere for at least 6 cycles before judging the treatment.

Why not 3 cycles?

Because irregular bleeding may persist beyond the first 3 months, and NICE specifically recommends at least 6 cycles.

Why not 9 or 12 cycles?

The major improvement is generally assessed by about 6 cycles; waiting a full year is not necessary before deciding whether it is helping.

Exam point:

LNG-IUS for HMB → counsel about irregular bleeding → assess benefit after ≥ 6 cycles.

Q12. 38-year-old with 6 months amenorrhoea and hot flushes; pregnancy test negative; FSH = 45 IU/L. What result would confirm premature ovarian insufficiency?

The options shown include:

- * a) AMH in 2 weeks <1.1 pmol/L
- * b) Further FSH in 2 weeks >50 IU/L
- * c) Further FSH in 2 weeks >25 IU/L
- * d) Immediate AMH <1.1 pmol/L

* e) Immediate LH >50 IU/L

Important: The answer depends on which guideline/version the MCQ was written from.

For the traditional exam answer: c) Further FSH >25 IU/L

The patient is <40 years old, has:

* 6 months of amenorrhoea

* Vasomotor symptoms

* FSH 45 IU/L

This strongly suggests premature ovarian insufficiency (POI).

Historically, diagnosis required two elevated FSH measurements, usually separated by several weeks. Therefore, among the options provided, a repeat FSH >25 IU/L is the intended answer.

But there is an important CURRENT guideline update

The current international evidence-based POI guideline states that POI can be diagnosed with:

* Amenorrhoea/irregular cycles for ≥ 4 months

* FSH >25 IU/L

One elevated FSH is sufficient when the clinical picture is consistent. A repeat FSH after 4–6 weeks is recommended only when there is diagnostic uncertainty.

Therefore, with today's guidance, this patient's FSH of 45 IU/L already supports the diagnosis, assuming other causes have been excluded.

Why AMH is not the answer

AMH is a marker of ovarian reserve, but it should not be used as the primary diagnostic test for POI. It can be useful when the FSH result is inconclusive.

Why LH is not the diagnostic test

LH may also be elevated because of ovarian failure, but FSH is the key biochemical test used for diagnosis.

Q13. Previous caesarean section for labour dystocia — chance of successful VBAC?

Correct answer: c) 60%

Overall, after one previous caesarean, the successful VBAC rate is around 70–75% in appropriately selected women. However, the success rate is lower when the previous caesarean was performed for labour dystocia/failed labour, because the underlying factor contributing to dystocia may recur. A figure of approximately 60% is therefore the expected answer among these options. RCOG notes an overall VBAC success rate of about 3 in 4

women after one caesarean, with individual success influenced by the indication for the previous caesarean.

Why not 70–80%?

Those figures are closer to the overall VBAC success rate, particularly in women with favourable factors such as a previous vaginal birth.

Exam point:

Previous CS for dystocia → VBAC success ~60–65%.

Q14. Previous shoulder dystocia — recurrence compared with the general population?

Correct answer: e) 10-fold

A previous shoulder dystocia is a strong risk factor for recurrence.

RCOG states that the rate of shoulder dystocia in women with a previous episode has been reported to be approximately 10 times higher than in the general obstetric population. The absolute recurrence rate is around 1–25%, depending on circumstances such as fetal size and severity of the previous event.

Important distinction

10-fold = relative increase in risk

It does not mean that 10% of all women will necessarily have recurrence.

The absolute recurrence rate is commonly quoted as approximately 10–16%, although reported figures vary.

Exam point:

Previous shoulder dystocia → ~10× increased risk; recurrence ≈ 10–25%.

Q15. Risk of 3rd/4th-degree perineal tear with forceps delivery?

Correct answer: b) 10%

Forceps delivery is strongly associated with obstetric anal sphincter injury (OASI).

RCOG patient information reports:

* Overall vaginal birth: ~3%

* Ventouse: up to ~4%

* Forceps: ~8–12%

Therefore, among the options, 10% is the best answer.

Why is forceps higher risk?

Forceps can:

- * Increase stretching of the perineum
- * Increase mechanical pressure on the anal sphincter
- * Frequently require episiotomy, depending on the circumstances

Other risk factors for OASI include:

- * First vaginal birth
- * Baby >4 kg
- * Prolonged second stage
- * Shoulder dystocia
- * Instrumental delivery

Memory:

Forceps → OASI $\approx$ 8–12% → MCQ answer 10%.

Q16. Nulliparous woman in labour, low-risk pregnancy; serial scan shows baby at 70th centile. How should she be monitored in labour?

Correct answer: b) Intermittent auscultation using the hand Doppler

This is an important intrapartum fetal monitoring question.

The woman is:

- * Nulliparous
- * Low-risk pregnancy
- * Fetal growth is normal (70th centile)
- * No other risk factor is given

Therefore, she does not require continuous CTG simply because she is nulliparous or because the fetus is at the 70th centile.

For a woman at low risk, intermittent auscultation (IA) is appropriate. RCOG/NICE-based guidance supports intermittent auscultation for women who remain low risk, with continuous CTG used when risk factors or abnormalities arise.

Why the options are wrong

a) Initial CEFM for 30 minutes then intermittent auscultation ✗

Routine initial continuous electronic fetal monitoring is not necessary in an uncomplicated low-risk labour.

b) Intermittent auscultation with hand Doppler ✓

This is the appropriate approach.

c) Intermittent auscultation using CTG machine ✗

Intermittent auscultation is usually performed with a Pinard fetoscope or handheld Doppler. A CTG machine is used for continuous electronic monitoring.

d) CEFM ✗

No indication for continuous CTG has been provided.

e) USG to see fetal heart ✗

Ultrasound is not the routine method for intrapartum fetal heart monitoring.

Important distinction

70th centile = normal fetal growth.

Fetal growth restriction would be a risk factor that could alter intrapartum monitoring, but a fetus at the 70th centile does not have FGR.

Exam point:

Low-risk labour → intermittent auscultation → hand-held Doppler/Pinard.

Q17. Main cause of litigation due to CTG is:

Options:

- a) Failure to act
- b) Failure to recognise an abnormal one
- c) Failure to monitor
- d) Failure to refer

Correct answer: a) Failure to act

This is a very important medico-legal point.

A CTG may be correctly recorded and even correctly recognised as abnormal, but failure to take appropriate action after recognising an abnormal CTG can lead to preventable fetal hypoxia and adverse neonatal outcome.

Thus, the key issue is:

Abnormal CTG → failure to act appropriately → avoidable adverse outcome → litigation.

Why the distinction matters

There are several potential errors:

1. Failure to monitor → CTG not performed appropriately.
2. Failure to recognise → abnormal CTG is present but not identified.
3. Failure to act → abnormal CTG is recognised but appropriate escalation/intervention is delayed or not performed.

For litigation questions, failure to act on an abnormal CTG is the classic answer.

RCOG's Each Baby Counts work specifically emphasizes that CTG interpretation must lead to appropriate clinical management and that decisions should consider the whole clinical picture, rather than CTG interpretation in isolation.

Exam point:

Recognised abnormal CTG + no appropriate action = major medico-legal risk.

Q18. Correct answer: b) Occipitofrontal

When the fetal head is partially deflexed, the presenting diameter becomes the occipitofrontal diameter, approximately 11.5 cm.

Deflexed → OF 11.5 cm

Brow → Mentovertical 13.5 cm

Face → Submentobregmatic 9.5 cm

Q19. Low-risk pregnancy contracting every 15 minutes for 12 hours; cervix 2 cm dilated and well effaced. Next step?

Correct answer: a) Advise to go home and come back

This woman is in the latent/early phase of labour, not established active labour.

She has:

- * Contractions only every 15 minutes
- * Cervix only 2 cm
- * Good effacement
- * Low-risk pregnancy
- * No evidence of maternal or fetal compromise

Current NICE guidance defines established first-stage labour from 4 cm cervical dilatation with regular painful contractions and progressive cervical dilatation.

Therefore, there is no indication for:

- * Oxytocin ✗
- * Amniotomy ✗
- * Routine admission ✗

She can be reassured and advised to return when labour becomes established or if there are concerning symptoms.

Exam point:

2 cm + infrequent contractions + low risk → latent phase → home/reassurance.

Q20. Second twin is breech, engaged, membranes intact; CTG normal. 30 minutes after delivery of first twin. Next management?

Correct answer: a) Breech extraction

The important clues are:

- * First twin already delivered.
- * Second twin is breech.
- * Breech is engaged.
- * Membranes are intact.
- * CTG is normal.
- * 30 minutes have elapsed.

The second twin usually delivers within approximately 30–60 minutes, but prolonged delay requires active assessment and management.

For a suitable second twin in breech presentation, breech extraction/internal podalic manoeuvres may be used by an appropriately skilled obstetrician. RCOG specifically recognises breech extraction as an appropriate technique in selected circumstances, including delivery of a second twin.

Why not emergency CS?

The CTG is normal and the second twin is already engaged, so there is no indication for immediate emergency caesarean solely because 30 minutes have elapsed.

Exam point:

Second twin + breech + engaged + reassuring CTG → assisted breech extraction.

Q21. Multiparous woman at 9 cm, cord presentation, membranes intact, CTG normal. Next management?

Correct answer: a) Category 2 caesarean section

This is cord presentation rather than established cord prolapse because the membranes are still intact.

At 9 cm, she is very close to full dilatation, but vaginal birth is not yet imminent.

The key issue is:

Cord presentation + intact membranes + CTG normal + not fully dilated → caesarean if vaginal birth is not imminent.

RCOG guidance recommends caesarean birth when cord prolapse is present and vaginal birth is not imminent. When the fetal heart pattern is normal, category 2 caesarean can be considered; if the CTG becomes abnormal, this should be escalated to category 1.

Why not ARM?

ARM would be dangerous because rupturing the membranes could convert cord presentation into cord prolapse.

Why not forceps?

She is only 9 cm, so she is not fully dilated and operative vaginal delivery is inappropriate.

Exam point:

Cord presentation → DON'T ARM.

Not fully dilated + vaginal birth not imminent → Category 2 CS.

Q22. Breech in labour at 6 cm with cord presentation; theatre is busy; good contractions. Appropriate next step?

Correct answer: c) Terbutaline 0.25 mg SC

This is a particularly important emergency-management question.

The woman has:

- * Breech presentation
- * Cord presentation
- * Cervix only 6 cm
- * Good contractions
- * Theatre unavailable/busy

The immediate concern is that rupture of membranes or descent of the breech could cause cord compression/prolapse.

If there is a delay before definitive delivery, tocolysis with subcutaneous terbutaline 0.25 mg can be considered to reduce uterine contractions while preparing for caesarean delivery. RCOG specifically states that tocolysis may be considered when birth is likely to be delayed, although it must not cause unnecessary delay.

NICE also lists subcutaneous terbutaline 0.25 mg as a suggested tocolytic regimen when reducing excessive uterine contractions is necessary.

Why not Category 1 CS?

A category 1 CS is generally indicated when there is an immediate threat to the life of the woman or fetus, for example a pathological fetal heart pattern with cord prolapse.

Here, the question does not describe fetal compromise.

Why not Category 2 CS?

Ultimately, she needs urgent delivery, but the question specifically asks what to do while the theatre is busy. Tocolysis temporarily reduces the risk of cord compression while preparing for delivery.

Why not ARM?

Absolutely avoid it:

Cord presentation + ARM → increased risk of cord prolapse.

Why not “push in another theatre”?

Moving the patient to another theatre is logistical rather than the immediate obstetric intervention tested by the question.

Q23. Previous classical caesarean section for fetal indication — plan for delivery

Best answer: b) Classical C.S. at 38 weeks (among the options given)

A previous classical caesarean incision is a contraindication to planned VBAC because the incision involves the contractile upper uterine segment and carries a substantially higher risk of uterine rupture during labour. Current RCOG guidance confirms that planned VBAC is contraindicated after a classical scar.

Therefore:

- * Allow vaginal delivery → ✗
- * Lower-segment CS at 38/39 weeks → ✗ as the option should reflect planned repeat CS without labour.
- * Classical CS at 38 weeks → expected MCQ answer

Important guideline nuance

For a classical uterine scar, many guidelines recommend planned caesarean before the onset of labour, commonly around 36–37 weeks, individualized according to the clinical situation. Therefore, 38 weeks is the best answer only because of the choices provided, rather than being a universal recommendation.

Exam pearl:

Previous classical CS → NO VBAC → planned repeat CS before labour.

Q24. Epidural top-up during labour — what fetal monitoring is required?

Correct answer: e) Start continuous fetal monitoring for 30 minutes after top-up

This is a very high-yield NICE point.

After administration of a further 10 mL or more of epidural solution, NICE recommends:

Continuous cardiotocography (CTG) for at least 30 minutes.

Why?

A significant epidural top-up can potentially affect:

- * Maternal blood pressure
- * Uteroplacental perfusion
- * Fetal heart rate

Therefore, the fetus should be monitored continuously during this period.

Why the other options are wrong

- a) CEFM – The principle is correct, but option E specifies the required duration.
- b) USG ✗ – Ultrasound is not required for routine intrapartum fetal monitoring after epidural top-up.
- c) Fetal heart for 1 minute every 5 minutes ✗ – This is intermittent auscultation and is insufficient immediately after a significant epidural bolus.
- d) Check every half hour ✗ – Not adequate monitoring immediately after the top-up.
- e) Continuous fetal monitoring for 30 min ✓

NICE specifically states continuous CTG for at least 30 minutes after each further bolus of ≥ 10 mL.

Memory:

Epidural top-up ≥ 10 mL $\rightarrow$ CTG $\times$ 30 min.

Q25. Success rate of McRoberts' manoeuvre in shoulder dystocia

Expected answer: d) 90%

McRoberts' manoeuvre is the first-line manoeuvre for shoulder dystocia.

It involves:

Hyperflexion of the mother's hips and knees onto the abdomen.

This changes the maternal pelvic geometry and helps dislodge the impacted anterior shoulder.

Many obstetric teaching resources quote a success rate of approximately 90%, particularly when McRoberts' manoeuvre is considered together with suprapubic pressure.

But be careful with the wording!

The actual success of McRoberts alone varies considerably between studies. For example, one study found only 42% success with McRoberts alone, while broader reports give a range of approximately 42–90%.

So for this exam-style question, where the choices are 88%, 70%, 60%, 90%, and 50%, the expected answer is:

D) 90%

Exam pearl:

Shoulder dystocia → McRoberts FIRST.

If unsuccessful → suprapubic pressure → internal rotational manoeuvres/posterior arm delivery, according to the situation.

Q26. 39-week pregnancy, breech, in labour, cervix 9 cm, FHR normal; patient has consented to vaginal breech delivery. Initial management?

Correct answer: a) Start CEFM

This is the key point.

She is:

- * 39 weeks
- * In established labour
- * Breech presentation
- * Cervix 9 cm
- * FHR currently normal
- * Has already been counselled and consented for vaginal breech birth

If proceeding with a planned vaginal breech birth, continuous fetal heart-rate monitoring is recommended. RCOG patient guidance states that during vaginal breech birth, the baby's heart rate will usually be monitored continuously.

Therefore:

Why A is correct

Continuous electronic fetal monitoring (CEFM/CTG) allows early detection of fetal compromise during this higher-risk labour.

Why not E — Doppler every 20 minutes?

Intermittent Doppler is appropriate in selected low-risk cephalic labours, but vaginal breech labour is not managed this way.

Why not ECV?

ECV is an antenatal procedure, generally offered around 36–37 weeks when the fetus remains breech. It is not appropriate at 9 cm in established labour.

Why not emergency LSCS?

The woman has:

- * Normal FHR
- * Advanced labour
- * Already consented for vaginal breech birth
- * No fetal compromise described

Therefore, breech presentation alone at this stage does not mandate an emergency CS.

Important: The wording in the photograph says “fully dilated” and also “cervix 9 cm”, which is internally inconsistent. If the cervix is actually 9 cm, she is not fully dilated. Either way, the key answer among these options remains continuous fetal monitoring if proceeding with vaginal breech birth.

Q27. Which nodal involvement is a negative prognostic indicator for survival in cervical cancer?

Correct answer: c) Para-aortic lymphadenopathy

Explanation

Lymph-node involvement is an important adverse prognostic factor in cervical cancer. Para-aortic lymph-node metastasis indicates more extensive regional spread and is associated with poorer survival.

In the FIGO 2018 staging system:

- * Pelvic lymph nodes → Stage IIIC1
- * Para-aortic lymph nodes → Stage IIIC2

Therefore, para-aortic lymphadenopathy is the best answer.

Exam pearl:

Cervical cancer + para-aortic nodes = FIGO IIIC2 → poorer prognosis.

Q28. Treatment recommended for Stage IA1 cervical cancer?

Correct answer: a) Cervical conisation (LLETZ/LEEP, laser or knife), particularly in the fertility-sparing subgroup

Explanation

Stage IA1 means microscopic invasive cervical carcinoma with stromal invasion ≤ 3 mm and horizontal spread ≤ 7 mm under the traditional FIGO definition, with no clinically evident lesion.

If the woman:

- * Wants to preserve fertility
- * Has no LVSI

- * Has adequate clear margins

then conisation alone can be sufficient treatment.

Options include:

- * Cold-knife conisation

- * LLETZ/LEEP

- * Laser conisation

Why not radical surgery?

Radical hysterectomy is unnecessarily extensive for appropriately selected IA1 disease.

Exam pearl:

Stage IA1 + no LVSI + fertility desired → conisation.

Current ESGO guidance also recognises conisation as the method of choice for staging/treatment in selected early cervical cancers.

Q29. Invasive carcinoma ≥ 4 cm, lesion limited to cervix — FIGO stage?

Correct answer: d) Stage IB3

This is a very important FIGO 2018 classification.

For Stage IB disease, the tumour is confined to the cervix.

[9:49 am, 20/8/2026] Mamta Singh: Stage

Tumour size

IB1

<2 cm

IB2

≥ 2 cm but <4 cm

IB3

≥ 4 cm

Q30. First-line imaging modality for staging cervical cancer in pregnancy?

Correct answer: b) MRI

Explanation

MRI without gadolinium contrast is the preferred imaging modality for assessing cervical cancer during pregnancy when imaging is required.

MRI provides excellent assessment of:

- * Tumour size
- * Stromal invasion
- * Parametrial involvement
- * Vaginal involvement
- * Lymph nodes

Most importantly, it avoids ionizing radiation.

ESGO guidance specifically describes MRI without IV contrast as useful for cervical cancer assessment during pregnancy.

Why not CT?

CT uses ionizing radiation and is therefore avoided when an adequate MRI examination can provide the necessary information.

Why not PET-CT?

PET-CT involves radiation exposure and is not the routine first-line staging investigation during pregnancy.

Exam pearl:

Cervical cancer + pregnancy → MRI without gadolinium.

Q31. Cervical cancer associated with in-utero exposure to diethylstilbestrol (DES)?

Correct answer: b) Clear cell carcinoma of cervix

Explanation

Diethylstilbestrol (DES) is a synthetic estrogen that was historically given to some pregnant women.

Female offspring exposed in utero have an increased risk of:

Clear cell adenocarcinoma of the vagina and cervix.

This is a classic association and is highly testable.

Other important DES associations

DES exposure can also be associated with:

- * Vaginal adenosis
- * Cervical adenosis
- * Uterine structural abnormalities
- * Infertility
- * Adverse pregnancy outcomes

But the classic malignancy is:

DES → clear cell adenocarcinoma

Exam pearl:

DES baby girl → clear cell adenocarcinoma of vagina/cervix.

Q32. Which of these is NOT an important prognostic factor in cervical cancer?

Correct answer: c) Parity

Important prognostic factors in cervical cancer include:

- * Tumour size
- * Lymphovascular space invasion (LVSI)
- * Pelvic/para-aortic lymph-node involvement
- * FIGO/TNM stage
- * Depth of stromal invasion
- * Histological type
- * Distant metastasis
- * Margin status

Current ESGO guidance specifically lists tumour size, nodal involvement, depth of stromal invasion, LVSI and distant metastases among the major prognostic factors.

Parity, although it is a risk factor associated with cervical cancer in some epidemiological contexts, is not an important prognostic factor once cervical cancer has developed.

Exam pearl

Cervical cancer prognosis → think SIZE + NODES + LVSI + STAGE, not parity.

Q33. Gold-standard treatment for stages IA2–IB2 cervical cancer?

Correct answer: d) Radical hysterectomy + pelvic lymphadenectomy

(as per the options in this MCQ)

For appropriately selected early-stage cervical cancer, the traditional standard surgical treatment is:

Radical hysterectomy + pelvic lymph-node assessment

The radical hysterectomy removes:

- * Cervix
- * Uterus
- * Parametrial tissue
- * Upper vagina

with appropriate pelvic lymph-node staging.

Why not simple conisation?

Conisation is appropriate for selected very early disease, particularly IA1 and selected IA2 patients, especially when fertility preservation is desired. It is not the standard treatment across IA2–IB2 disease.

Why not chemoradiotherapy?

Primary chemoradiotherapy is particularly important for locally advanced disease or when surgery is inappropriate. For selected early-stage disease, surgery is an established treatment.

Important modern nuance: Management has become more individualized, and lymph-node staging may use sentinel lymph-node techniques in selected early-stage cases. ESGO also emphasizes multidisciplinary treatment planning.

Exam pearl

Early cervical cancer → radical surgery + nodal staging.

Q34. 28-year-old: hrHPV positive, cytology normal. What next?

Correct answer: a) Re-screen for hrHPV in 12 months

This is a classic primary HPV screening question.

The woman has:

hrHPV positive → cytology negative

She does not immediately require colposcopy after a single HPV-positive/normal-cytology result.

Instead, she is recalled for repeat HPV testing in 12 months. Current UK screening guidance states that hrHPV-positive women with negative cytology should be screened again at 12 months.

Why?

Most HPV infections are transient and will clear spontaneously.

The concern is persistent hrHPV infection, which is much more strongly associated with CIN2/3 and cervical cancer.

What happens at 12 months?

HPV negative → return to appropriate routine recall

HPV positive → further triage/colposcopy according to the screening pathway.

In the UK pathway, persistent hrHPV positivity with normal cytology eventually leads to colposcopy after repeated positive tests.

Memory

HPV+ / cytology normal → repeat HPV in 12 months.

Q35. 25-year-old: hrHPV positive + abnormal cytology. What next?

Correct answer: c) Refer to colposcopy

This is different from Q34.

Here:

hrHPV positive + abnormal cytology

means there is both:

- * A high-risk HPV infection, and
- * Cytological evidence of abnormal cells.

Therefore, she should be referred for colposcopic assessment.

UK cervical screening guidance states that an hrHPV-positive result with abnormal cytology leads to colposcopy referral.

Q36. 31-year-old attends repeat hrHPV screening and HPV is negative. What next?

Correct answer: d) Routine recall in 3 years

The woman has completed the follow-up/re-screening pathway and her hrHPV is now negative.

A negative HPV result means that her immediate risk of significant cervical precancer is low, so she can return to the appropriate routine screening interval.

For women in the UK aged 25–49 years, the routine screening interval is 3 years. Current NHS screening pathways similarly return women to routine recall after appropriate negative follow-up.

Why not 5 years?

The 5-year interval applies to women aged 50–64 years in the UK programme, not this 31-year-old woman.

Q37. What does an anterior exenteration involve?

Correct answer: (a) Removal of tumour and adjacent structures including bladder and vagina

Explanation:

- * Pelvic exenteration is a radical operation used for selected advanced/recurrent pelvic malignancies.

- * Anterior pelvic exenteration involves removal of:
 - * The bladder
 - * The uterus/cervix and vagina, as appropriate
 - * The tumour-containing pelvic tissues
- * The rectum is preserved, unlike in posterior or total exenteration.
- * Therefore, among the given options, removal of the tumour with bladder and vagina is the correct description.

Easy way to remember:

- * Anterior → bladder removed
- * Posterior → rectum removed
- * Total → bladder + rectum removed

Q38. 27-year-old with severe dyskaryosis and colposcopy consistent with CIN3

Correct answer: (b) Loop excision of the cervical transformation zone (LLETZ)

Why?

The patient has:

- * Severe dyskaryosis on cervical smear
- * A transformation zone visible on colposcopy
- * Large areas of dense acetowhite epithelium
- * Appearance consistent with CIN3

CIN3 is a high-grade cervical intraepithelial lesion with significant risk of progression to invasive cervical cancer if untreated.

LLETZ (Large Loop Excision of the Transformation Zone) is preferred because it:

1. Removes the abnormal transformation zone
2. Provides a specimen for histopathological confirmation
3. Treats the high-grade lesion at the same time.

Why not the other options?

- * HPV testing → not appropriate as definitive management of a lesion already strongly suggestive of CIN3.
- * Repeat colposcopy in 12 months → inappropriate for suspected high-grade disease.
- * Repeat smear in 6 months → inadequate.
- * Single punch biopsy → may confirm the diagnosis but does not adequately treat the extensive CIN3 lesion.

Exam point:

CIN3/high-grade lesion → excisional treatment, usually LLETZ.

Q39. 34-year-old with mild dyskaryosis and a well-demarcated acetowhite lesion

Correct answer: (e) Punch biopsy

Why?

This woman has:

- * Mild dyskaryosis on smear
- * Colposcopy showing an acetowhite lesion with well-demarcated margins
- * No information suggesting invasion or a very high-grade lesion.

The appropriate next step is to obtain histological confirmation with a directed punch biopsy of the abnormal area.

A punch biopsy allows the pathologist to determine whether the lesion is:

- * Normal/benign
- * CIN1
- * CIN2
- * CIN3
- * or, rarely, invasive disease.

Why not LLETZ?

LLETZ is an excisional treatment and is generally reserved when there is a stronger indication for excision, such as confirmed/suspected high-grade disease or when the transformation zone/lesion requires excision for diagnostic reasons.

Why not hysterectomy?

Far too radical for mild dyskaryosis.

Why not knife or laser cone biopsy?

These are larger excisional procedures and are not first-line for a straightforward, well-defined lesion associated with mild dyskaryosis.

Q40. 29-year-old with moderate dyskaryosis and abnormal colposcopy

Correct answer: (d) Large loop excision of the transformation zone (LLETZ)

Why?

- * The smear shows moderate dyskaryosis, suggesting a high-grade cervical abnormality.
- * Colposcopy shows dense acetowhite areas, punctuation and mosaicism with irregular margins—features suspicious for a significant CIN lesion.
- * In this setting, LLETZ is appropriate because it both removes the abnormal transformation zone and provides tissue for histology. LLETZ is a standard treatment for cervical cell abnormalities.

Why not the others?

- * Follow-up only: inappropriate when colposcopy is strongly suspicious for high-grade disease.
- * Hysterectomy: unnecessarily radical.
- * Knife cone biopsy: generally reserved for selected situations, such as suspected glandular disease, invasion, or when adequate assessment/excision requires a cone.
- * Punch biopsy: may diagnose the lesion, but with a high-grade appearance, an excisional procedure can be both diagnostic and therapeutic.

MRCOG pearl:

👉 Moderate/severe dyskaryosis + high-grade colposcopic features → think LLETZ.

Q41. Ovarian torsion should be managed by

Best answer: (d) Untwisting and fixation of the ovary to the pelvic sidewall

There appears to be a marking beside option (a) in the photograph, but conservative management with only antibiotics, fluids and analgesia is not the appropriate treatment for ovarian torsion.

Why?

Ovarian torsion is a surgical emergency because twisting of the vascular pedicle compromises ovarian blood flow.

The basic management is:

Torsion → urgent laparoscopy/laparotomy → detorsion (untwisting) → preserve the ovary whenever possible.

In a young woman, the aim is ovarian preservation, even when the ovary initially looks dark or congested, because ovarian function may recover after detorsion.

Why not oophorectomy?

- * Oophorectomy sacrifices ovarian tissue and fertility potential.
- * It is generally reserved for an ovary that is clearly non-viable or when malignancy is suspected.

Why fixation?

Oophoropexy (fixation of the ovary) can be considered in selected cases, particularly recurrent torsion or certain high-risk situations.

So, among the options shown, (d) is the best answer.

MRCOG pearl:

👉 Torsion = operate, detorse, preserve ovary.

☞ Don't simply observe or treat medically.

Q42. 2 weeks postpartum with offensive vaginal discharge, malaise and sore throat

Correct answer: (d) Streptococcus pyogenes

This is a classic clue for Group A Streptococcus (GAS) causing a serious puerperal genital tract infection.

Why Streptococcus pyogenes?

- * She is 2 weeks postpartum.
- * She has offensive vaginal discharge, suggesting postpartum genital tract infection/endometritis.
- * She has malaise and sore throat, which is an important clue toward Group A Streptococcus.
- * GAS can cause severe puerperal infection and, importantly, can progress rapidly to sepsis and toxic shock syndrome.

Postpartum endometritis is usually polymicrobial, with Gram-positive organisms, Gram-negative organisms and anaerobes. However, Group A Streptococcus is particularly important when the question highlights a sore throat, because it points toward GAS infection.

Why not the other organisms?

- * Clostridium difficile: primarily associated with antibiotic-associated colitis.
- * E. coli: common in puerperal genital tract infection, but the sore throat clue strongly favors GAS.
- * Staphylococcus aureus: can cause postpartum infection but is less characteristic here.
- * Streptococcus pneumoniae: not the classic organism for puerperal sepsis.

High-yield association

Postpartum woman + offensive lochia/discharge + sore throat → think Streptococcus pyogenes (Group A Streptococcus).

⚠ GAS puerperal infection can be rapidly progressive and is associated with sepsis/toxic shock, so it is clinically important not to miss.

Q43. 20-week pregnant woman with acute hepatitis A

Correct answer: (e) Positive serology for anti-HAV IgM

Why?

- * She has symptoms typical of acute hepatitis: flu-like symptoms, anorexia and jaundice.
- * Recent travel to Pakistan is an epidemiological risk because hepatitis A is transmitted mainly by the faeco-oral route, often through contaminated food/water.

- * The definitive serological marker of acute hepatitis A infection is anti-HAV IgM.

Why the other options are less suitable?

- * ALT: Usually markedly elevated, but it is nonspecific and cannot confirm HAV.
- * HAV RNA in faeces: Can demonstrate infection, but is not the routine first-line diagnostic test.
- * HAV RNA in saliva: Not a standard diagnostic test.
- * Anti-HAV IgG: Indicates past infection or vaccination/immunity, not specifically acute infection.

Exam pearl:

☞ Acute HAV = anti-HAV IgM

☞ Past infection/vaccination = anti-HAV IgG

Q44. HBsAg-positive woman at 20 weeks asking about breastfeeding

Correct answer: (e) Will she accept hepatitis B vaccination for the neonate?

The important concept is that maternal hepatitis B infection is NOT, by itself, a contraindication to breastfeeding.

The key issue is preventing vertical transmission to the baby.

The baby should receive:

- * Hepatitis B vaccine at birth
- * HBIG when indicated, particularly for an infant born to an HBsAg-positive mother, according to the relevant neonatal protocol.

Current CDC guidance recommends HepB vaccine and HBIG for infants born to HBsAg-positive mothers within 12 hours of birth.

Therefore, knowing whether the mother will accept appropriate neonatal immunoprophylaxis is crucial when counselling her about breastfeeding.

Important exam distinction:

- * HBsAg positive → breastfeeding can be undertaken
- * But → neonatal immunoprophylaxis is essential

Maternal HBV DNA/viral load is important for deciding whether the mother needs antiviral therapy to reduce transmission. CDC guidance uses HBV DNA >200,000 IU/mL as a threshold for maternal tenofovir prophylaxis beginning in the third trimester.

So don't confuse:

“What determines maternal antiviral prophylaxis?” → HBV viral load

with

“What is important for safe breastfeeding?” → ensuring neonatal protection.

Q45. 32-week primiparous woman with recurrent genital herpes

Answer marked in the question: (e) Prophylactic acyclovir from 36 weeks of gestation and normal vaginal delivery

Why?

This is recurrent genital herpes, not a first episode.

With recurrent HSV:

- * Maternal antibodies are already present and cross the placenta.
- * Therefore, the risk of neonatal transmission is much lower than with a primary infection acquired near term.
- * Vaginal delivery is generally appropriate if there are no active lesions/prodromal symptoms at labour. RCOG guidance specifically states that vaginal delivery should be anticipated for recurrent herpes in the absence of another obstetric indication for caesarean.
- * Suppressive aciclovir late in pregnancy reduces recurrences and viral shedding at delivery and may reduce the need for caesarean delivery.

Why not elective LSCS at 39 weeks?

Routine caesarean is not required for recurrent genital herpes. Caesarean is particularly important when a primary/first episode occurs late in pregnancy, especially close to delivery, because neonatal transmission risk is much higher.

⚠ Important current-guideline point

The question’s answer says acyclovir from 36 weeks, which reflects the guideline used by many older MRCOG question banks. Current RCOG guidance has moved toward offering suppressive treatment from 32 weeks for women with recurrent genital herpes (and earlier, from 22 weeks, when there is high risk of preterm birth).

So for this particular MCQ, select (e) because that is the marked/keyed answer, but remember the updated clinical guidance.

Q46. Preterm newborn, prolonged rupture of membranes and maternal fever

Correct answer: (d) Early-onset Group B streptococcal disease

Why?

This baby has several classic risk factors for early-onset GBS infection:

- * Born at 36 weeks → preterm

- * Rupture of membranes for 22 hours → prolonged ROM (>18 h)
- * Maternal intrapartum fever of 38°C
- * Baby develops lethargy and poor feeding at 6 hours of life → neonatal sepsis occurring within the first 7 days

Early-onset GBS disease usually presents in the first week of life, commonly with sepsis, pneumonia or meningitis. Risk is increased by maternal GBS colonisation, preterm birth, prolonged rupture of membranes and maternal fever.

Why not the others?

- * *Mycoplasma hominis*: can be associated with postpartum/neonatal infection but is not the classic organism with this risk-factor pattern.
- * *Plasmodium falciparum*: would require malaria exposure; presentation is not typical.
- * CNS HSV: neonatal HSV usually has a different presentation and often appears later, particularly with vesicular lesions, encephalitis or disseminated disease.
- * Early-onset listeriosis: possible in neonates but the combination of prolonged ROM + maternal fever + early sepsis strongly points to GBS.

Exam pearl:

☞ Neonate <7 days + maternal fever/prolonged ROM/preterm birth → think early-onset GBS.

Q47. GBS-positive woman at 30 weeks with previous elective LSCS and planned third LSCS

Correct answer: (d) No treatment required

Why?

The important detail is:

She is planning an elective caesarean section.

If a woman is GBS positive but undergoes a planned caesarean before labour begins with intact membranes, specific intrapartum GBS prophylaxis is not required.

Why?

GBS prevention is primarily aimed at preventing vertical transmission during labour and vaginal passage through the birth canal.

Therefore:

GBS positive + labour/ruptured membranes → IV intrapartum antibiotics

but:

GBS positive + elective CS + no labour + intact membranes → no GBS-specific prophylaxis

Why not antenatal penicillin?

Giving antibiotics during pregnancy to eradicate vaginal GBS colonisation is not effective, because colonisation can recur. Antibiotics are therefore given during labour when indicated.

Why not oral/intrapartum oral penicillin?

GBS prophylaxis is administered intravenously, not orally.

Why not treat the infant?

The baby does not routinely receive penicillin simply because the mother is GBS-positive when appropriate maternal management has been followed.

MRCOG pearl:

☞ GBS + vaginal delivery → intrapartum IV penicillin

☞ GBS + elective CS before labour + intact membranes → NO GBS prophylaxis

Q48. Pregnant woman at 8 weeks concerned about seasonal influenza

Correct answer: (a) Give intramuscular vaccine as soon as possible

Why?

Pregnancy increases the risk of more severe influenza illness, including hospitalisation. Influenza vaccination protects both the mother and, through transplacental antibodies, the baby during the early months after birth.

The important point is:

Influenza vaccine can be given in ANY trimester.

Therefore, there is no reason to wait until the second trimester.

At 8 weeks, she should receive the inactivated injectable influenza vaccine as soon as it is available.

Why not nasal spray?

The nasal influenza vaccine is live attenuated influenza vaccine (LAIV) and is not recommended/contraindicated during pregnancy.

So:

* IM/inactivated influenza vaccine → YES

* Nasal live attenuated vaccine → NO

Why not wait until postpartum?

Waiting unnecessarily leaves the mother vulnerable to influenza during pregnancy and loses the opportunity to provide passive antibody protection to the fetus.

Why not wait until second trimester?

Influenza vaccination is recommended during any trimester, so vaccination at 8 weeks is appropriate.

Q49. Parvovirus B19 exposure in pregnancy

Correct answer: (b) Maternal antibodies for Parvovirus B19

Why?

The woman is 18 weeks pregnant, has been exposed to a child with slapped-cheek disease, and the child has confirmed Parvovirus B19.

The first step is to determine whether she has:

- * IgG antibodies → indicates previous immunity.
- * IgM antibodies → indicates recent/current infection.

If she has IgG positive and IgM negative, she is immune and no further fetal surveillance is generally required.

If IgM is positive, recent infection is suspected and she requires fetal surveillance because Parvovirus B19 can cross the placenta and infect fetal erythroid cells.

Why is maternal infection important?

Parvovirus B19 can cause:

- * Severe fetal anaemia
- * Hydrops fetalis
- * Fetal loss

Therefore, after confirmed maternal infection, MCA Doppler is used to detect fetal anaemia. An MCA-PSV >1.5 MoM is concerning for significant fetal anaemia and requires specialist assessment.

Why not the other options?

- * (a) Amniocentesis: Not the initial investigation.
- * (c) MCA Doppler: Used for surveillance after maternal infection is confirmed, not as the first test following exposure.
- * (d) Reassure: Cannot be done until maternal immunity/infection status is established.
- * (e) Umbilical cord sampling: Invasive and reserved for situations where significant fetal anaemia requires further assessment/treatment.

MRCOG pearl:

Exposure → maternal Parvovirus B19 IgG/IgM → if recent infection → serial MCA Doppler.

Q50. 39 weeks pregnant with chickenpox diagnosed 24 hours ago + planned elective CS

Correct answer: (b) Oral acyclovir and aim for caesarean section in 7 days

Why?

This is a particularly important timing question.

She is:

- * 39 weeks pregnant
- * Has developed chickenpox within the last 24 hours
- * Already has a planned caesarean for a previous caesarean
- * Otherwise clinically well.

Why give oral acyclovir?

She has presented very early after the rash appeared.

Aciclovir is most useful when started within 24 hours of rash onset. It reduces the duration and severity of maternal symptoms.

Why wait approximately 7 days for delivery?

The major concern is neonatal varicella.

If maternal chickenpox occurs very close to delivery, the mother may not have enough time to produce and transfer protective antibodies to the fetus.

The newborn is at greatest risk when maternal chickenpox occurs around the time of delivery. RCOG advises that, where possible, delivery should be delayed until the maternal illness has settled—ideally at least 7 days after onset of the rash—to allow maternal antibodies to cross the placenta.

Therefore:

39 weeks + new chickenpox + elective CS → treat mother with aciclovir and, if clinically safe, delay CS for about 7 days.

Why not immediate CS?

Chickenpox itself is not an indication for immediate delivery. Delivering immediately may actually increase neonatal risk because the baby receives less time to acquire maternal antibodies.

Why not VZIG?

Again:

VZIG is for post-exposure prophylaxis, not treatment once the maternal rash has developed.

PAPERS 4 ANSWERS

Q1. Correct answer: (i) Gonorrhoea — *Neisseria gonorrhoeae*

Why?

The key clues are:

- * Baby delivered vaginally.
- * Very early onset of conjunctivitis.
- * Profuse green/purulent discharge
- * Eyelids are swollen and congested.

This is classic gonococcal ophthalmia neonatorum. *N. gonorrhoeae* can cause severe purulent conjunctivitis in newborns and may rapidly damage the cornea.

Why the other options are unlikely?

- * CMV: Usually causes systemic congenital infection; not acute purulent conjunctivitis.
- * HSV: Can cause neonatal conjunctivitis/keratitis, but vesicular skin lesions or disseminated/CNS disease are more characteristic.
- * Syphilis: Congenital infection can cause systemic manifestations, not this classic acute purulent ophthalmia.
- * GBS: Causes neonatal sepsis, pneumonia and meningitis rather than this characteristic purulent conjunctivitis.
- * Listeria: Mainly causes neonatal sepsis/meningitis.
- * Rubella: Classically cataracts, cardiac disease and deafness.
- * Toxoplasma: Classically chorioretinitis, hydrocephalus and intracranial calcifications rather than acute neonatal purulent conjunctivitis.
- * HIV: Does not cause this presentation.
- * Measles: Not a typical cause of neonatal purulent conjunctivitis.
- * Hepatitis B: Does not cause ophthalmia neonatorum.
- * Varicella: Causes vesicular lesions and potentially neurological/systemic disease.

☆ Exam clue

Newborn + copious purulent/green discharge + marked eyelid swelling → Gonococcus.

Q2. Correct answer: (g) Toxoplasmosis

Why?

The most important clue is:

CT brain shows multiple low-intensity/circumscribed lesions.

In a patient with possible immunosuppression/HIV exposure, multiple intracranial lesions + seizures/status epilepticus strongly suggest cerebral toxoplasmosis.

Toxoplasma gondii can cause CNS disease with:

- * Seizures
- * Altered consciousness
- * Focal neurological deficits
- * Multiple brain lesions

In HIV-associated cerebral toxoplasmosis, CT/MRI classically shows multiple ring-enhancing lesions, often involving the basal ganglia.

Why is Botswana relevant?

Botswana has a high burden of HIV infection. In an HIV-positive/immunocompromised patient, reactivation of latent Toxoplasma gondii can produce toxoplasmic encephalitis.

The positive pregnancy test and symphysis-fundal height are additional obstetric information, but the neurological presentation and CT findings are the major diagnostic clues.

Why not CMV?

CMV can cause congenital infection and CNS abnormalities, but multiple focal brain lesions with seizures in an immunocompromised adult is much more characteristic of cerebral toxoplasmosis.

Why not HSV?

HSV encephalitis usually produces temporal lobe-predominant inflammation, rather than multiple discrete lesions.

Why not syphilis/GBS/listeriosis?

These do not fit the characteristic imaging pattern and presentation as well as toxoplasmosis.

Q3. Correct answer: (e) Vaginal prostaglandin

Why?

She is:

- * 41+3 weeks

- * Nulliparous
- * Head engaged
- * Cervix 2 cm dilated but still 2 cm long
- * No established contractions

The cervix is not yet sufficiently favourable for straightforward amniotomy and oxytocin. The key issue is the Bishop score/cervical favourability.

A cervix that remains relatively long despite 2 cm dilatation generally has a Bishop score ≤ 6 , for which cervical ripening is appropriate. NICE recommends vaginal dinoprostone (prostaglandin) or low-dose oral misoprostol when Bishop score is ≤ 6 .

Why not amniotomy + oxytocin?

Amniotomy with IV oxytocin is preferred when the Bishop score is >6 , i.e. the cervix is already favourable.

Why not balloon catheter?

A balloon catheter is an alternative mechanical method, particularly when pharmacological methods are unsuitable or there is increased concern about hyperstimulation. It is not the preferred answer in this straightforward case.

Exam pearl:

Unfavourable cervix $\rightarrow$ prostaglandin for ripening.

Favourable cervix $\rightarrow$ amniotomy + oxytocin.

Q4. Correct answer: (a) 29+6 weeks

Why?

Magnesium sulfate is given for fetal neuroprotection, particularly to reduce the risk of cerebral palsy when very preterm birth is expected.

According to current NICE guidance:

- * 24+0 to 29+6 weeks: Offer IV magnesium sulfate if established preterm labour or birth is planned within 24 hours.
- * 30+0 to 33+6 weeks: Consider magnesium sulfate.
- * Before 24 weeks: individualised discussion is required.

Therefore, 29+6 weeks is the important threshold in this question.

Dose

NICE recommends:

- * 4 g IV loading dose over 15 minutes

- * Followed by 1 g/hour infusion
- * Continue until birth or for a maximum of 24 hours, whichever occurs first.

Memory aid

MgSO₄ neuroprotection:

24–29+6 → OFFER

30–33+6 → CONSIDER

So the answer is 29+6 weeks.

Q5. Correct answer: (e) Transvaginal ultrasound

Why?

She has:

- * Gestation 30+3 weeks
- * Regular contractions approximately every 10 minutes
- * Cervix appears long but slightly dilated
- * No history of ruptured membranes

The question is asking whether she actually has preterm labour and how likely delivery is within 48 hours.

For suspected preterm labour at $\geq 30+0$ weeks with intact membranes, NICE recommends transvaginal ultrasound measurement of cervical length as the preferred diagnostic test.

Interpretation

Cervical length >15 mm

→ preterm labour is unlikely

→ consider alternative diagnoses and observation/discharge as appropriate.

Cervical length ≤ 15 mm

→ treat as diagnosed preterm labour.

Why not fetal fibronectin?

Fetal fibronectin is useful, but according to NICE it is considered when transvaginal cervical-length measurement is unavailable or unacceptable.

Why not speculum examination alone?

A speculum examination is part of the initial clinical assessment, but it doesn't provide the same objective assessment of cervical length and likelihood of delivery within 48 hours.

Why not “no test, treat as preterm labour”?

At 30+3 weeks, if TVUS cervical length or fFN is available, diagnostic assessment should be performed rather than automatically labelling every woman with contractions as established preterm labour.

☆ Three high-yield MRCOG rules from these questions

Q6. Correct answer: (e) No additional risk

The question asks what intrapartum risk is increased specifically because of maternal age in a 41-year-old woman undergoing induction, compared with expectant management.

The important point is that advanced maternal age alone does not mean induction itself increases the risk of caesarean section, failed induction, fetal hypoxia or instrumental delivery. Evidence around induction at term does not support a blanket increase in these outcomes solely because of age.

Therefore, for this MCQ, the best answer is:

(e) No additional risk

This is also an important counselling point: induction should not be presented as inherently more dangerous simply because the woman is >40. NICE recommends discussing the benefits and risks of induction individually.

Exam pearl:

👉 Maternal age >40 ≠ automatic increased intrapartum risk from induction.

Q7. Correct answer: (d) 70–80%

When the epidural needle accidentally punctures the dura mater, cerebrospinal fluid can leak through the dural hole.

This produces a reduction in CSF pressure and can lead to a characteristic:

Post-dural puncture headache (PDPH)

The headache is typically:

- * Postural — worse when sitting/standing
- * Better when lying down
- * May be associated with nausea, neck stiffness, photophobia or hearing symptoms.

After an accidental dural puncture with a large epidural needle, the risk of PDPH is very high—around 70–80% or even higher in some obstetric studies. One large obstetric series reported PDPH in 88% following recognised accidental dural puncture.

Therefore:

Answer = (d) 70–80%

Important distinction:

Accidental dural puncture → high risk of PDPH

But an accidental dural puncture itself is much less common than PDPH after the puncture.

Memory:

“Big epidural needle + dura punctured → ~80% headache.”

Q8. Correct answer: (e) Tachycardia

Atosiban is an oxytocin receptor antagonist used as a tocolytic to inhibit uterine contractions in threatened preterm labour.

Among the cardiac adverse effects, tachycardia is the characteristic answer.

The product information lists tachycardia as a cardiac adverse reaction and hypotension as a vascular adverse reaction.

Why not hypotension?

Hypotension can occur, but the question specifically asks for the cardiac adverse effect.

* Cardiac → tachycardia

* Vascular → hypotension

Therefore:

Answer = (e) Tachycardia

* Cardiac → tachycardia

* Vascular → hypotension

Therefore:

Answer = (e) Tachycardia

High-yield comparison

Tocolytic

Important adverse effects

Atosiban

Tachycardia, hypotension, nausea

β-mimetics

Marked maternal/fetal tachycardia, palpitations, tremor, hyperglycaemia

Nifedipine

Hypotension, headache, flushing

Atosiban generally produces fewer cardiovascular effects than β -mimetics, although tachycardia can still occur.

Memory:

☞ Atosiban $\rightarrow$ oxytocin antagonist $\rightarrow$ tachycardia is the cardiac ADR.

Q9. Correct answer: (b) Early jaundice

The important information is:

- * Mother is Rh-negative
- * Anti-c antibody level has risen to 20
- * Delivery occurred at 37 weeks
- * The baby is therefore at risk of haemolytic disease of the fetus and newborn (HDFN).

Anti-c is one of the clinically important red-cell antibodies that can cause significant fetal/neonatal haemolysis.

The maternal IgG anti-c antibodies cross the placenta and attach to c-antigen-positive fetal red cells $\rightarrow$ red-cell destruction $\rightarrow$ fetal/neonatal haemolysis.

RCOG specifically recognises anti-c as an antibody capable of causing significant fetal anaemia and neonatal jaundice. An anti-c level >20 IU/mL is associated with a high risk of HDFN.

Why early jaundice?

After birth, ongoing haemolysis produces increased bilirubin.

Therefore the newborn can develop:

Haemolysis $\rightarrow$ $\uparrow$ unconjugated bilirubin $\rightarrow$ neonatal jaundice

Because this is immune haemolysis, jaundice can occur early, often within the first 24 hours, unlike physiological jaundice which typically appears after 24 hours.

Thus:

Answer = (b) Early jaundice

What about anaemia?

Anaemia is also an important complication of HDFN. In severe cases it can be present before birth and may require intrauterine transfusion. RCOG notes that clinically significant antibodies including anti-c can cause fetal/neonatal anaemia and jaundice.

But for this MCQ, the specific expected neonatal complication is early jaundice.

☞ Four quick memory hooks

Dura punctured → “80% headache”

Atosiban → “Tachycardia”

Anti-c → “Haemolysis”

Haemolysis in newborn → “Early jaundice”

Q10. Correct answer: (c) Once per week

The woman is 36 weeks, has placenta praevia, and has atypical red-cell antibodies. Placenta praevia carries a significant risk of sudden major obstetric haemorrhage, so compatible blood must be readily available.

For women at high risk of emergency transfusion, such as placenta praevia, RCOG recommends a group-and-screen sample once weekly to detect newly developing antibodies and ensure blood can be made available promptly.

Why not daily?

There is no need to take a sample every day routinely.

Why not fortnightly?

A fortnightly sample may be insufficient in a woman at particularly high risk of emergency transfusion.

Exam pearl:

Placenta praevia + high risk of haemorrhage → group & screen/cross-match sample weekly.

Q11. Correct answer: (c) 16 weeks

MCDA = monochorionic diamniotic twins.

Because the twins share a placenta, vascular anastomoses can occur between their circulations. This creates the risk of twin-to-twin transfusion syndrome (TTTS).

Therefore, ultrasound surveillance for TTTS should begin at:

16 weeks

and continue every 2 weeks thereafter. This is recommended by both ISUOG and SMFM.

What is looked for?

At each scan:

- * Amniotic fluid volume in each sac
- * Fetal bladder visibility
- * Growth

- * Umbilical artery Doppler
- * Evidence of fluid discordance

TTTS classic picture:

Donor twin → oligohydramnios + small/absent bladder

Recipient twin → polyhydramnios + large bladder

ISUOG describes the donor DVP as <2 cm and recipient DVP as >8 cm in the diagnostic context.

Memory:

MCDA → “16 weeks, every 2 weeks.”

Q12. Correct answer: (e) Lambda sign

At 14 weeks, ultrasound can determine whether twins are:

- * Dichorionic
- * Monochorionic

The lambda sign (twin peak sign) is characteristic of a dichorionic diamniotic pregnancy.

Lambda sign

There is a triangular wedge of chorionic tissue between the two amniotic sacs.

Lambda → Dichorionic

T-sign

A T-sign is characteristic of a monochorionic diamniotic pregnancy because there is a thin intertwin membrane without the chorionic wedge.

Why the other options are inferior?

- * Concordance of fetal sex: Can suggest monozygosity when twins are different sexes, but cannot reliably establish chorionicity in all cases.
- * Number of placentas: Two placental masses strongly suggest dichorionicity, but fused dichorionic placentas can appear as one.
- * Thickness of intertwin membrane: Useful, but the sonographic signs are more characteristic.
- * How membrane is attached to placenta: Not the standard named marker.

Exam pearl:

Lambda = Dichorionic

T-sign = Monochorionic diamniotic

The first-trimester/early second-trimester scan is the optimal time to establish chorionicity.

Q13. Correct answer: (c) Anti-K

This is a very important MRCOG question.

Why anti-K?

Anti-Kell (anti-K) antibodies can cause severe fetal anaemia because they do not simply destroy mature fetal red cells—they can also suppress fetal erythropoiesis.

Importantly, significant fetal disease can occur even with a low maternal antibody level/titre.

Therefore, unlike some other antibodies where referral depends on reaching a critical level, anti-K antibodies warrant referral to a fetal medicine specialist when first identified.

Antibody

Important point

Anti-D

Refer/monitor according to level and history

Anti-c

Can cause severe HDFN; referral according to level/rising titre

Anti-K

Refer when first detected

Anti-E

Usually less severe, but can enhance anti-c disease

RCOG specifically identifies anti-D, anti-c and anti-K as antibodies particularly associated with severe fetal HDFN.

Memory trick:

“K = Keep a close watch.”

Anti-K → fetal medicine referral even at low level.

Q14. Correct answer: (A) CMV — Cytomegalovirus

The combination is classic for congenital CMV infection.

Important fetal/neonatal manifestations

CMV can cause:

- * Fetal growth restriction
- * Microcephaly
- * Intracranial calcifications, particularly periventricular calcifications

- * Ventriculomegaly
- * Seizures
- * Hepatosplenomegaly
- * Jaundice
- * Sensorineural hearing loss

CDC specifically lists microcephaly and brain imaging abnormalities including intracranial/periventricular calcifications among manifestations of congenital CMV.

Why not the other options?

Rubella

- * Cataracts
- * Congenital heart disease, especially PDA
- * Sensorineural deafness

Toxoplasmosis

- * Chorioretinitis
- * Hydrocephalus
- * Intracranial calcification

Syphilis

- * Hepatosplenomegaly
- * Placental abnormalities
- * Rash
- * Bone abnormalities
- * Later: dental and skeletal abnormalities

Classic congenital infection memory

CMV → “C” for Calcifications + Cytomegaly

Toxoplasma → “TOXO = eye + hydrocephalus + calcifications”

Rubella → “3 Cs”: Cataracts + Cardiac disease + Deafness

🧠 Five one-line memories

Placenta praevia → weekly blood sample

MCDA → 16 weeks, every 2 weeks

Lambda → Dichorionic

Anti-K → refer immediately

CMV → microcephaly + periventricular calcification

Q15. Correct answer: (b) MRI for fetal brain

Why?

This is a monochorionic diamniotic (MCDA) pregnancy, meaning both twins share a placenta and therefore have vascular connections between their circulations.

If one twin dies, the surviving twin is at risk of acute transfer of blood through placental vascular anastomoses into the dead twin. This can cause:

- * Acute hypotension/anemia
- * Cerebral hypoperfusion
- * Ischaemic brain injury
- * Neurological disability

Therefore, the surviving twin needs assessment for possible brain injury. Fetal MRI is particularly useful for detecting cerebral injury that may not be obvious on ultrasound.

The monochorionic placenta is the crucial clue: complications after single fetal death are much more significant in monochorionic than dichorionic pregnancies because of the shared vascular circulation. RCOG highlights the vascular anastomoses and neurological complications associated with single fetal death in monochorionic twins.

Why not immediate delivery?

At 30 weeks, immediate delivery of the surviving twin is not automatically required if there is no other indication for delivery. The decision depends on fetal condition, gestation and evidence of neurological injury.

Why not reassurance?

Reduced movements plus death of the co-twin is a high-risk situation, particularly in MCDA twins.

MRCOG pearl:

MCDA + single fetal death → surviving twin at risk of neurological injury → fetal brain assessment, including MRI.

Q16. Correct answer: (c) Serial growth scans

The important finding is:

PAPP-A = 0.39 MoM

This is low.

Although PAPP-A is used as part of first-trimester screening for chromosomal abnormalities, low PAPP-A is also associated with placental dysfunction and an increased risk of fetal growth restriction/SGA.

RCOG identifies first-trimester PAPP-A below approximately 0.415 MoM as a significant risk factor for SGA.

Therefore, even though:

- * β -hCG is normal
- * Nuchal translucency is normal
- * Other screening parameters are normal

the low PAPP-A warrants additional fetal growth surveillance.

Why not amniocentesis or CVS?

These are diagnostic tests for chromosomal abnormalities. The question gives otherwise normal Down syndrome screening parameters and asks how to manage the low PAPP-A.

There is no indication here for an invasive diagnostic test solely because PAPP-A is low.

Why not reassurance?

Low PAPP-A is not simply an insignificant laboratory abnormality. It can be a marker of placental dysfunction, particularly later fetal growth restriction.

Why serial growth scans?

They allow monitoring of:

- * Estimated fetal weight
- * Growth trajectory
- * Amniotic fluid
- * Doppler assessment when indicated

MRCOG pearl:

Low PAPP-A → think placental dysfunction → monitor fetal growth.

And remember:

PAPP-A <0.415 MoM → increased SGA/FGR risk.

Q17. Correct answer: (c) cffDNA

This is an important red-cell alloimmunisation question.

The mother has anti-K (Kell) antibodies and the father is heterozygous K-positive.

Because the father is heterozygous, the fetus has approximately a 50% chance of inheriting the Kell antigen.

What should be done?

The next step is non-invasive fetal genotyping using cell-free fetal DNA (cffDNA) from maternal blood.

This determines whether the fetus is:

- * Kell antigen positive → at risk of HDFN
- * Kell antigen negative → not at risk from maternal anti-K

Current RCOG guidance recommends early fetal-medicine assessment for pregnancies with immune anti-K, and fetal antigen genotyping can be used to establish whether the fetus carries the relevant antigen.

Why is anti-K particularly important?

Anti-K can cause severe fetal anaemia through two mechanisms:

1. Destruction of fetal red cells
2. Suppression of fetal erythropoiesis

Therefore, severe fetal disease can occur even when the antibody level is relatively low.

Why not amniocentesis?

Amniocentesis is invasive and is not the preferred first-line method when non-invasive fetal antigen testing is available.

Why not CVS?

CVS is also invasive. cffDNA provides fetal antigen information without an invasive procedure.

If the fetus is Kell-positive

The pregnancy requires fetal medicine surveillance, particularly assessment for fetal anaemia using MCA peak systolic velocity (MCA-PSV). An MCA-PSV of ≥ 1.5 MoM is concerning for significant fetal anaemia.

Q18. Correct answer: (a) Manual removal of placenta

The woman:

- * Delivered 40 minutes ago
- * Has already received oxytocin 10 IU IM
- * Has no signs of placental separation
- * Is not bleeding
- * Is haemodynamically stable
- * Has IV access

Because she is being managed with active management of the third stage, failure to deliver the placenta by 30 minutes constitutes a prolonged third stage/retained placenta.

Therefore, at 40 minutes, the next step is preparation for manual removal of the placenta under appropriate anaesthesia/analgesia.

Why not umbilical vein oxytocin?

The old option of injecting oxytocin into the umbilical vein is not routinely recommended. NICE specifically states not to use umbilical-vein agents routinely for retained placenta.

Why not more IV oxytocin?

IV oxytocin is not routinely used to deliver a retained placenta in a woman who is not bleeding. It is appropriate as part of management when there is excessive bleeding.

Key point

Active management + placenta not delivered by 30 min → retained/prolonged third stage → prepare for manual removal.

Q19. Answer marked in the question: (b) 30 seconds–3 minutes

This question is based on the older NICE recommendation.

Delayed cord clamping allows continued placental transfusion, which can improve neonatal blood volume and reduce anaemia. In a stable preterm baby, delayed clamping is beneficial. The older NICE recommendation was:

At least 30 seconds, but not longer than 3 minutes.

Important current update

The current NICE recommendation has changed to:

Wait at least 60 seconds before clamping the cord in preterm babies, unless maternal or fetal circumstances require earlier clamping.

So for this question bank, choose:

(b) 30 seconds–3 minutes

But for current clinical practice/exam preparation, remember:

Preterm baby → wait ≥ 60 seconds if stable.

The baby's condition takes priority; if immediate resuscitation is required, earlier clamping may be necessary.

Q20. Correct answer: (d) 75 minutes

The question states:

- * First stage of labour
- * Inadequate progress
- * CTG = suspicious
- * Decision made for Category 2 caesarean section

What does Category 2 mean?

There is maternal or fetal compromise, but it is not immediately life-threatening.

Therefore, delivery should be expedited but does not require the same urgency as Category 1.

Timing

Category 1 → usually within 30 minutes

Category 2 → usually within 75 minutes

NICE specifically recommends performing Category 2 caesarean birth as soon as possible and, in most situations, within 75 minutes of the decision.

Memory trick

Category 1 = 30 minutes

Category 2 = 75 minutes

Category 3 = no immediate compromise

Category 4 = elective/planned

So:

Answer = 75 minutes

Q21. Correct answer: (b) Blood loss >1000 mL

This is a very important second-stage CS question.

The woman has:

- * Been pushing for 2 hours
- * Fetal head is only 2/5 palpable abdominally → deeply engaged
- * Head at -1 station
- * Caput and moulding
- * Decision made for LSCS

This represents a difficult second-stage caesarean, particularly because the fetal head is deeply engaged.

Why is blood loss >1000 mL more likely?

During a second-stage CS, the fetal head is deeply impacted in the maternal pelvis. Delivering it through the uterine incision can be technically difficult.

This increases the risk of:

- * Unintentional uterine incision extensions
- * Injury to uterine vessels
- * Uterine atony
- * Postpartum haemorrhage
- * Increased blood loss

Studies comparing second-stage with first-stage caesarean sections show significantly higher rates of blood loss >1000 mL, uterine incision extension and uterine atony in second-stage CS.

One study found blood loss >1000 mL in approximately 9.7% of second-stage CS versus 3.8% of first-stage CS.

Why not bladder injury?

Bladder injury is also increased in second-stage CS because the deeply engaged fetal head and stretched lower uterine segment make bladder dissection/delivery more difficult.

However, in this MCQ, the best answer is blood loss >1000 mL, because haemorrhage is a particularly important and more frequent complication.

Why not simply “intraoperative uterine trauma”?

Uterine incision extension is indeed increased during second-stage CS, but the question is asking for the complication more likely compared with CS performed in the first stage, and the key answer is blood loss >1000 mL.

Q22. Current answer: Carbetocin by slow IV injection

The options in this question appear to be from an older question bank, and the exact option for carbetocin is not listed. Current NICE guidance states that for women having a caesarean birth, carbetocin should be offered by slow IV injection to prevent postpartum haemorrhage.

Why carbetocin?

Carbetocin is a long-acting oxytocin analogue. It produces sustained uterine contraction after delivery of the baby and therefore reduces the risk of uterine atony and postpartum haemorrhage.

NICE specifically recommends carbetocin for caesarean birth because evidence showed it to be an effective and cost-effective uterotonic for this setting.

What about the options shown?

- * Oxytocin 10 IU IV → not the current routine recommendation for caesarean birth.
- * Oxytocin 5 IU IV → may be used in some protocols/settings, particularly historically.
- * Oxytocin 5 IU IV + infusion → older regimen.
- * Syntometrine IM → not preferred routinely for caesarean section and ergometrine has important contraindications.
- * Oxytocin + ergometrine → mainly relevant to vaginal birth when increased PPH risk exists.

☆ Exam update

Vaginal birth: oxytocin-based uterotonic regimen.

Caesarean birth: carbetocin slow IV injection according to current NICE guidance.

So if this is an older MRCOG question, check the answer key used by that paper; for current practice, remember carbetocin.

Q23. Correct answer: (b) Brachial plexus injury

Shoulder dystocia occurs when, after delivery of the fetal head, the shoulders fail to deliver with normal traction.

The most important fetal complication is brachial plexus injury (BPI).

RCOG reports brachial plexus injury in approximately 2.3–16% of shoulder dystocia deliveries.

Why does it happen?

During difficult delivery of the shoulders, excessive traction on the fetal head/neck can stretch the brachial plexus, particularly the upper roots (C5–C6, Erb palsy).

Possible consequences include:

- * Weakness of the affected arm
- * Reduced shoulder abduction
- * Loss of elbow flexion
- * Persistent neurological deficit in severe cases

Because permanent neurological injury can have major lifelong consequences, brachial plexus injury is an important source of medicolegal claims following shoulder dystocia.

Why not clavicular or humeral fracture?

These fractures can occur during shoulder dystocia, but they are generally less important medicolegally because most heal without permanent disability.

Why not birth asphyxia?

Birth asphyxia is a serious complication of prolonged shoulder dystocia, but the characteristic litigation-associated injury tested in this question is brachial plexus injury.

☆ Memory

Shoulder dystocia → “BPI”

B = Brachial plexus injury

Q24. Correct answer: (d) 40%

Approximately 4 in 10 women who plan a vaginal breech birth ultimately require caesarean delivery. Current RCOG patient information gives this figure as 40%.

Why is this important?

A planned vaginal breech birth can be successful, but there is a significant chance that labour will not progress safely or that fetal/maternal concerns will arise, requiring emergency caesarean birth.

Therefore, planned vaginal breech birth should take place in a setting with:

- * Experienced staff
- * Continuous fetal monitoring
- * Immediate access to emergency caesarean delivery

RCOG specifically states that women planning vaginal breech birth should plan hospital birth where emergency caesarean is available because 4 in 10 require caesarean birth.

☆ Memory

Planned vaginal breech → 40% → emergency CS

Q25. Correct answer: (c) 4 times

The question asks about term breech presentation after 39 weeks.

Historically, the Term Breech Trial demonstrated a substantially higher risk of perinatal/neonatal mortality and serious neonatal morbidity with planned vaginal breech birth compared with planned caesarean birth.

The commonly tested MRCOG figure is approximately:

4 × higher perinatal mortality

This is why planned caesarean became the usual recommended option for many term breech pregnancies.

RCOG currently states that planned caesarean is safer for the baby than planned vaginal breech birth, while recognising that caesarean has additional maternal and future-pregnancy risks.

Important distinction

This does not mean that every vaginal breech birth is unsafe.

A carefully selected woman with:

- * Appropriate breech type
- * Appropriate fetal size
- * No contraindication
- * Experienced team
- * Immediate access to caesarean delivery

may still choose planned vaginal breech birth after counselling.

☆ Exam memory

Term breech:

Planned CS → lower perinatal risk

Planned vaginal breech → higher perinatal risk, traditionally tested as ~4×

Q26. Correct answer: (b) History of a previous vaginal birth

Why?

The strongest predictor of successful VBAC is a previous vaginal birth, particularly a previous successful VBAC.

A previous vaginal delivery demonstrates that:

- * The pelvis has previously permitted vaginal birth.
- * The cervix and uterus have previously undergone labour successfully.
- * The likelihood of successful VBAC is therefore substantially higher.

Why not the other options?

(a) Gestation when in labour: Does influence VBAC outcome, but is not the strongest predictor.

(c) Maternal age: Increasing age can reduce VBAC success, but it is not the best predictor.

- (d) Scar thickness on ultrasound: Lower uterine-segment thickness may have some association with scar complications, but it is not the single best predictor of VBAC success.
- (e) Type of previous caesarean: Important for assessing whether VBAC is appropriate, especially the uterine incision, but previous vaginal birth is a stronger predictor of successful VBAC.

🧠 Remember:

Previous vaginal birth → best predictor of successful VBAC.

Q27. The woman has:

- * Prolonged second stage
- * Fetal head 1/5 palpable abdominally → head is deeply engaged
- * Vaginal examination: fetal head at +1 station

Correct answer: (d) Mid forceps

Why?

Forceps classification is primarily based on the station of the fetal head.

Forceps

Fetal head position

Outlet

Scalp visible at introitus; head on pelvic floor

Low

Leading point of skull at +2 station or more, but not on pelvic floor

Mid

Head is engaged but leading point is above +2, typically 0 to +1 station

High

Head not engaged — generally no longer used

Here the fetal head is at +1 station, so this is:

Mid-cavity/mid forceps

The fact that only 1/5 of the head is palpable abdominally confirms that the head is well engaged, but the +1 station determines the classification.

🧠 Easy memory

0 to +1 → MID

≥ +2 → LOW

At perineum/on pelvic floor → OUTLET

Q28. Correct answer: (E) Vaginal prostaglandin

This is essentially the same clinical situation as the earlier question you showed.

She is:

- * 41+3 weeks
- * Nulliparous
- * Cervix 2 cm dilated but 2 cm long
- * Fetal head engaged
- * No contractions
- * Previous membrane sweeps have not established labour.

The key issue is that the cervix is not sufficiently favourable for amniotomy and oxytocin.

Why prostaglandin?

When the cervix is unfavourable, the first step is cervical ripening.

Vaginal dinoprostone (prostaglandin E2) softens and shortens the cervix and promotes cervical dilatation. NICE recommends vaginal dinoprostone when the Bishop score is 6 or less, provided there are no contraindications. ([nice.org.uk^{\[OBJ\]}](https://www.nice.org.uk/obj))

Why not amniotomy + oxytocin?

Amniotomy with oxytocin is appropriate when the cervix is already favourable. In this woman, the cervix is still relatively long, so cervical ripening should occur first.

Why not balloon catheter?

A balloon catheter is a valid mechanical cervical-ripening option, particularly when pharmacological methods are contraindicated or the woman prefers a mechanical method. But in this classic MCQ, with no contraindication to prostaglandin, vaginal prostaglandin is the expected answer. ([nice.org.uk^{\[OBJ\]}](https://www.nice.org.uk/obj))

Why not membrane sweep?

She has already had membrane sweeps at 40 and 41 weeks, without establishing labour. At 41+3 weeks, she now requires formal induction.

Q29. Correct answer: (A) 29+6 weeks

The woman is in established preterm labour with:

- * 3 contractions/10 minutes
- * Cervix 4 cm dilated

The question asks up to which gestation magnesium sulfate should be offered for fetal neuroprotection.

Why 29+6 weeks?

NICE recommends:

- * 24+0 to 29+6 weeks → OFFER magnesium sulfate
- * 30+0 to 33+6 weeks → CONSIDER magnesium sulfate
- * 23+0 to 23+6 weeks → discuss individually

So the upper limit for the word “offer” is 29+6 weeks.

Why is magnesium sulfate given?

It provides fetal neuroprotection and reduces the risk of neurological injury, particularly cerebral palsy, in babies born very preterm.

It is not primarily being given as a tocolytic.

Easy way to remember

24–29+6 → OFFER

30–33+6 → CONSIDER

23–23+6 → DISCUSS

Therefore:

☒ Answer: 29+6 weeks

Q30. Correct answer: (E) Transvaginal ultrasound

She has:

- * Gestation 30+3 weeks
- * Regular contractions
- * Cervix appears long but slightly dilated
- * No ruptured membranes

The question is asking how to establish whether she is actually in preterm labour.

At ≥ 30 weeks, if membranes are intact and preterm labour is suspected, transvaginal ultrasound measurement of cervical length is the preferred diagnostic assessment when available.

Cervical-length interpretation

Cervical length > 15 mm

→ preterm labour is unlikely.

Cervical length ≤ 15 mm

→ treat as diagnosed preterm labour.

Why not fetal fibronectin?

Fetal fibronectin is an alternative when transvaginal cervical-length measurement is unavailable or unacceptable. NICE specifically recommends it in that situation rather than routinely using both tests together.

Why not FBC and CRP?

FBC/CRP may be useful if infection is suspected, but they do not establish whether she is in preterm labour.

Why not simply treat as preterm labour?

At 30+3 weeks, objective assessment with cervical length can avoid unnecessary treatment and hospitalisation when true preterm labour is unlikely.

☆ Remember

Suspected preterm labour ≥ 30 weeks + intact membranes → TVUS cervical length

≤ 15 mm → treat as preterm labour

> 15 mm → preterm labour unlikely

Therefore:

☑ Answer: Transvaginal ultrasound

Q31. The woman is:

* 41 years old

* Primigravida

* 36 weeks currently

* Planned induction at 39 weeks

* Worried about the risks of induction.

The question asks:

What intrapartum risk is increased in women in this age group undergoing induction compared with expectant management?

Correct answer: (E) No additional risk

This is an important counselling point.

Advanced maternal age alone does not mean that induction at term increases the risk of caesarean section, failed induction, fetal hypoxia or instrumental delivery compared with expectant management.

Evidence reviewed by RCOG has not demonstrated a clear increase in operative delivery from induction simply because the woman is ≥ 40 years old.

More recent RCOG material similarly notes that induction at or after 39 weeks does not appear to increase caesarean birth or adverse fetal/neonatal outcomes.

Why is induction offered at 39 weeks in older women?

The important issue is actually the risk of continuing the pregnancy, particularly the increased risk of stillbirth with advancing maternal age.

Therefore, induction around 39–40 weeks may be discussed with women aged ≥ 40 years.

It is not because induction itself is more dangerous.

Why not caesarean section?

Age alone is not an indication for caesarean section.

Why not failed induction?

Although failed induction can occur in any nulliparous woman, there is no evidence that maternal age alone makes induction substantially more likely to fail compared with expectant management.

Why not fetal hypoxia?

Induction itself is not associated with a specific increased risk of fetal hypoxia simply because the woman is older.

Why not instrumental delivery?

Again, age alone does not make instrumental delivery an inevitable consequence of induction.

☆ Important exam distinction

Advanced maternal age increases the risk of stillbirth with expectant management.

But:

Induction at ≥ 39 weeks does NOT appear to increase caesarean delivery or adverse fetal/neonatal outcomes simply because of age.

So the answer is:

☒ No additional risk

Q32. Correct answer: (D) 70–80%

Why?

During attempted epidural insertion, if the epidural needle accidentally punctures the dura mater, CSF can leak through the dural puncture.

This produces reduced CSF pressure and may cause a characteristic post-dural puncture headache (PDPH).

Typical features:

- * Headache worsens when sitting or standing
- * Improves when lying flat
- * May be associated with nausea, neck stiffness, photophobia or auditory symptoms.

After a recognised accidental dural puncture with a large epidural needle, the risk of PDPH is very high, commonly quoted around 70–80% in obstetric teaching.

Why not 100%?

Not every patient with a dural puncture develops PDPH, so 100% is too high.

Why not 5–45%?

Those figures underestimate the risk following a recognised accidental dural puncture.

☆ Remember

Accidental dural puncture → approximately 70–80% risk of PDPH.

Q33. Correct answer: (E) Tachycardia

Why?

Atosiban is an oxytocin receptor antagonist used as a tocolytic in threatened preterm labour.

The drug's listed adverse effects include:

- * Cardiac: tachycardia
- * Vascular: hypotension and hot flushes

* GI: nausea/vomiting

* Neurological: headache/dizziness

The product information specifically lists tachycardia under cardiac disorders and hypotension under vascular disorders.

Therefore, when the question asks specifically for the cardiac adverse effect, the answer is:

Tachycardia

Why not hypotension?

Hypotension can occur with atosiban, but it is classified as a vascular adverse effect rather than the cardiac effect being asked for.

Why not palpitations?

Palpitations may accompany tachycardia, but tachycardia is the recognised cardiac adverse reaction.

☆ Exam trick

Atosiban:

* Cardiac → tachycardia

* Vascular → hypotension

* GI → nausea

Q34. The question states:

* Mother is RhD-negative

* Anti-D antibodies were initially normal

* At 36 weeks, anti-D titre/level has risen to 20

* She delivers at 37 weeks

* What complication is the baby at increased risk of?

Correct answer: (B) Early jaundice

Why?

This is haemolytic disease of the fetus and newborn (HDFN).

The mother has developed IgG anti-D antibodies. IgG can cross the placenta and bind to RhD-positive fetal red blood cells.

This causes:

Maternal anti-D IgG → fetal RBC destruction → haemolysis → ↑ bilirubin

After birth, the placenta is no longer available to remove bilirubin, while the newborn's liver has limited capacity to conjugate it.

Therefore, the baby can develop early neonatal jaundice.

RCOG identifies anti-D as one of the major antibodies capable of causing severe fetal/neonatal anaemia and jaundice.

Why EARLY jaundice?

Physiological jaundice generally appears after the first 24 hours.

In immune haemolysis, bilirubin production is increased from birth, so jaundice may appear within the first 24 hours.

Therefore:

Anti-D alloimmunisation → haemolysis → early jaundice

What about anaemia?

Anaemia is also an important complication of RhD alloimmunisation.

In severe HDFN, fetal anaemia may develop antenatally and can become severe enough to cause hydrops or fetal death. RCOG confirms that anti-D can cause severe fetal and neonatal disease.

However, for this particular MCQ, the expected neonatal complication among the choices is:

Early jaundice

Q35. Answer in this question bank: (C) Once a week

The woman has:

- * Placenta praevia
- * Previous bleeding
- * 36 weeks
- * Atypical red-cell antibodies
- * Potentially high risk of major obstetric haemorrhage/transfusion

Placenta praevia carries a significant risk of major haemorrhage, so blood availability needs to be carefully planned. RCOG guidance states that women with red-cell antibodies who are at high risk of requiring transfusion should have a cross-match sample taken at least weekly.

Why not daily or twice weekly?

There is no routine need to repeat the sample every day or twice weekly if the woman is clinically stable.

Important distinction

For blood actually issued for transfusion in pregnancy, the compatibility sample generally needs to be less than 3 days old (72 hours). However, RCOG specifically allows a weekly strategy in selected high-risk antenatal situations, with a fresh sample immediately if transfusion becomes necessary.

☆ Exam point

High-risk woman + clinically significant antibodies → crossmatch sample at least weekly.

So for this MCQ:

✓ Answer: Once a week

Q36. MCDA twins — when does monitoring for TTTS start?

Correct answer: (C) 16 weeks

MCDA = monochorionic diamniotic twins.

They share one placenta, so vascular connections between the two fetal circulations can occur.

This creates a risk of:

Twin-to-twin transfusion syndrome (TTTS)

Therefore, surveillance must begin early.

Current NICE guidance recommends ultrasound surveillance for fetal complications in monochorionic pregnancies from 16 weeks, with scans at intervals of no more than 14 days.

Current RCOG guidance similarly recommends TTTS screening by ultrasound from 16+0 weeks, every 2 weeks.

What is assessed?

At each surveillance scan, assess:

- * Amniotic fluid in each sac
- * Fetal bladder visibility
- * Fetal growth/biometry
- * Doppler parameters as appropriate

Why not 12 weeks?

The first-trimester scan is primarily for:

- * Dating

* Chorionicity/amnionicity

* Aneuploidy screening

Routine TTTS surveillance does not start at 12 weeks. NICE recommends determining chorionicity/amnionicity at approximately 11+2 to 14+1 weeks.

Why not 24 weeks?

Starting at 24 weeks would miss the period during which TTTS can develop.

☆ Remember

MCDA → TTTS surveillance → 16 weeks → every 2 weeks

✓ Answer: 16 weeks

Q37. Twin pregnancy at 14 weeks — best parameter to diagnose chorionicity

Correct answer: (E) Lambda sign

This is a classic ultrasound question.

At 14 weeks, the important task is to determine whether the twins are:

* Dichorionic diamniotic (DCDA), or

* Monochorionic diamniotic (MCDA).

The lambda sign (twin-peak sign) is characteristic of dichorionic twins.

Lambda sign

It represents a triangular wedge of chorionic tissue between the two amniotic sacs:

DCDA → Lambda/ “twin peak” sign

T-sign

The alternative is:

MCDA → T-sign

because the dividing membrane inserts directly into the placenta without the chorionic wedge.

NICE recommends determining chorionicity using:

* Number of placental masses

* Membrane thickness

* Lambda or T-sign.

Why not concordance of fetal sex?

Same-sex twins can be either:

- * Monozygotic, or
- * Dizygotic.

Therefore, fetal sex cannot reliably determine chorionicity.

Why not number of placentas?

This can be difficult because two placental masses may appear fused and can be mistaken for one.

Why not membrane thickness?

It is useful, but the lambda/T sign is the classic and highly useful ultrasound marker at this gestation.

Q38. ☒ Correct answer: Anti-K

This is a very important MRCOG fact.

The options are:

- * Anti-D
- * Anti-c
- * Anti-K
- * Anti-E

Why Anti-K?

Anti-K (Kell) antibodies can cause severe fetal anaemia even at very low antibody titres/levels.

Anti-K is different from many other red-cell antibodies because it causes fetal anaemia by:

1. Destruction of Kell-positive fetal red cells
2. Suppression of fetal erythropoiesis

Therefore, the relationship between antibody titre and severity is unreliable. RCOG recommends referral to a fetal medicine specialist as soon as anti-K is detected, rather than waiting for a particular critical titre.

Compare with anti-D and anti-c

For anti-D:

- * Referral is recommended when the level reaches >4 IU/mL.

For anti-c:

* Referral when >7.5 IU/mL.

For anti-K:

* Refer when first detected — regardless of level.

What happens after referral?

If the fetus is antigen-positive or potentially at risk, fetal medicine will assess for fetal anaemia, principally using:

MCA peak systolic velocity (MCA-PSV) Doppler

🧠 MRCOG memory

Anti-K = K for “Keep referring” — even at low titre.

✅ Answer: Anti-K

Q39. ✅ Correct answer: CMV

The classic combination is:

Congenital CMV → IUGR + microcephaly + intracranial calcifications

Why CMV?

Cytomegalovirus (CMV) is a major congenital infection and can cause significant fetal neurological disease.

Important fetal/neonatal features include:

- * Microcephaly
- * Intracranial/periventricular calcifications
- * Ventriculomegaly
- * Abnormal brain development
- * Fetal growth restriction
- * Hepatosplenomegaly
- * Thrombocytopenia
- * Sensorineural hearing loss

The combination of microcephaly + intracranial calcification is particularly characteristic of congenital CMV.

Why not the other options?

Rubella

→ cataracts, congenital heart disease, sensorineural deafness, “blueberry muffin” rash.

Toxoplasmosis

→ classically:

- * Hydrocephalus

- * Intracranial calcification

- * Chorioretinitis

Syphilis

→ hepatosplenomegaly, placentomegaly, fetal hydrops, bone abnormalities and later congenital manifestations.

Important distinction

Both CMV and toxoplasmosis can cause intracranial calcification, but:

CMV → microcephaly + periventricular calcification

Toxoplasmosis → hydrocephalus + diffuse intracranial calcification + chorioretinitis

🧠 Memory

CMV = “Cerebral + Microcephaly + Ventricular calcification.”

✅ Answer: CMV

Q40. ✅ Correct answer: MRI for fetal brain

This is one of the most important complications of monochorionic twins.

The woman has:

- * Monochorionic diamniotic twins

- * 30 weeks

- * Death of one twin

- * The other twin is still alive

Why is the surviving twin at risk?

MCDA twins share a single placenta, with vascular anastomoses connecting the two fetal circulations.

When one twin dies, there can be an acute haemodynamic event:

Death of Twin A

↓

Blood from surviving Twin B rapidly flows through placental vascular connections toward the dead twin



Acute hypotension/hypovolaemia in Twin B



Cerebral hypoperfusion/ischaemia



Possible brain injury

Therefore, the surviving twin is at risk of neurological injury, even if its initial ultrasound appears reassuring. RCOG specifically notes the risk of ischaemic brain injury after single fetal death in a monochorionic pregnancy.

Why MRI?

Fetal brain MRI provides detailed assessment for:

- * Cerebral infarction
- * Ischaemic injury
- * Haemorrhage
- * Other structural brain abnormalities

RCOG states that fetal brain MRI may be performed up to about 4 weeks after the co-twin's demise to help detect neurological morbidity.

This timing is important because some cerebral abnormalities take time to become visible.

Why not immediate delivery?

This is the major exam trap.

Immediate delivery does not reverse neurological injury that has already occurred.

The cerebral insult occurs around the time of the co-twin's death. Delivering immediately may simply introduce prematurity without preventing established cerebral injury.

Current RCOG guidance therefore supports individualised/conservative management in many cases, with fetal medicine assessment, surveillance and brain imaging.

What else should be monitored?

The surviving twin should be assessed for:

1. Fetal anaemia

→ MCA-PSV Doppler

2. Cerebral injury

→ serial cranial ultrasound + fetal MRI

3. Fetal wellbeing

→ appropriate surveillance/CTG depending on gestation and clinical situation.

RCOG notes that MCA-PSV can be used to assess fetal anaemia, while MRI provides additional information about neurological injury.

Why not emergency caesarean?

The death of one twin in an MCDA pregnancy does not automatically mandate immediate delivery of the surviving twin.

The decision depends on:

- * Gestational age
- * Fetal condition
- * Evidence of anaemia
- * CTG
- * Evidence of neurological injury
- * Maternal condition
- * Parents' wishes

At 30 weeks, avoiding unnecessary extreme prematurity is particularly important.

Q41. Correct answer: Serial growth scans

The results are:

- * β -hCG: normal
- * NT: normal
- * PAPP-A = 0.39 MoM
- * Other parameters: normal

Although 0.39 is within the laboratory reference range shown in the question, it is low enough to be considered a low PAPP-A result in the obstetric screening context. A commonly used threshold is around <0.4 – 0.415 MoM.

Why is low PAPP-A important?

PAPP-A is produced by the placenta. A low level can be a marker of abnormal placentation, and therefore is associated with an increased risk of:

- * Fetal growth restriction/SGA
- * Pre-eclampsia
- * Placental dysfunction
- * Preterm birth in some pregnancies

Therefore, the important consequence is increased fetal growth surveillance, rather than assuming that the baby has Down syndrome.

RCOG recognises low PAPP-A as a risk factor for a small-for-gestational-age fetus, and women at increased risk are offered additional growth monitoring.

Why not CVS or amniocentesis?

These are diagnostic tests for chromosomal abnormalities.

Here:

- * NT is normal
- * β -hCG is normal
- * The question does not give a high-risk combined screening result.

Low PAPP-A alone is not an indication for invasive chromosomal testing.

Why not cfDNA?

cfDNA is primarily a screening test for aneuploidy. It does not address the main concern raised by low PAPP-A: placental dysfunction and fetal growth.

Why serial growth scans?

Because the important potential complication is fetal growth restriction.

The practical sequence is:

Low PAPP-A

↓

Possible placental dysfunction

↓

Increased FGR/SGA risk

↓

Serial fetal growth assessment

☆ MRCOG pearl

Low PAPP-A → think PLACENTA → monitor GROWTH.

✓ Answer: Serial growth scans

Q42 ✓ **Correct answer: Cell-free fetal DNA (cffDNA)**

The important clues are:

- * Mother has anti-K antibodies
- * Titre = 1:64
- * Father is heterozygous K-positive

Because the father is heterozygous:

Father = Kk

Therefore, the fetus has approximately:

50% chance of being K-positive

50% chance of being K-negative

The next step is to determine whether the fetus has inherited the K antigen.

Why cffDNA?

Cell-free fetal DNA from maternal blood can be used for non-invasive fetal antigen genotyping.

If the fetus is K-negative:

→ maternal anti-K cannot cause Kell-mediated HDFN.

If the fetus is K-positive:

→ fetus is potentially at risk

→ fetal medicine surveillance is required, particularly MCA-PSV Doppler for fetal anaemia.

RCOG guidance recognises cffDNA testing for fetal antigen status, including Kell, as a non-invasive approach.

Why is anti-K particularly important?

Anti-K is different from many other red-cell antibodies.

Anti-K can cause severe fetal anaemia even at relatively low antibody titres, because it can both:

1. Destroy fetal red cells
2. Suppress fetal erythropoiesis

Therefore, RCOG recommends fetal-medicine referral as soon as anti-K is detected, rather than waiting for a particular titre.

So the 1:64 titre is not the reason to wait.

Why not amniocentesis?

Amniocentesis is invasive and is not required simply to establish fetal Kell status when non-invasive testing is available.

Why not CVS?

CVS can determine fetal genotype, but it is invasive. cffDNA provides the information without the procedural risk.

Why not ultrasound?

Ultrasound cannot tell you reliably whether the fetus is Kell antigen positive or negative.

Ultrasound/MCA Doppler becomes important after establishing that the fetus is potentially at risk, particularly for detecting fetal anaemia.

☆ The sequence to remember

Anti-K detected

↓

Refer to fetal medicine

↓

Determine fetal Kell status (cffDNA where available)

↓

If K-negative → no Kell-mediated HDFN risk

↓

If K-positive → monitor for fetal anaemia

↓

MCA-PSV Doppler

↓

If MCA-PSV ≥ 1.5 MoM → significant fetal anaemia suspected and specialist management required.

🧠 MRCOG memory

Anti-K = “Kell is dangerous even at low titre.”

Father heterozygous → 50% fetal risk → cffDNA to determine fetal antigen status.

Q43. ✓ Correct answer: Inguinal lymph nodes

The options are:

- * External iliac
- * Femoral
- * Inguinal
- * Internal iliac
- * Para-aortic

Why?

The vulva has a rich lymphatic drainage system. For most vulval cancers, the first regional lymph nodes involved are the superficial inguinal lymph nodes.

The pathway is broadly:

Vulval tumour → superficial inguinal nodes → deep inguinal/femoral nodes → pelvic nodes

Therefore, the inguinal nodes are the first important nodal basin to assess.

Important anatomical point

The clitoris and anterior vulva can have somewhat different drainage patterns and may drain toward deep inguinal/pelvic nodes, but for a typical vulval SCC, the key exam answer for initial lymphatic spread is:

Inguinal lymph nodes

RCOG guidance emphasises assessment of the groin nodes in vulval carcinoma and describes groin node surgery/sentinel-node assessment as a central component of management.

Why not pelvic nodes?

External/internal iliac nodes are downstream pelvic nodes, rather than the usual first site of spread.

🧠 Memory

Vulval cancer → “Vulva → Groin” → inguinal nodes.

Q44. The woman has:

- * Age 70
- * Vulval itching and bleeding
- * Biopsy confirms squamous cell carcinoma
- * Depth of invasion <1 mm

☒ Correct answer: <1%

The crucial information is the depth of stromal invasion.

For a small vulval SCC confined to the vulva/perineum with stromal invasion ≤ 1 mm, the risk of lymph-node metastasis is extremely low/negligible. RCOG guidance specifically states that these lesions can be treated by wide local excision without groin node dissection because the risk of lymph-node metastasis is negligible.

Therefore, among the options:

- * <1% → correct
- * 5%
- * 10%
- * 15%
- * 20%

Why does depth matter?

As tumour invasion increases, the likelihood of lymphatic access and nodal metastasis increases.

A very superficial tumour has much less opportunity to invade lymphatic channels.

Important threshold

≤ 1 mm invasion → very low/negligible nodal risk

> 1 mm invasion → nodal assessment becomes important

RCOG guidance states that groin node dissection/evaluation is indicated when invasion is > 1 mm or the tumour is > 2 cm.

 Exam pearl

Vulval SCC ≤ 1 mm invasion → think “no groin node surgery.”

☒ Answer: <1%

Q45. She has:

- * 6 months of vulval discomfort and soreness
- * A 2.5 cm raised ulcerated lesion
- * Lesion is highly suspicious for vulval cancer

Question:

What is the first-line investigation?

☒ Correct answer: Multiple punch biopsies with adjacent normal skin

The first step in diagnosing a suspected vulval malignancy is tissue diagnosis by biopsy.

The biopsy should provide enough information to establish:

- * Histological type
- * Presence of invasion
- * Depth of invasion
- * Differentiated vs usual-type disease where appropriate
- * Relationship with adjacent abnormal/normal tissue

RCOG information on vulval disease confirms that when the diagnosis is uncertain or a suspicious lesion persists, a biopsy is required; VIN, for example, can only be diagnosed by biopsy.

Why multiple punch biopsies?

A suspicious vulval lesion can be heterogeneous. Taking multiple biopsies, including the lesion and adjacent representative skin, helps avoid sampling only an area of superficial or non-representative disease.

This is particularly useful when the lesion is large, ulcerated or has different appearing areas.

Why not sentinel lymph-node biopsy?

Sentinel lymph-node biopsy is part of staging/management, not the initial diagnostic step.

First:

Suspicious lesion → biopsy → confirm cancer

Then:

Histological diagnosis + staging → decide on sentinel node/groin management

RCOG guidance describes sentinel lymph-node biopsy as an important development in the management of vulval cancer, but it is not the first diagnostic investigation for an undiagnosed lesion.

Why not CT or MRI?

CT/MRI can be useful for staging and treatment planning, particularly when advanced disease is suspected.

But they cannot replace tissue diagnosis.

Correct sequence:

Suspicious vulval lesion

↓

Biopsy

↓

Histological confirmation

↓

Assess tumour size/depth/invasion

↓

Appropriate imaging/staging

↓

Groin/sentinel-node assessment when indicated

RCOG specifically identifies imaging as part of staging and treatment planning in gynaecological oncology.

Q46. ☒ Correct answer: To decide on the need for lymph-node resection

The sentinel lymph node (SLN) is the first lymph node(s) receiving drainage from the tumour.

The purpose of SLN biopsy in appropriately selected early vulval cancer is to determine whether the tumour has spread to the groin nodes.

How it works

Vulval tumour

↓

Sentinel lymph node identified

↓

SLN biopsy

↓

Negative → avoid complete inguinofemoral lymphadenectomy

Positive → further nodal treatment considered

Thus, the major benefit is avoiding unnecessary full groin lymph-node dissection in women whose sentinel node is negative, thereby reducing complications such as lymphoedema, lymphocyst and wound problems. Current RCOG guidance recommends SLN biopsy for eligible women with squamous vulval carcinoma.

Current ESGO guidance similarly recommends SLN biopsy for appropriately selected unifocal vulval cancers <4 cm with >1 mm invasion and clinically negative groin nodes.

Why not the other options?

- * Follow-up interval: SLN status may influence follow-up, but this is not its primary purpose.
- * Postoperative radiotherapy: Treatment decisions may be influenced by nodal status, but this is secondary.
- * Postoperative chemotherapy: Not the principal purpose.
- * Need for radical vulvectomy: SLN biopsy is primarily about nodal assessment, not deciding the extent of vulval excision.

 Memory

Sentinel node = “Do I need the whole groin dissected?”

☒ Answer: To decide on the need for lymph-node resection

Q47. ☒ Correct answer: HPV 16

The options shown are:

- * HPV 6
- * HPV 11
- * HPV 16
- * HPV 18
- * HPV 31

Why HPV 16?

HPV 16 is the most important high-risk HPV type associated with squamous cell carcinomas of the lower genital tract, including vaginal SCC.

HPV 16 is particularly strongly associated with:

- * Cervical cancer
- * Vaginal cancer

* Vulval HPV-associated disease

* Anal cancer

* Oropharyngeal cancer

HPV 18 is also a high-risk oncogenic type, but HPV 16 is the expected answer in this question.

Why not HPV 6 or 11?

HPV 6 and 11 are low-risk HPV types.

They are strongly associated with:

* Genital warts

* Condyloma acuminata

* Recurrent respiratory papillomatosis

They are not major causes of invasive vaginal SCC.

Why not HPV 18?

HPV 18 is high-risk and is important in cervical and other anogenital cancers, but HPV 16 is the more commonly associated type with vaginal SCC.

 Memory

HPV 16 = the major high-risk type across the lower genital tract.

 Answer: HPV 16

Q48.  Correct answer: HPV 16 and HPV 18

The options are:

* HPV 5 and 8

* HPV 6 and 11

* HPV 16 and 18

* HPV 31 and 33

* HPV 58 and 59

Why 16 and 18?

The HPV-associated pathway of vulval carcinogenesis is predominantly associated with high-risk HPV, particularly HPV 16, with HPV 18 also being an important oncogenic type.

HPV-associated vulval squamous lesions are part of the HPV-associated pathway, in contrast to HPV-independent vulval cancers, which are commonly associated with differentiated VIN

and p53 abnormalities. Current vulval cancer guidance recommends classification into HPV-associated and HPV-independent SCC, with p16 immunohistochemistry serving as a surrogate marker for HPV association.

Why not HPV 6 and 11?

These are low-risk HPV types and are mainly associated with genital warts rather than invasive vulval carcinoma.

Why not HPV 5 and 8?

These are associated with epidermodysplasia verruciformis-associated cutaneous SCC, not the usual HPV-associated vulval SCC pathway.

Why not 31 and 33?

HPV 31 and 33 are also high-risk types and can be detected in vulval disease, but 16 and 18 are the classic answer in this MCQ.

Important modern concept

Not all vulval SCC is HPV-related.

There are two major pathways:

HPV-associated pathway

→ usually younger women

→ vulval HSIL → SCC

→ HPV 16 predominant

→ p16 block-positive

HPV-independent pathway

→ usually older women

→ differentiated VIN/lichen sclerosus → SCC

→ commonly TP53-related

→ HPV negative.

Q49:  Correct answer: Local excision

Why?

VIN 3 represents high-grade vulval squamous intraepithelial disease with a risk of progression to invasive squamous cell carcinoma.

When the lesion is well-circumscribed and suspicious, excision is preferred because it:

1. Removes the lesion.

2. Provides a complete specimen for histological assessment.
3. Allows assessment for an occult focus of invasive carcinoma.
4. Gives information about the surgical margins.

ACOG specifically recommends wide local excision when there is concern about occult invasion, even when the biopsy has shown vulval HSIL/VIN.

Why not the other options?

- * 5-FU: Not the preferred treatment for a suspicious focal VIN lesion.
- * Imiquimod: Can be used for selected HPV-associated vulval HSIL, particularly when invasion is not suspected, but is not the best choice for a suspicious lesion requiring exclusion of invasion.
- * Laser: Can treat selected VIN, but destroys tissue and therefore cannot provide a specimen to exclude invasive cancer.
- * Vulvectomy: Excessively radical for a localized lesion.

 Exam pearl

VIN + suspicion of invasion → EXCISE.

 Answer: Local excision

PAPER 5 ANSWERS

Q1. Correct answer: Wide local excision of the vulval lesion

Why?

The important details are:

- * Tumour size = 2 cm
- * Stromal invasion = <1 mm
- * Lesion is away from the midline
- * MRI shows no other abnormality.

This fulfils the criteria for FIGO stage IA / pT1a vulval cancer: tumour ≤ 2 cm with stromal invasion ≤ 1 mm. For such very early disease, the risk of inguinofemoral lymph-node metastasis is extremely low, so groin lymphadenectomy is not indicated.

Therefore, treatment is local/radical local excision with adequate tumour-free margins.

Why not lymphadenectomy?

Once invasion is >1 mm, the risk of nodal metastasis increases and assessment of the groins becomes important. But with ≤ 1 mm invasion, lymph-node surgery can be omitted.

Exam point:

Vulval SCC ≤ 2 cm + invasion ≤ 1 mm $\rightarrow$ local excision, NO groin node dissection.

Q2. Correct answer: A. Differentiated VIN (dVIN)

There are two important pathways to vulval squamous cell carcinoma:

Type

Typical association

Typical patient

Differentiated VIN

Lichen sclerosus

Older/postmenopausal women

Usual VIN / HPV-related VIN

High-risk HPV, especially HPV-16

Younger women

[7:17 am, 21/8/2026] Mamta Singh: dVIN has a particularly high risk of progression to invasive squamous cell carcinoma. It is frequently found in association with lichen sclerosis and may sometimes only be diagnosed when invasive carcinoma is already present.

The RCOG guideline specifically notes that dVIN has a higher risk of invasion than HPV-associated VIN.

Exam pearl:

Lichen sclerosis → differentiated VIN → vulval SCC

Whereas:

High-risk HPV → usual VIN → vulval SCC

Q3. Correct answer: An increased risk of a family history of autoimmune disorders (as phrased in the question).

Lichen sclerosis is considered an autoimmune-associated inflammatory disorder and is commonly associated with other autoimmune conditions.

Recognised associations include:

- * Personal history of autoimmune disease ✓
- * Thyroid disease — particularly autoimmune thyroid disease ✓
- * Pernicious anaemia ✓
- * Other autoimmune conditions/autoimmune skin disorders ✓

Patients with vulval lichen sclerosis commonly have a personal or family history of autoimmune disease, particularly thyroid disease and pernicious anaemia.

⚠ Important point about this question

The wording in the photograph appears to list “increased risk of a family history of autoimmune disorders.” This is somewhat awkward because family history itself is not a disease association in the same sense as the patient’s own autoimmune disease, although family clustering of autoimmune disease is recognised.

The stronger established associations are personal autoimmune disease, thyroid disease and pernicious anaemia.

Quick revision summary

Vulval SCC

- * ≤ 2 cm + invasion ≤ 1 mm → local excision only
- * 1 mm invasion → assess/manage groin nodes depending on stage
- * Midline lesions have potential for bilateral lymphatic drainage

VIN

- * dVIN → highest risk of invasive SCC
- * dVIN → associated with lichen sclerosis
- * Usual VIN → associated with high-risk HPV

Lichen sclerosis

- * Associated with autoimmune disease
- * Especially thyroid disease
- * Pernicious anaemia
- * Carries a risk of progression to vulval SCC.

Q4. Answer: Local surgical excision

The question describes a woman with a vulval lesion suspicious for HPV-related vulval intraepithelial neoplasia (VIN).

The important principle is that a suspicious vulval lesion requires biopsy, and when treatment is indicated, surgical excision is appropriate—particularly when invasion cannot be confidently excluded.

- * Radical vulvectomy ✗ — excessive for VIN without invasive cancer.
- * Simple vulvectomy ✗ — unnecessarily extensive.
- * Therapeutic HPV vaccination ✗ — vaccination is preventive; it is not treatment for an established VIN lesion.
- * Interferon therapy ✗ — not standard first-line treatment.
- * Local surgical excision ✓ — allows complete removal and, importantly, histological assessment of the margins and exclusion of occult invasion.

Exam pearl:

Suspicious vulval lesion → biopsy first; VIN requiring excision → local excision, preserving normal vulval tissue whenever possible.

Q5. Answer: Right ventricular dysfunction

The woman has a history of Tetralogy of Fallot (TOF) repaired in childhood and is now pregnant.

The key long-term issue after repaired TOF is right ventricular dysfunction, often related to previous pulmonary valve disease/surgery and pulmonary regurgitation.

During pregnancy:

↑ blood volume + ↑ cardiac output → increased workload on the right ventricle.

Therefore, a woman with repaired TOF may develop or worsen:

- * Right ventricular dilatation
- * Right ventricular dysfunction
- * Arrhythmias
- * Heart failure

Why the other options are less appropriate?

- * Left ventricular dysfunction ✗ — not the characteristic residual problem of repaired TOF.
- * Pericardial effusion ✗ — not a typical consequence of repaired TOF.
- * Profound cyanosis ✗ — a successfully repaired TOF patient should generally not have profound cyanosis.
- * Pulmonary hypertension ✗ — can occur in congenital heart disease but is not the characteristic issue in an uncomplicated repaired TOF patient.
- * Right ventricular dysfunction ✓ — classic long-term concern.

Exam pearl:

Repaired TOF → think RV dilatation/dysfunction, pulmonary regurgitation and arrhythmias.

Q6. The image shows a 26-year-old at 7 weeks' gestation with Eisenmenger syndrome secondary to a ventricular septal defect.

Answer: Termination of pregnancy

This is a very important MRCOG concept.

Why?

Eisenmenger syndrome = pulmonary hypertension + right-to-left shunting due to longstanding congenital heart disease.

Pregnancy causes major cardiovascular changes:

- * ↑ plasma volume

- * ↑ cardiac output
- * ↓ systemic vascular resistance

These changes can worsen right-to-left shunting and maternal hypoxaemia.

Eisenmenger syndrome carries a very high maternal risk, including:

- * Maternal heart failure
- * Severe hypoxaemia
- * Arrhythmia
- * Thromboembolism
- * Maternal death

Therefore, pregnancy is considered contraindicated/high risk, and early counselling regarding termination of pregnancy is appropriate.

Why not the other treatments?

A. Bed rest + oxygen ✗

Does not remove the underlying severe haemodynamic risk.

B. Oral labetalol ✗

Not treatment for Eisenmenger syndrome and reducing systemic vascular resistance can potentially worsen right-to-left shunting.

C. Oral sildenafil ✗

Pulmonary vasodilator therapy may have a role in selected pulmonary hypertension patients, but it does not make pregnancy safe in Eisenmenger syndrome.

D. LMWH ✗

Does not address the fundamental haemodynamic problem.

E. Termination of pregnancy ✓

The safest maternal option when pregnancy is established in severe pulmonary vascular disease/Eisenmenger physiology.

Exam pearl:

Eisenmenger syndrome + pregnancy = very high maternal mortality → pregnancy should generally be avoided/termination discussed...

Q 7 — Answer: C) Primary surgery

This is a 28-year-old woman at 12 weeks' gestation with stage I breast cancer, HER2-positive and estrogen-receptor-positive, who declines termination of pregnancy.

Why primary surgery?

- * Breast surgery is the preferred initial treatment for localized breast cancer during pregnancy.
- * Surgery can be performed safely during pregnancy, including in the first/early second trimester, with appropriate anaesthetic and obstetric precautions.
- * The choice between breast-conserving surgery and mastectomy depends on the tumour and the possibility of completing radiotherapy after delivery.

Why the other options are inc

Option

Why not?

A. Anthracycline chemotherapy

Chemotherapy is generally avoided during the 1st trimester because of teratogenicity. After ~12–14 weeks, anthracycline-based chemotherapy can be used when indicated, but surgery remains the initial treatment for operable stage I disease.

B. Radiotherapy with fetal shielding

Contraindicated during pregnancy because the fetus is exposed to ionising radiation. It is usually postponed until after delivery.

D. Tamoxifen

Contraindicated in pregnancy; endocrine therapy is deferred until after delivery.

E. Trastuzumab

Contraindicated during pregnancy, particularly because of the risk of fetal renal toxicity/oligohydramnios and other fetal complications. It is given postpartum.

Exam pearl 

For operable breast cancer diagnosed during pregnancy:

Surgery → chemotherapy if indicated after 1st trimester → radiotherapy/endocrine/HER2-targeted therapy after delivery.

So the best answer is C. Primary surgery.

Q8. Correct answer: C. Pemphigoid gestationis (according to the answer marked in the image).

The important features shown are:

- * Pregnancy at 28 weeks
- * Severe pruritus
- * Urticarial-type papules and plaques
- * Lesions on the abdomen/thighs
- * Normal liver function tests

However, there is an important distinction here. If the lesions are centred in the umbilicus or subsequently develop tense blisters, pemphigoid gestationis is the diagnosis. Pemphigoid gestationis is an autoimmune blistering disorder that typically begins in the late 2nd/3rd trimester and can progress from urticarial plaques to tense vesicles/bullae.

Why the other options are less likely?

A. Atopic eruption of pregnancy ✗

Usually occurs earlier in pregnancy and is associated with an atopic background.

B. Obstetric cholestasis ✗

Typically causes intense pruritus without a primary rash. Liver tests and bile acids may be abnormal. The presence of primary urticarial plaques makes this less likely.

C. Pemphigoid gestationis ✓

Late pregnancy + intense itching + urticarial plaques, particularly when there is periumbilical involvement, is characteristic. It can progress to tense blisters.

D. Polymorphic eruption of pregnancy ✗

This is an important differential. PEP/PUPPP usually begins in the abdominal striae, with characteristic periumbilical sparing, and is benign with no significant fetal risk.

E. Psoriasis ✗

The clinical pattern is not typical.

☆ Exam pearl

Itching + urticarial plaques + umbilical involvement → Pemphigoid gestationis.

Itching + lesions beginning in abdominal striae + umbilical sparing → PEP/PUPPP.

Q9. Answer marked: E. Nephrotoxicity

The patient has inflammatory bowel disease and is taking sulfasalazine 4 g/day + folic acid 5 mg/day.

Sulfasalazine is generally considered low risk in pregnancy and current guidance supports continuing maintenance sulfasalazine when clinically indicated. Large datasets have not demonstrated an increased risk of congenital malformations.

Why is nephrotoxicity the relevant adverse effect?

Sulfasalazine can rarely cause renal toxicity, including:

- * Interstitial nephritis
- * Proteinuria
- * Renal impairment

Therefore, renal function should be monitored, particularly with prolonged therapy.

Why not the fetal complications?

A. Bloody diarrhoea in the newborn ✗

Not a characteristic fetal/neonatal toxicity of sulfasalazine.

B. Exomphalos ✗

There is no established association with exomphalos.

C. Intrauterine death ✗

Sulfasalazine is not associated with a significant increase in fetal death.

D. IUGR ✗

Sulfasalazine itself is not considered a major cause of fetal growth restriction.

E. Nephrotoxicity ✓

A recognised, although uncommon, adverse effect of sulfasalazine.

☆ Important MRCOG point

Sulfasalazine interferes with folate absorption/metabolism, so folic-acid supplementation is particularly important. Modern IBD guidance recommends continuing sulfasalazine when needed during pregnancy, with folate supplementation.

Sulfasalazine → relatively safe in pregnancy + folic acid + remember renal toxicity.

Q10. Correct answer: C. Every 5 years

Patients with sickle-cell disease are at increased risk of serious infection with encapsulated organisms, particularly *Streptococcus pneumoniae*, because of functional asplenia/hyposplenia.

Therefore, pneumococcal vaccination is an important part of preconception and antenatal care.

For the traditional PPSV23 schedule, revaccination is generally given at ≥ 5 -year intervals when indicated. Current SMFM guidance specifically notes pneumococcal vaccination for pregnant patients with SCD when due, with PPSV23 given ≥ 5 years after the first dose.

Why the other options?

- * A. Annually ✗ — that's the type of interval used for influenza vaccination, not pneumococcal PPSV23.
- * B. Every 2 years ✗ — too frequent.
- * C. Every 5 years ✓
- * D. Every 10 years ✗ — too long for the traditional PPSV23 revaccination interval in SCD.
- * E. Once only ✗ — inadequate protection for this high-risk group.

☆ Exam pearl

Sickle-cell disease → functional asplenia → increased pneumococcal risk → pneumococcal vaccination + appropriate revaccination schedule.

One modern caveat: pneumococcal vaccine schedules have evolved with newer conjugate vaccines (PCV15/PCV20/PCV21), so the exact schedule depends on which vaccine was previously received and the country's current immunisation recommendations. For an MRCOG-style question using the classic PPSV23 schedule, "every 5 years" is the expected answer.

Q11. Correct answer: B. 2–4-fold

The woman is euthyroid but TPO-antibody positive. Even when thyroid hormone levels are normal, the presence of thyroid autoantibodies is associated with an increased risk of adverse pregnancy outcomes, particularly preterm birth. Meta-analyses have shown approximately a 2-fold increase in the risk of preterm delivery, making 2–4-fold the best option in this question.

Why?

TPO antibodies indicate underlying thyroid autoimmunity. During pregnancy, increased physiological demand on the thyroid may make women with limited thyroid reserve more vulnerable to thyroid dysfunction.

TPO-antibody positivity has been associated with:

- * Preterm birth
- * Miscarriage
- * Development of hypothyroidism during pregnancy

Exam point

TPOAb positive + euthyroid → increased risk of preterm birth, approximately 2-fold.

So B (2–4-fold) is the closest answer.

Q12. Correct answer: D. Pethidine

This is a classic MRCOG question.

Pethidine should be avoided or used with caution in women with epilepsy because its metabolite, norpethidine, can lower the seizure threshold. RCOG specifically recommends diamorphine in preference to pethidine when opioid analgesia is required.

Why is pethidine problematic?

Pethidine is metabolised to norpethidine, which has CNS excitatory properties and can become epileptogenic, particularly at high doses or with accumulation.

Therefore:

Pethidine → norpethidine → ↓ seizure threshold → increased seizure risk

What analgesia can be used?

Appropriate options include:

- * Entonox
- * TENS
- * Epidural/regional analgesia
- * Diamorphine, if an opioid is required

RCOG states that an epidural may be particularly useful because pain, stress, sleep deprivation and hyperventilation can precipitate seizures during labour.

Why not the others?

- * Codeine — not the classic opioid to avoid in this MRCOG question.
- * Diamorphine — preferred over pethidine. ☒
- * Morphine — can be used when clinically appropriate.

- * Pethidine — avoid/use with caution. ✗
- * Tramadol — also has seizure-threshold concerns clinically, but pethidine is the specific RCOG answer in this question.

☆ Remember

Epilepsy + labour → avoid pethidine; diamorphine is preferred.

RCOG explicitly states that pethidine's metabolite norpethidine is epileptogenic at high doses.

Q13. Correct answer: D. 10 days

The woman has:

- * Prothrombin gene mutation → a low-risk thrombophilia when asymptomatic
- * BMI = 35 kg/m² → obesity, which is an additional VTE risk factor
- * Vaginal delivery at term

According to the RCOG VTE risk-assessment approach, an asymptomatic low-risk thrombophilia such as prothrombin gene mutation is scored as a risk factor. BMI ≥30 is also a risk factor. When there are ≥2 postpartum risk factors, pharmacological thromboprophylaxis is recommended for at least 10 days.

Why 10 days?

Think of it as:

Prothrombin mutation

↓

Low-risk thrombophilia → 1 risk factor

BMI 35

↓

BMI ≥30 → 1 additional risk factor

Therefore:

≥2 postpartum risk factors → LMWH for at least 10 days.

Why not 6 weeks?

Six weeks is generally used for higher-risk thrombophilia or previous VTE, for example:

- * Previous VTE
- * Antithrombin deficiency

- * Antiphospholipid syndrome with previous VTE
- * Certain high-risk thrombophilias

For an asymptomatic low-risk thrombophilia such as a prothrombin gene mutation, the standard answer in this scenario is 10 days when another postpartum risk factor is present.

☆ MRCOG memory trick

Low-risk thrombophilia + another postpartum risk factor → 10 days LMWH.

Previous VTE/high-risk thrombophilia → usually 6 weeks postpartum LMWH.

Q14. Correct answer: D. Rifampicin

The question describes a 35-year-old woman with intrahepatic cholestasis of pregnancy who is already receiving ursodeoxycholic acid (UDCA) but has no improvement in symptoms or biochemical parameters.

Why rifampicin?

UDCA is the usual first-line drug used for symptomatic treatment of ICP. If significant pruritus persists despite UDCA, rifampicin can be considered as an additional/second-line treatment, particularly in severe or refractory disease.

Rifampicin appears to improve:

- * Maternal pruritus
- * Serum bile-acid concentrations
- * Sometimes liver biochemical abnormalities

Evidence for rifampicin is less robust than for UDCA, so it is generally used under specialist supervision rather than routinely.

Why not the other options?

- * A. Clarithromycin ✗ — antibiotic; no role in treatment of ICP.
- * B. Cholestyramine ✗ — can be used as an alternative/additional antipruritic, but is less effective and can interfere with absorption of fat-soluble vitamins, including vitamin K.
- * C. Dexamethasone ✗ — not recommended as routine treatment for ICP.
- * D. Rifampicin ☒ — appropriate specialist second-line/add-on therapy for refractory symptoms.
- * E. Vitamin K ✗ — may be required in selected women with prolonged cholestasis or coagulation abnormalities, but it does not treat the underlying cholestasis or pruritus.

☆ MRCOG memory point

ICP → UDCA first → persistent severe symptoms → consider rifampicin.

Q15. Correct answer: C. 3.0 mmol/L

The question asks:

What is the threshold value for serum/blood ketones to confirm DKA?

The important threshold is:

Blood ketones >3.0 mmol/L

For DKA in pregnancy, the diagnosis requires diabetes + significant ketosis + metabolic acidosis. The JBDS guidance gives blood ketones >3.0 mmol/L as the diagnostic ketosis threshold.

Therefore:

C. 3.0 mmol/L ☒

Why is pregnancy particularly important?

DKA can occur in pregnancy at a lower blood glucose level than would typically be expected, including euglycaemic DKA.

Pregnancy increases susceptibility because of:

- * Increased insulin resistance
- * Increased lipolysis
- * Increased ketone production
- * Reduced buffering capacity

Therefore, a pregnant woman with type 1 diabetes who has vomiting, illness or inability to take insulin needs urgent assessment for ketones and acidosis.

Diagnostic framework

Think:

Diabetes

+

Blood ketones >3 mmol/L

+

pH <7.3 and/or bicarbonate <15 mmol/L

→ DKA

☆ Exam pearl

Pregnancy + type 1 diabetes + vomiting → check ketones even if glucose is not markedly elevated.

Q16. Correct answer: C. Stop lithium and check plasma lithium level 12 hours after the last dose

This is an important pharmacology question.

The woman has bipolar disorder treated with lithium and presents in established labour.

Why stop lithium?

During labour there is a risk of:

- * Dehydration
- * Changes in fluid balance
- * Reduced renal clearance
- * Increased serum lithium concentration
- * Lithium toxicity

Therefore, NICE recommends that when labour starts:

Lithium should be stopped during labour and the plasma lithium level checked 12 hours after the last dose.

Why is dehydration particularly important?

Lithium is predominantly renally excreted.

During labour, dehydration or reduced renal perfusion can decrease lithium clearance:

Dehydration → ↓ renal clearance → ↑ serum lithium → lithium toxicity

Therefore, fluid balance must be carefully monitored.

Why not the other options?

A. Continue treatment throughout labour ✗

Increases the risk of maternal lithium toxicity and neonatal exposure.

B. Stop lithium and check levels every 2 hours ✗

Excessive monitoring; this is not the recommended schedule.

C. Stop lithium and check plasma level 12 hours after last dose ✓

This is the NICE recommendation.

D. Stop lithium and restart after birth ✗

Stopping during labour is correct, but simply restarting immediately without assessing the level/clinical situation is not the recommended approach.

E. Substitute lithium with a benzodiazepine during labour ✗

There is no routine indication to substitute lithium with a benzodiazepine simply because labour has started.

☆ MRCOG memory point

Lithium + labour → STOP lithium → monitor fluid balance → check lithium level 12 h after last dose.

Also remember that lithium levels are normally interpreted using a 12-hour post-dose level, which is the standard trough monitoring approach.

Q17. Correct answer: B. Labetalol

The options shown are:

- * Ramipril
- * Labetalol
- * Enalapril
- * Losartan
- * Spironolactone

Why labetalol?

Labetalol is a recommended first-line antihypertensive in pregnancy. NICE recommends considering labetalol for chronic hypertension during pregnancy. If labetalol is unsuitable, nifedipine can be considered, followed by methyldopa if needed.

Why the others are wrong?

- * Ramipril ✗ — ACE inhibitor; contraindicated in pregnancy because of fetal renal toxicity and other fetal complications.
- * Enalapril ✗ — also an ACE inhibitor; avoid in pregnancy.
- * Losartan ✗ — angiotensin-II receptor blocker (ARB); contraindicated in pregnancy.
- * Spironolactone ✗ — generally avoided because of its anti-androgenic effects and lack of a routine role in treating hypertension during pregnancy.
- * Labetalol ✓ — preferred/commonly used first-line option.

☆ MRCOG memory point

Chronic hypertension in pregnancy → Labetalol → nifedipine if unsuitable → methyldopa if both unsuitable.

Q18. Correct answer: B. Labetalol initiation

The woman is 32 years old, 16 weeks pregnant, with BP 160/100 mmHg.

This is severe hypertension because the systolic BP is ≥ 160 mmHg. It requires prompt antihypertensive treatment rather than observation alone.

NICE recommends antihypertensive treatment for chronic hypertension when BP is $\geq 140/90$ mmHg, with labetalol considered the first-line drug.

Why not aspirin?

Aspirin 75–150 mg daily is given to women at high risk of pre-eclampsia, including those with chronic hypertension, but it is prophylaxis, not treatment for an existing BP of 160/100. NICE recommends starting it from 12 weeks.

Why not bed rest?

Bed rest is not appropriate treatment for severe hypertension.

Why not induction of labour?

At 16 weeks, induction is obviously not the immediate treatment for maternal hypertension. The priority is maternal stabilisation and assessment.

Why not hydralazine?

Hydralazine can be used in certain situations for acute severe hypertension, particularly when rapid BP control is required, but for ongoing management of chronic hypertension, labetalol is the appropriate first-line option.

☆ Key point

BP $\geq 160/110$ mmHg in pregnancy = severe hypertension → urgent treatment.

Here the systolic is 160, so it meets the severe threshold even though the diastolic is only 100. NICE defines severe hypertension as ≥ 160 systolic or ≥ 110 diastolic.

Q19. Correct answer: A. At 12 weeks

Women with chronic hypertension are at increased risk of pre-eclampsia.

NICE recommends:

Aspirin 75–150 mg once daily from 12 weeks until birth.

Why aspirin?

Low-dose aspirin reduces the risk of pre-eclampsia and its associated adverse pregnancy outcomes in women at increased risk.

Why not 16, 20, 24 or 32 weeks?

Starting later would miss the recommended prophylactic window.

☆ Easy memory

High risk of pre-eclampsia → aspirin 75–150 mg → start at 12 weeks.

High-risk factors include:

- * Chronic hypertension
- * Previous hypertensive disease of pregnancy
- * Chronic kidney disease
- * SLE/APS
- * Type 1 or type 2 diabetes.

Q20. Correct answer: B. Umbilical artery Doppler velocimetry

The woman has pre-eclampsia at 34 weeks. Pre-eclampsia can cause uteroplacental insufficiency, resulting in fetal growth restriction and abnormal placental blood flow.

Therefore, assessment includes:

- * Fetal growth
- * Amniotic fluid volume
- * Umbilical artery Doppler
- * CTG when indicated/at diagnosis of pre-eclampsia

NICE specifically recommends ultrasound assessment of fetal growth and amniotic fluid plus umbilical artery Doppler velocimetry in women with pre-eclampsia or severe gestational hypertension.

Why umbilical artery Doppler?

It assesses placental resistance.

As placental insufficiency develops:

↑ placental resistance → abnormal umbilical artery flow → reduced/reversed end-diastolic flow

This can indicate significant fetal compromise and may influence the timing of delivery.

NICE lists reversed end-diastolic flow in the umbilical artery as one of the fetal indications that may prompt planned early birth in severe pre-eclampsia.

Why not the other options?

A. Fetal MRI ✗

Not a routine assessment of fetal wellbeing in pre-eclampsia.

C. Amniocentesis ✗

Not required to assess fetal wellbeing in this situation.

D. Serum AFP ✗

Used primarily for screening for certain fetal abnormalities, not assessment of fetal wellbeing at 34 weeks.

E. CTG only ✗

CTG is useful, and NICE recommends CTG at diagnosis of pre-eclampsia, but CTG alone is insufficient. Assessment of fetal growth, liquor and umbilical artery Doppler is also important.

☆ MRCOG pearl

Pre-eclampsia → think placental insufficiency → fetal growth + liquor + umbilical artery Doppler.

Q21. Answer: D. 6 weeks (the intended exam answer)

Women who have had pre-eclampsia require postnatal follow-up, because hypertension may persist and there is an increased long-term cardiovascular risk.

NICE recommends a medical review at 6–8 weeks after birth for women who had pre-eclampsia.

Why is this important?

At the postnatal review, assess:

- * Blood pressure
- * Whether antihypertensive treatment is still required
- * Renal function/proteinuria when indicated
- * Future pregnancy risk
- * Long-term cardiovascular risk

Exam point:

Pre-eclampsia → postnatal medical review at 6–8 weeks.

So among the options given, 6 weeks is the best answer.

Important distinction: BP is actually checked much earlier after delivery—NICE recommends BP measurement daily for the first 2 days and at least once between days 3–5. The 6–8-week period is the formal postnatal medical review, not continuous BP monitoring for 6 weeks.

Q22. Answer: E. All of the above (as marked in the question)

The question asks which blood tests should be monitored weekly during conservative management.

The purpose of maternal blood tests is to detect progression to severe pre-eclampsia/HELLP syndrome and deterioration in renal or hepatic function.

1. Serum creatinine ☒

Assesses renal function.

Pre-eclampsia can cause renal vasoconstriction and glomerular endothelial injury → deterioration in renal function.

2. Liver function tests ☒

Monitor for hepatic involvement.

Rising AST/ALT may indicate progression toward severe pre-eclampsia/HELLP syndrome.

3. Platelet count ☒

Very important because falling platelets can indicate:

- * Severe pre-eclampsia
- * HELLP syndrome
- * Increased bleeding risk

4. Coagulation profile ☒ *

This can be relevant when there is concern about thrombocytopenia, bleeding or suspected DIC.

⚠ MRCOG/NICE nuance

Current NICE guidance does not mean that every woman with pre-eclampsia requires a full coagulation profile every week. The routine surveillance focuses particularly on FBC/platelets, liver function and renal function, with coagulation testing guided by clinical circumstances.

So, for this MCQ, E is clearly the intended answer, but don't memorise "weekly coagulation profile for everyone" as a universal NICE rule.

☆ Remember

Pre-eclampsia surveillance → platelets + LFTs + renal function.

Q23. Answer: B. Switch to labetalol after 20 weeks

The woman:

- * Is 18 weeks pregnant
- * Has chronic hypertension
- * Is taking methyldopa
- * BP is controlled at 135/85 mmHg.

The question asks what to do as she approaches the third trimester.

Why switch to labetalol?

Labetalol is preferred as first-line treatment for chronic hypertension in pregnancy. NICE recommends:

1. Labetalol
2. Nifedipine if labetalol is unsuitable
3. Methyldopa if both are unsuitable.

Methyldopa is effective but has disadvantages including:

- * Sedation
- * Depression
- * Less favourable side-effect profile

Therefore, in the context of this MCQ, switching from methyldopa to labetalol is the intended answer.

Why the other options are wrong?

A. Continue methyldopa throughout pregnancy ✗

Not the preferred long-term strategy when a suitable first-line alternative such as labetalol is available.

C. Discontinue methyldopa and start nifedipine ✗

Nifedipine is an alternative if labetalol is unsuitable, not the preferred first choice.

D. Transition to enalapril at 28 weeks ✗

ACE inhibitors such as enalapril are contraindicated during pregnancy.

E. Add amlodipine ✗

Not the standard NICE first-line strategy for this situation.

⚠ Important current-guideline nuance

NICE's current wording does not specifically mandate "switch at 20 weeks." It says to consider labetalol for chronic hypertension, with the choice based on previous treatment, side effects, fetal risks and patient preference.

So for this particular MCQ, remember:

Methyldopa → switch to labetalol as the preferred agent.

Q24. Answer: C. Routine corticosteroids for inflammation

This is an important distinction.

Intrahepatic cholestasis of pregnancy (ICP) is a pregnancy-specific liver disorder characterised mainly by:

- * Pruritus
- * Increased serum bile acids
- * Abnormal liver function tests

Why are routine corticosteroids NOT recommended?

Corticosteroids are not routine treatment for ICP and do not address the fundamental problem or reliably prevent fetal complications.

Therefore:

C. Routine corticosteroids for inflammation → NOT recommended ✓

The other options

A. Weekly liver function tests — reasonable/used in monitoring

Liver biochemistry and bile acids are followed according to the clinical situation.

B. Vitamin K if indicated — appropriate

Severe cholestasis can occasionally interfere with vitamin-K absorption and coagulation. Vitamin K may therefore be considered in selected women.

D. Consider early delivery when bile acids >100 µmol/L — correct

Severe ICP is associated with increased stillbirth risk, and planned birth around 35–36 weeks may be recommended.

E. Fetal monitoring — may be used according to the clinical situation, although routine additional CTG/ultrasound solely because of ICP has limitations and does not reliably predict stillbirth. RCOG notes that additional scans are not routinely required solely because of ICP.

☆ Exam pearl

ICP treatment is not “anti-inflammatory” treatment. Think bile acids + maternal symptoms + fetal risk + timing of delivery.

Q25. Answer: C. 35–36 weeks

This is a very high-yield MRCOG fact.

Bile acids ≥ 100 $\mu\text{mol/L}$ indicate severe ICP and are associated with a substantially increased risk of stillbirth, particularly later in pregnancy.

Current RCOG patient guidance states that planned birth at 35–36 weeks may be recommended when bile acids are 100 $\mu\text{mol/L}$ or more.

Q26. Most common cause of acute kidney injury in pregnancy

Answer: D) Pre-eclampsia

Pregnancy-related AKI is particularly associated with hypertensive disorders of pregnancy, especially pre-eclampsia. Several reviews describe pre-eclampsia as a leading/commonest cause, particularly in late pregnancy and postpartum.

Why?

Severe pre-eclampsia can cause:

- * Renal endothelial dysfunction
- * Reduced renal perfusion
- * Glomerular endotheliosis
- * Proteinuria
- * Reduced GFR $\rightarrow$ AKI

Other options

- * Haemorrhage: can certainly cause prerenal AKI/ATN, but is not the best answer for this question.
- * Hyperemesis gravidarum: can cause dehydration and AKI, particularly in the 1st trimester, but is not the overall commonest cause.
- * NSAIDs: can cause renal injury but are not the commonest pregnancy-related cause.
- * Urinary retention: postrenal AKI is uncommon in pregnancy.

Exam pearl:

👉 AKI in pregnancy → think pre-eclampsia, haemorrhage and sepsis.

The relative frequency varies with the population and timing; for example, some Indian studies find sepsis particularly prominent.

Q27. Repaired Tetralogy of Fallot

Answer: E) Right ventricular dysfunction

A woman with repaired Tetralogy of Fallot (TOF) is particularly at risk of right ventricular dysfunction during pregnancy.

Why?

After repair of TOF, an important late complication is pulmonary regurgitation.

Pulmonary regurgitation → RV volume overload → RV dilatation → RV dysfunction

Pregnancy produces:

- * Increased plasma volume
- * Increased cardiac output
- * Increased stroke volume

Therefore, the volume-loaded right ventricle may have difficulty coping with the additional haemodynamic burden.

Pulmonary regurgitation and progressive RV dilatation are well-recognised complications of repaired TOF, and pregnancy can exacerbate these problems.

Why not the others?

- * A. LV dysfunction – can occur, but is not the characteristic problem.
- * B. Paradoxical embolism – possible in the presence of a residual shunt, but not the main expected issue.
- * C. Profound cyanosis – repaired TOF usually does not cause profound cyanosis unless there is significant residual disease.
- * D. Pulmonary hypertension – not the typical issue after successful TOF repair.
- * E. RV dysfunction ☒ – the characteristic concern.

Exam pearl:

👉 Repaired TOF + pregnancy → think pulmonary regurgitation and RV dilatation/dysfunction.

The ESC pregnancy guidance places repaired TOF generally in an intermediate-risk category, depending on the individual cardiac status.

Q28. Eisenmenger syndrome due to VSD

Answer: E) Termination of pregnancy

This is a very important MRCOG concept.

Eisenmenger syndrome = severe pulmonary vascular disease with pulmonary hypertension and right-to-left shunting.

Pregnancy causes major cardiovascular changes, particularly:

- * ↑ blood volume
- * ↑ cardiac output
- * Reduced systemic vascular resistance

In Eisenmenger syndrome, these changes can produce severe maternal deterioration, including right-to-left shunting, hypoxaemia, heart failure, arrhythmia and thromboembolic complications.

Therefore, pregnancy carries very high maternal risk, and termination should be discussed early by a specialist multidisciplinary team.

The ESC pregnancy guidelines classify severe pulmonary arterial hypertension/Eisenmenger physiology among conditions in which pregnancy is extremely high risk; current guidance emphasises specialist counselling and multidisciplinary management.

Why the other options are wrong?

A. Bed rest + oxygen ✗

These do not make pregnancy safe in Eisenmenger syndrome.

B. Oral labetalol ✗

Labetalol is an antihypertensive; it does not treat the fundamental pulmonary vascular disease.

C. Oral sildenafil ✗

Sildenafil may have a role in selected pulmonary hypertension management, but simply starting sildenafil does not make pregnancy acceptable/safe in Eisenmenger syndrome.

D. LMWH thromboprophylaxis ✗

Eisenmenger patients have thrombotic risk, but anticoagulation does not remove the fundamental maternal haemodynamic risk.

E. Termination of pregnancy ✓

This is the intended answer in the traditional MRCOG framework for Eisenmenger syndrome diagnosed in early pregnancy.

Q29.

Why primary surgery?

- * Breast cancer surgery can be performed safely during pregnancy, including in the first trimester when necessary.
- * For a localized stage I tumour, surgery is the initial treatment.
- * Radiotherapy is contraindicated during pregnancy because of fetal radiation exposure.
- * Tamoxifen is contraindicated in pregnancy.
- * Trastuzumab is avoided during pregnancy because of significant risk of oligohydramnios/anhydramnios and fetal renal effects, particularly later in pregnancy.
- * Chemotherapy, particularly anthracycline-based regimens, may be used during pregnancy when indicated, but generally after the first trimester (from around 14 weeks), not as the initial treatment for a localized operable tumour at 12 weeks.

Exam point

Pregnant + operable breast cancer → surgery can be performed during pregnancy.

If chemotherapy is required, it is generally given after 12–14 weeks.

Radiotherapy, endocrine therapy (tamoxifen), and HER2-targeted therapy (trastuzumab) are avoided during pregnancy.

Therefore: C) Primary surgery.

Q30. Correct answer: C. Pemphigoid gestationis

The woman is 36 weeks pregnant and has severe itching with urticarial-type plaques. The important clue is that she has blistering lesions, with normal liver function tests.

Why pemphigoid gestationis?

Pemphigoid gestationis is an autoimmune blistering disorder of pregnancy.

Typical features:

- * Usually occurs in the 2nd or 3rd trimester
- * Severe pruritus
- * Begins with urticarial erythematous plaques
- * Progresses to tense vesicles/bullae
- * Often involves the periumbilical area
- * Mucous membranes are usually spared

Diagnosis is confirmed by skin biopsy with direct immunofluorescence, typically showing linear C3 along the basement membrane.

Why not the other options?

A. Atopic eruption of pregnancy ✕

Usually presents with eczematous or papular lesions and does not characteristically produce tense blisters.

B. Obstetric cholestasis ✕

Causes intense itching but usually has no primary skin rash. Bile acids/LFTs may be abnormal.

C. Pemphigoid gestationis ✓

Severe pruritus + urticarial plaques progressing to blisters = classic.

D. Polymorphic eruption of pregnancy ✕

Usually begins in the abdominal striae and characteristically spares the umbilicus. Blistering is unusual.

E. Psoriasis ✕

The clinical picture is not typical.

☆ Exam pearl

Pregnancy + severe pruritus + periumbilical urticarial plaques + tense blisters → Pemphigoid gestationis.

Q31. Correct answer: E. Nephrotoxicity

The woman has inflammatory bowel disease and is taking sulfasalazine 4 g/day with folic acid.

Sulfasalazine is generally considered compatible with pregnancy and can be continued when required to maintain control of IBD.

However, an important potential adverse effect is renal toxicity, including:

- * Interstitial nephritis
- * Proteinuria
- * Renal impairment

Therefore, among the options, nephrotoxicity is the best answer.

Why the other options are wrong?

- * A. Bloody diarrhoea in the newborn ✕ — not a characteristic adverse effect.
- * B. Exomphalos ✕ — no established association.
- * C. Intrauterine death ✕ — not a recognised characteristic toxicity.
- * D. Intrauterine growth restriction ✕ — not a typical direct effect of sulfasalazine.

* E. Nephrotoxicity ☒ — recognised adverse effect.

Important additional point

Sulfasalazine can interfere with folate metabolism, so women taking it during pregnancy should receive folic acid supplementation.

☆ Exam pearl

Sulfasalazine → generally safe in pregnancy + give folic acid + remember renal toxicity.

Q32. Correct answer: C. Every 5 years

Sickle-cell disease causes functional asplenia, making the patient particularly susceptible to severe infections caused by encapsulated organisms, especially *Streptococcus pneumoniae*.

Therefore, pneumococcal vaccination is particularly important.

For the traditional PPSV23 schedule, revaccination is given at 5-year intervals in high-risk patients such as those with sickle-cell disease.

Thus:

C. Every 5 years ☒

Why not the others?

* A. Annually ☒ — this is more characteristic of influenza vaccination.

* B. Every 2 years ☒ — too frequent.

* C. Every 5 years ☒

* D. Every 10 years ☒ — too long for the traditional PPSV23 schedule.

* E. Once only ☒ — inadequate for this high-risk patient.

⚠ Modern guideline point

Pneumococcal vaccination schedules have changed with the introduction of PCV15, PCV20 and PCV21, so the exact current schedule depends on which vaccine the patient has previously received and the national guideline being followed.

For this classic MRCOG-style MCQ, however:

Sickle-cell disease + PPSV23 → remember 5 years.

Q33. Correct answer: B. 2–4-fold

The woman is euthyroid but positive for thyroid peroxidase (TPO) antibodies.

The question asks how much her risk of preterm labour is increased compared with women without autoimmune thyroid disease.

The expected answer is approximately 2-fold, making 2–4-fold the best option.

Why?

TPO antibodies are markers of thyroid autoimmunity.

Even if the woman is currently euthyroid, TPO positivity is associated with an increased risk of adverse pregnancy outcomes, including:

- * Miscarriage
- * Preterm birth
- * Development of hypothyroidism during pregnancy

The increased risk of preterm birth is generally reported as approximately 2-fold, although the exact estimate varies between studies.

Therefore:

B. 2–4-fold ☒

Why not the other options?

- * 1–1.5-fold ☒ — too low.
- * 2–4-fold ☒ — closest to the recognised increased risk.
- * 6–8-fold ☒
- * 10–15-fold ☒
- * 20–30-fold ☒

☆ Exam pearl

TPO antibody positive + euthyroid → increased risk of miscarriage and preterm birth, despite normal thyroid function.

Q34. Correct answer: D. Pethidine

Pethidine is metabolised to norpethidine, which can be epileptogenic, particularly at higher doses. Therefore, it can lower the seizure threshold.

RCOG specifically recommends that diamorphine should be used in preference to pethidine for analgesia in labour in women with epilepsy.

Why?

During labour, seizure risk can increase because of:

- * Pain
- * Stress

- * Sleep deprivation
- * Dehydration
- * Hyperventilation

Good analgesia is therefore important, but pethidine is not the preferred opioid.

Exam pearl:

Epilepsy + labour → avoid pethidine; diamorphine is preferred.

Q35. Correct answer: D. 10 days

The woman has:

- * BMI 35 kg/m²
- * Asymptomatic prothrombin gene mutation
- * Vaginal delivery
- * No history of previous VTE mentioned.

A prothrombin gene mutation is classified by RCOG as a low-risk thrombophilia when asymptomatic.

RCOG recommends 10 days of postnatal LMWH if another risk factor is present.

Here:

Prothrombin mutation + obesity → additional postpartum risk factors → 10 days LMWH.

Why not 6 weeks?

Six weeks is generally associated with higher-risk situations, such as:

- * Previous VTE
- * High-risk thrombophilia
- * Antithrombin deficiency
- * Certain combinations of thrombophilia/family history

So:

Asymptomatic prothrombin mutation + another risk factor → 10 days.

Answer: D. 10 days 

Q36. Correct answer: C. Stop lithium and check plasma lithium level 12 hours after the last dose

The patient is taking lithium for bipolar disorder and has entered established labour.

Why stop lithium?

Lithium is almost entirely eliminated by the kidneys.

During labour, changes in:

- * Fluid balance
- * Hydration
- * Renal function

can increase serum lithium concentration and therefore increase the risk of lithium toxicity.

NICE recommends:

Stop lithium during labour and check the plasma lithium level 12 hours after the last dose.

Why not continue lithium?

Continuing it throughout labour can increase the risk of toxicity, particularly if the woman becomes dehydrated.

Why not check every 2 hours?

There is no need for such frequent lithium levels.

Why not simply restart after birth?

Management should be individualized according to the maternal lithium level, fluid balance, renal function and psychiatric needs.

☆ Remember

Lithium + labour → STOP lithium → maintain hydration/fluid balance → check level 12 h after last dose.

Q37. Correct answer: D. Rifampicin

The woman has intrahepatic cholestasis of pregnancy (ICP) and has not responded to ursodeoxycholic acid (UDCA).

First-line treatment

UDCA is commonly used to improve maternal pruritus.

If symptoms remain troublesome despite UDCA, rifampicin may be considered as an additional/second-line treatment, usually under specialist supervision.

The important concept is that ICP is characterised by raised bile acids and pruritus, rather than an inflammatory process. RCOG classifies ICP according to peak bile acids and emphasises regular monitoring and individualised management.

Why not the others?

- * Chlorpheniramine ✗ — antihistamines may help sleep/itching but are not the key second-line treatment.

- * Cholestyramine ✗ — can be used for pruritus but is less effective than UDCA and is not the intended answer here.
- * Dexamethasone ✗ — not routine treatment for ICP.
- * Rifampicin ✓ — specialist second-line/add-on option for refractory disease.
- * Vitamin K ✗ — may be required in selected women with coagulation abnormalities but does not treat the underlying ICP.

☆ Exam pearl

ICP → UDCA first → refractory symptoms → consider rifampicin.

Q38. Correct answer: 3.0 mmol/L

The question asks for the serum/blood ketone threshold used in diagnosing DKA.

The important number is:

Blood ketones >3.0 mmol/L

The JBDS diagnostic criteria include:

- * Diabetes mellitus
- * Blood ketones >3.0 mmol/L or significant ketonuria
- * Metabolic acidosis: pH <7.3 and/or bicarbonate <15 mmol/L.

Why is this particularly important in pregnancy?

Pregnant women can develop DKA with only modestly elevated glucose levels, particularly during prolonged vomiting or illness. Therefore:

Do not exclude DKA simply because the glucose is not extremely high.

In a pregnant woman with type 1 diabetes and prolonged vomiting:

Vomiting → insulin deficiency/starvation → lipolysis → ketone production → metabolic acidosis

So check blood ketones and blood gas urgently.

⚠ About the options in your photograph

The options appear to contain duplicated/poorly formatted values—there seem to be two options showing 3 mmol/L. The correct physiological threshold is >3.0 mmol/L, so choose the option that corresponds to 3.0 mmol/L.

Q39. Correct answer: C. Para-aortic lymphadenopathy

The key prognostic factor here is para-aortic lymph-node involvement.

Cervical cancer spreads through the lymphatic system. Once tumour reaches the para-aortic nodes, it indicates more extensive disease and is associated with poorer survival. Para-aortic nodal status is an important prognostic factor and is incorporated into modern FIGO staging.

Why the other options are less appropriate?

- * Axillary lymphadenopathy ✗ — not a usual drainage pathway for cervical cancer.
- * Inguinal lymphadenopathy ✗ — can occur with certain lower vaginal/vulval involvement but is not the major prognostic nodal site for typical cervical cancer.
- * Pelvic lymphadenopathy — definitely important and adverse, but para-aortic involvement represents more extensive disease.
- * Supraclavicular lymphadenopathy — indicates distant disease but is not the classic answer to this question.

☆ Exam pearl

Cervical cancer + para-aortic nodes = poor prognostic indicator.

Q40. Correct answer: A. Cervical conisation in a fertility-sparing patient

Stage IA1 means microscopic invasion with stromal invasion ≤ 3 mm and horizontal spread ≤ 7 mm.

For a woman with IA1 disease who wishes to preserve fertility, conisation with clear margins can be adequate, particularly when LVSI is absent. Current fertility-sparing guidance states that pelvic nodal staging is not indicated for T1a1/LVSI-negative disease with negative conisation margins.

Why not the others?

B. Chemoradiotherapy ✗

Far too aggressive for IA1 disease.

C. Pelvic lymphadenectomy ✗

Not routinely required for IA1 without LVSI.

D. Radical hysterectomy + pelvic lymphadenectomy ✗

Excessive treatment for microinvasive disease.

E. Radical trachelectomy ✗

Used for selected larger early-stage invasive cancers when fertility preservation is required— not routine for IA1.

☆ Remember

IA1 + no LVSI + fertility desired → conisation with clear margins.

Q41. Correct answer: D. Stage IB2

This is a very important FIGO 2018 staging question.

The tumour is:

- * Invasive
- * Confined to the cervix
- * 2–4 cm in greatest dimension

Therefore:

FIGO Stage IB2 = tumour ≥ 2 cm but < 4 cm

Stage

Tumour

IB1

< 2 cm

IB2

≥ 2 cm and < 4 cm

IB3

≥ 4 cm

So a tumour measuring 2–4 cm corresponds to IB2.

The option in the photograph appears to say “Stage IBII”, which is almost certainly a formatting/typing representation of Stage IB2.

☆ Very important memory trick

IB1 = < 2 cm

IB2 = 2 to < 4 cm

IB3 = ≥ 4 cm

ESGO’s current cervical-cancer materials continue to specifically distinguish stage IB3 disease, reflecting the FIGO size-based subdivisions.

Q42. Correct answer: B. Magnetic resonance imaging (MRI)

MRI is preferred because it provides excellent local assessment of the cervix, parametria and surrounding pelvic structures without exposing the fetus to ionising radiation.

The NCI specifically states that when imaging is indicated for cervical cancer during pregnancy, MRI is the most appropriate imaging modality.

Why not CT?

CT ✗

Uses ionising radiation and is therefore avoided when an appropriate non-ionising alternative such as MRI is available.

Why not PET?

PET ✗

Uses radioactive tracer and is generally avoided during pregnancy unless there is a compelling clinical indication.

Why not ultrasound?

Ultrasound is useful in pregnancy but MRI provides superior local staging of cervical cancer, particularly for:

- * Tumour size
- * Stromal invasion
- * Parametrial involvement
- * Pelvic extension

☆ Exam pearl

Cervical cancer + pregnancy → MRI is the preferred imaging modality when staging imaging is required.

Q43. Correct answer: B. Clear-cell cervical carcinoma

The key word is:

DES = diethylstilbestrol

Women exposed to DES in utero have an increased risk of developing clear-cell adenocarcinoma of the vagina and cervix.

This is a classic examination association. The NCI confirms the increased risk of clear-cell adenocarcinoma of the vagina and cervix following prenatal DES exposure.

Why?

DES was a synthetic oestrogen historically prescribed to some pregnant women. Daughters exposed during fetal development have an increased risk of developing clear-cell adenocarcinoma, classically involving the vagina and also the cervix.

Why not the other options?

- * A. Adenosarcoma ✗ — no classic DES association.
- * B. Clear-cell cervical carcinoma ✓
- * C. Primary malignant melanoma ✗
- * D. Small-cell cervical cancer ✗

* E. Squamous-cell carcinoma ✗ — the classic association is clear-cell adenocarcinoma.

☆ Must-remember association

In-utero DES exposure → clear-cell adenocarcinoma of vagina/cervix.

Q44. Correct answer: C. Parity

The options include:

- * Lymphovascular space invasion (LVSI)
- * Metastases to pelvic/para-aortic nodes
- * Parity
- * Performance status
- * Tumour size

Why is parity the answer?

Important prognostic factors in cervical cancer include:

- * Lymph-node involvement — one of the strongest prognostic factors.
- * Para-aortic nodal involvement — indicates more extensive disease.
- * Tumour size — larger tumours generally have a worse prognosis.
- * LVSI — associated with increased risk of lymph-node involvement and recurrence.
- * Performance status — reflects the patient's overall ability to tolerate treatment and is relevant to outcomes.

Parity itself does not determine cervical-cancer prognosis.

☆ Exam pearl

Cervical cancer prognosis → tumour size + lymph nodes + LVSI + general condition.

Parity → NOT a major prognostic factor.

Q45 The intended answer in the image appears to be:

D. Radical hysterectomy with pelvic lymphadenectomy

(The option in the image additionally mentions bilateral salpingo-oophorectomy.)

Why radical surgery?

For selected early-stage invasive cervical cancers, particularly IA2/IB1 disease, surgical treatment consists of:

Radical hysterectomy + pelvic lymph-node assessment

The lymph nodes are assessed because nodal status is crucial for prognosis and determines whether additional treatment is required. ESGO recommends lymph-node assessment as the first step of surgical management in appropriate early-stage disease.

Important correction to the MCQ

The option shown appears to include bilateral oophorectomy. That is not routinely required in a young/premenopausal woman with squamous-cell carcinoma, because ovarian preservation is generally desirable.

So, conceptually:

Radical hysterectomy + pelvic lymph-node assessment = appropriate surgical principle.

But routine BSO should not be memorised as part of the standard operation in a young woman.

Also, modern management is more nuanced than the old blanket statement “all IA2–IB1 = radical hysterectomy.” Selected very-low-risk early cancers may be candidates for less radical surgery, and fertility-sparing options exist. ESGO specifically individualises treatment according to tumour size, LVSI, histology, fertility wishes and nodal status.

☆ MRCOG point

Early invasive cervical cancer → surgery + lymph-node assessment.

Do not automatically remove ovaries in a young woman.

Q46. Correct answer: A. Re-screen for HR-HPV in 12 months

This is the standard HPV-primary-screening principle.

The woman has:

HR-HPV positive + cytology negative

She does not immediately require colposcopy.

Instead, she undergoes HPV-based surveillance at 12 months.

Why?

Most HPV infections are transient and clear spontaneously. Immediate colposcopy for every HPV-positive woman would lead to unnecessary investigations.

At the 12-month repeat:

- * HPV negative → return to routine screening
- * HPV remains positive → further assessment/colposcopy according to cytology and screening protocol
- * HPV positive + abnormal cytology → colposcopy

☆ Remember

HPV positive + normal cytology → repeat HPV test in 12 months.

Q47. Correct answer: A. Cervical conisation (LLETZ/knife/laser) in fertility-sparing patients

Stage IA1 represents very early microinvasive cervical cancer.

For a woman who wishes to preserve fertility, conisation with clear margins can be definitive treatment, particularly when LVSI is absent.

ESGO states that for T1a1 disease, conisation can be definitive treatment and that radical hysterectomy/trachelectomy would constitute overtreatment.

Why not radical surgery?

Radical hysterectomy ✗

Too extensive for appropriately selected IA1 disease.

Radical trachelectomy ✗

Also excessive for IA1.

Chemoradiotherapy ✗

Used for more advanced disease, not routine IA1 disease.

Pelvic lymphadenectomy ✗

Not routinely indicated in T1a1/LVSI-negative disease because the risk of nodal metastasis is extremely low.

Important qualification

If LVSI is present, management changes because the risk of nodal disease is higher; sentinel-node assessment can be considered/recommended depending on the exact circumstances.

☆ Memory

IA1 + fertility desired + clear margins + LVSI negative → conisation.

Q48. Correct answer: C. Refer to colposcopy

This is different from Q47.

Q49:

HPV positive + abnormal cytology → colposcopy.

The abnormal cytology means there is evidence of cervical cellular abnormality in addition to the persistent high-risk HPV infection.

Therefore, the appropriate next step is:

Refer for colposcopic assessment.

Why not repeat in 12 months?

Because the cytology is already abnormal. Waiting without colposcopic assessment could delay diagnosis of CIN.

HPV result

Cytology

Management

HPV +

Normal

Repeat HPV in 12 months

HPV +

Abnormal

Colposcopy

HPV –

Normal

Routine recall

PAPER 6 ANSWER

Q1. Correct answer: B. Loop excision of the cervical transformation zone (LLETZ)

Why?

- * Severe dyskaryosis on cervical cytology suggests a high-grade squamous intraepithelial lesion (HSIL).
- * Colposcopy shows dense acetowhite epithelium, which is a high-grade feature.
- * The transformation zone is fully visualised and the abnormal area is extensive.
- * LLETZ provides both treatment and a histological specimen to assess the lesion and exclude invasive disease.

Why not the others?

- * HPV testing: Not sufficient when high-grade disease is already suspected.
- * Repeat colposcopy in 12 months: Too delayed for suspected CIN3.
- * Repeat smear in 6 months: Inappropriate for high-grade cytology.
- * Single punch biopsy: May confirm the diagnosis but does not adequately treat an extensive high-grade lesion.

Key point:

👉 High-grade cytology + high-grade colposcopic appearance → excisional treatment such as LLETZ.

Q2. Correct answer: E. Punch biopsy

Why?

- * Mild dyskaryosis suggests a low-grade lesion, often associated with CIN1/HPV infection.
- * The colposcopy shows smooth, well-demarcated acetowhite lesions, without the major high-grade features such as coarse punctation, coarse mosaicism or atypical vessels.
- * A targeted punch biopsy can establish the histological diagnosis before deciding whether treatment is required.
- * In low-grade disease, especially in a young woman, unnecessary excisional treatment should be avoided because it can increase the risk of future obstetric complications.

Why not LLETZ/knife cone/laser cone?

These are excisional or ablative treatments generally reserved for confirmed or strongly suspected high-grade disease, rather than a straightforward low-grade appearance.

Key point:

☞ Mild cytology + low-grade colposcopic appearance → targeted biopsy/appropriate surveillance rather than immediate excision.

Q3. Correct answer: D. Large loop excision of the transformation zone (LLETZ)

The important findings are:

- * Moderate dyskaryosis
- * Coarse vascular patterns
- * Punctuation and mosaicism
- * Large dense acetowhite lesions
- * Irregular margins

These are characteristic of a high-grade cervical lesion, with CIN2/3 being a significant concern.

LLETZ is appropriate because:

1. It removes the abnormal transformation zone.
2. It provides a specimen for histopathological examination.
3. It allows assessment of the margins.
4. It helps exclude occult invasive cancer.

Why not follow-up?

Follow-up alone would be inappropriate when both cytology and colposcopy strongly suggest high-grade disease.

Why not hysterectomy?

Hysterectomy is not first-line treatment for CIN2/3 in a young woman. It is excessive unless there are other indications.

Why not punch biopsy alone?

A punch biopsy samples only a small portion and does not treat the extensive lesion.

Key point:

☞ Moderate/high-grade cytology + high-grade colposcopy → excisional treatment, usually LLETZ.

Q4. Correct answer: D. Untwisting and fixation of the ovary to the pelvic side wall

Why?

Ovarian torsion is a gynaecological emergency because twisting of the ovarian pedicle compromises venous and eventually arterial blood flow.

The principle is:

Torsion → urgent surgery → detorsion → preserve the ovary whenever possible.

In a young woman, the ovary should generally be detorsed and preserved, even if it initially appears enlarged or dark, because ovarian function may recover.

Why not the other options?

* A. Conservative treatment with antibiotics, fluids and analgesia:

✗ Torsion is a mechanical vascular emergency and requires surgery.

* B. Oophorectomy:

✗ Not routinely required in a young woman. Removal is considered when the ovary is clearly nonviable or malignancy is suspected.

* C. Untwisting alone:

⚠ Detorsion is essential, but fixation (oophoropexy) may be performed in selected cases, particularly when recurrence risk is significant.

* D. Untwisting + fixation:

✓ Preserves ovarian tissue and addresses the risk of recurrent torsion.

Exam pearls

* CIN3/high-grade disease → excisional treatment.

* Low-grade cytology + low-grade colposcopy → biopsy/surveillance rather than aggressive treatment.

* High-grade colposcopic signs: dense acetowhite areas, coarse punctation, coarse mosaicism, irregular margins and atypical vessels.

* Ovarian torsion → urgent laparoscopy + detorsion; preserve the ovary whenever possible.

Q5. Correct answer: C. Group A Streptococcus (Streptococcus pyogenes)

A woman develops fever, hypotension and rapid clinical deterioration following caesarean section.

Why?

- * Group A Streptococcus can cause severe invasive postpartum infection.
- * It can progress very rapidly to septic shock, multiorgan failure and streptococcal toxic shock syndrome.
- * Severe pain and rapid deterioration may occur even when local findings are initially subtle.

Why not E. coli?

E. coli is an important cause of puerperal sepsis, but the classic organism associated with fulminant, rapidly progressive postpartum sepsis is Group A Streptococcus.

👉 Exam pearl: Rapidly progressive postpartum sepsis + shock → think Group A Streptococcus.

Q6. Correct answer: C. Prescribe thromboprophylaxis

The Sepsis Six consists of six immediate actions:

1. Give oxygen if indicated.
2. Take blood cultures.
3. Give IV antibiotics.
4. Give IV fluids.
5. Measure lactate.
6. Monitor urine output.

Therefore, thromboprophylaxis is not one of the Sepsis Six interventions.

👉 Answer: C. Prescribe thromboprophylaxis

Q7. Correct answer: D. Refer to critical care

This patient has evidence of ongoing tissue hypoperfusion:

- * Lactate 3.5 mmol/L is elevated.
- * She remains hypotensive despite fluid resuscitation.

This indicates that initial management has not adequately restored circulation.

She needs urgent senior/critical-care assessment, potentially requiring:

- * Vasopressor support

- * Invasive monitoring
- * Organ-support measures
- * Further source control and antibiotics

Why not continue IV fluids indefinitely?

Excessive fluid administration can cause pulmonary oedema and other complications, particularly in pregnancy/postpartum patients.

👉 Key point: Persistent hypotension despite adequate fluids = escalate to critical care and consider vasopressors.

Q8. Correct answer: C. Delay in antibiotic administration

In sepsis, time to effective antimicrobial treatment is critical.

A delay allows the infection to progress, increasing the risk of:

- * Septic shock
- * Multiorgan dysfunction
- * ICU admission
- * Maternal morbidity and mortality

Why not fever?

Fever itself does not necessarily indicate severe sepsis. A patient can have severe sepsis even without a high temperature.

Why not raised WCC?

White-cell count is nonspecific and may be physiologically altered during pregnancy.

👉 Exam pearl: Early recognition + prompt broad-spectrum antibiotics + source control are key determinants of outcome in maternal sepsis.

Q9. Correct answer: D. Red triggers prompt urgent senior review

MEOWS is designed to identify early physiological deterioration in pregnant and postpartum women.

A red trigger indicates a significant abnormality and should prompt urgent clinical assessment/senior review.

Why are the other statements wrong?

- * A. Only used postpartum ✗

MEOWS is used in pregnancy and the postpartum period, not exclusively postpartum.

* B. Red triggers mean MEOWS should be discontinued ✕

They indicate deterioration and require escalation.

* C. Recorded every 6 hours ✕

The frequency depends on the clinical situation and local protocol; a deteriorating patient requires more frequent observations.

* E. Includes only heart-rate monitoring ✕

MEOWS incorporates multiple physiological parameters, such as heart rate, respiratory rate, blood pressure, temperature, oxygen saturation and level of consciousness, depending on the chart.

👉 Answer: D. Red triggers prompt urgent senior review.

Q10. Correct answer: D. Transvaginal ultrasound

Why?

Transvaginal ultrasound is the appropriate imaging investigation to assess the uterine cavity and endometrial contents for possible retained products of conception (RPOC).

It can identify:

- * Echogenic intrauterine material
- * Thickened endometrium
- * Increased vascularity associated with retained tissue

Why not the others?

- * CT abdomen: Not the first-line test for suspected RPOC.
- * MRI pelvis: Usually unnecessary as an initial investigation.
- * Plain abdominal X-ray: Cannot adequately assess retained placental tissue.
- * Chest X-ray: Does not assess the uterus.

👉 Exam pearl: Suspected retained products postpartum → ultrasound, usually transvaginal ultrasound.

Q11. Correct answer: D. 20 mL/kg

In a woman with suspected sepsis and hypotension or evidence of hypoperfusion, IV crystalloid fluid resuscitation is required.

- * A commonly used initial approach is approximately 20 mL/kg of isotonic crystalloid, with frequent reassessment.

- * The response should be assessed using BP, heart rate, urine output, respiratory status and lactate.
- * Further fluids should be given cautiously if there is inadequate response, because excessive fluid can cause pulmonary oedema.

Why not 5, 10 or 15 mL/kg?

These amounts may be insufficient for initial resuscitation in significant septic shock.

📖 Exam point: Maternal sepsis with hypotension → IV crystalloid + reassessment; escalate to vasopressors/critical care if hypotension persists.

Q12. Correct answer: D. Start broad-spectrum IV antibiotics immediately

Maternal sepsis is a medical emergency. Antibiotics should be started as soon as possible after recognition, ideally after obtaining cultures if this can be done without causing a significant delay.

Broad-spectrum antibiotics are used initially because the causative organism is often unknown.

Why the other options are wrong:

- * A. Wait for cultures before antibiotics ✗

Waiting can allow sepsis to progress.

- * B. Use oral antibiotics if symptoms are mild ✗

Suspected maternal sepsis requires prompt systemic treatment; route depends on severity, but significant sepsis generally requires IV therapy.

- * C. Delay antibiotics until imaging is complete ✗

Imaging should not unnecessarily delay treatment.

- * E. Continue antibiotics only if cultures are positive ✗

Cultures may be negative despite genuine infection. Antibiotics are subsequently reviewed and narrowed according to clinical response and microbiology.

📖 Key principle: Cultures when appropriate, but never allow cultures to cause a clinically important delay in antibiotics.

Q13. Correct answer: C. Aseptic technique during vaginal examinations

Vaginal examinations can introduce microorganisms into the genital tract, particularly when performed repeatedly or with poor infection-control practices.

Therefore, meticulous hand hygiene and aseptic technique during vaginal examination are important preventive measures.

Why not the others?

* A. Universal GBS treatment in all pregnancies ✗

GBS prevention targets neonatal GBS disease; it is not a strategy for preventing all puerperal sepsis.

* B. Routine antibiotics for all vaginal deliveries ✗

This would constitute unnecessary antibiotic exposure and is not recommended.

* D. Postpartum antibiotics for all women ✗

Not appropriate and promotes antimicrobial resistance.

* E. Daily MEOWS for 7 days postpartum ✗

Early-warning systems help detect deterioration, but do not directly prevent infection.

🔑 Exam pearl: Prevention of puerperal infection includes good hand hygiene, aseptic technique, appropriate intrapartum practices and appropriate antibiotic prophylaxis when indicated.

Q14. Correct answer: C. Heart transplant recipient

A heart-transplant recipient is at particularly high risk during pregnancy because pregnancy places substantial additional demands on the cardiovascular system.

Potential complications include:

* Cardiac dysfunction/failure

* Arrhythmias

* Hypertension

* Rejection

* Infection related to immunosuppression

* Medication-related fetal and maternal complications

This requires multidisciplinary high-risk pregnancy care involving maternal medicine, cardiology/transplant specialists and obstetricians.

Why the others are generally lower risk?

- * Wolff-Parkinson-White syndrome: Can cause tachyarrhythmias, but many patients can have successful pregnancy with appropriate management.
- * Repaired tetralogy of Fallot: Risk depends heavily on residual cardiac lesions and ventricular function; a stable repaired case may have considerably lower risk.
- * Marfan syndrome with aortic root 4 cm: Important risk because of aortic dissection, but the risk depends on the individual phenotype and aortic dimensions; it requires specialist assessment.
- * Mechanical prosthetic heart valve: Pregnancy is high risk because of thrombosis/anticoagulation issues, but the overall risk varies with valve type, function and anticoagulation management.

👉 Key point: Cardiac transplant = very high-risk pregnancy requiring specialist multidisciplinary management.

Q15. Correct answer: C. Factor VIII assay of the woman's blood to determine her carrier status

Haemophilia A is X-linked recessive and is caused by factor VIII deficiency.

The woman has a significant family history, so the first step is to determine whether she is a carrier.

A factor VIII assay can help assess factor VIII levels, but an important exam nuance is that factor VIII levels can be normal in some carriers. Therefore, definitive carrier assessment may require F8 genetic testing, particularly when the familial pathogenic variant is known.

Why not amniocentesis immediately?

✗ You should establish the mother's carrier status first rather than immediately performing an invasive fetal test.

Why not CVS immediately?

✗ CVS can determine fetal genotype when indicated, but it is generally undertaken after appropriate genetic counselling and establishment of the maternal/familial mutation.

Why not wait until 16 weeks for amniocentesis?

✗ This unnecessarily delays diagnosis and involves an invasive procedure.

Why not free fetal DNA as the first step?

✗ Fetal sex determination can be useful in the pathway, but it does not replace appropriate maternal carrier assessment.

📖 Exam pearl: In a woman with a strong family history of haemophilia A, think genetic counselling → establish carrier status → offer appropriate prenatal diagnosis if she is a carrier.

Q16. Correct answer: B. Supraventricular tachycardia (SVT)

The characteristic features are:

- * Sudden onset and sudden termination
- * Rapid, regular heartbeat
- * Episodes lasting several minutes
- * Recurrent attacks
- * No syncope
- * Otherwise normal cardiac history

This is typical of paroxysmal SVT, commonly AVNRT or AVRT.

Why not the others?

- * A. Atrial fibrillation: Usually an irregularly irregular rhythm rather than a sudden regular rapid heartbeat.
- * C. Ventricular tachycardia: More concerning and usually associated with structural heart disease; may cause syncope or haemodynamic instability.
- * D. Ectopic beats: Usually felt as isolated “missed” or extra beats, not sustained episodes for 5–10 minutes.
- * E. Anxiety: Anxiety can cause palpitations, but the abrupt onset/offset and recurrent stereotyped episodes strongly suggest an arrhythmia.

📖 Exam pearl: Sudden-onset, sudden-offset regular palpitations = SVT.

Q17. Correct answer: B. Aortic dissection

This is a classic presentation of acute aortic dissection.

Important clues:

- * Sudden severe chest pain
- * Radiation to the back
- * Difference in blood pressure between the two arms
- * A new aortic systolic murmur, potentially due to acute aortic regurgitation

* Pregnancy itself increases susceptibility to aortic complications because of haemodynamic and hormonal changes.

The presence of unequal arm blood pressures is particularly important because the dissection can involve branches of the aorta.

Why not myocardial ischaemia/infarction?

These can cause chest pain, but sudden tearing/severe pain radiating to the back + unequal arm BP + new aortic murmur strongly points toward dissection.

👉 Exam pearl:

Sudden chest/back pain + pulse/BP difference + new aortic regurgitation → aortic dissection until proven otherwise.

Q18. Best answer: C. Progesterone-only pill (among the options shown)

This woman has significant cardiovascular disease and is anticoagulated.

The important principle is to avoid oestrogen-containing contraception because combined hormonal contraception can increase thrombotic risk.

Therefore, a progestogen-only method is preferred.

Why not E. Combined oral contraceptive pill?

✗ Contains oestrogen and is undesirable in a woman with significant valvular disease and thromboembolic risk.

Why not combined hormonal methods?

✗ Oestrogen increases thrombotic risk.

Progestogen-only options such as the POP, implant or injectable can generally be considered depending on the individual cardiovascular risk and anticoagulation situation.

The LNG-IUS (Mirena) can also be useful in anticoagulated women because it can reduce heavy menstrual bleeding, but the exact preferred method depends on the clinical circumstances.

👉 Exam pearl: Significant cardiac disease/anticoagulation → avoid oestrogen-containing contraception; consider progestogen-only contraception.

Q19. Correct answer: E. ST elevation

The patient has:

* Acute chest pain

* Pregnancy

- * Risk factors including obesity
- * Suspected myocardial infarction

ST-segment elevation in appropriate contiguous leads is the classic ECG finding supporting an acute ST-elevation myocardial infarction (STEMI).

Why not the other options?

- * T-wave inversion: Can indicate ischaemia but is less specific and does not by itself establish acute MI.
- * Q wave in lead III: An isolated Q wave can be a normal variant.
- * Right bundle branch block: May occur in many conditions and is not by itself diagnostic of MI.
- * ST depression: Can indicate myocardial ischaemia or NSTEMI, but the classic ECG finding for STEMI is ST elevation.

🔑 Key point:

Acute chest pain + appropriate ST elevation → STEMI until proven otherwise.

Q20. This 20-year-old woman has:

- * Repaired Tetralogy of Fallot (TOF)
- * No symptoms
- * Recent echocardiogram showing only mild pulmonary regurgitation

These are reassuring features, so she is likely to tolerate pregnancy well.

Why?

After successful repair of TOF, pregnancy is generally well tolerated when there is:

- * Good ventricular function
- * No significant pulmonary stenosis
- * No severe pulmonary regurgitation
- * No significant arrhythmia
- * No pulmonary hypertension
- * Good functional status/asymptomatic state

Pregnancy increases cardiac output by about 30–50%, but a woman with good cardiac reserve can usually accommodate this.

Why the other options are incorrect

A. Planned caesarean section at term is recommended ✗

Repaired TOF alone is not an indication for caesarean section. Vaginal delivery is generally preferred unless there is a specific obstetric or cardiac indication.

C. May develop arrhythmias and left heart failure ✗

Arrhythmias are possible in repaired TOF, but an asymptomatic woman with only mild pulmonary regurgitation does not have a high expected risk of heart failure.

D. Significant chance of admission for bed rest and diuretics ✗

Not expected in a woman with good cardiac function and mild residual disease.

E. Fetal congenital heart disease risk is 25% ✗

The fetus has an increased risk of congenital heart disease compared with the general population, but 25% is substantially too high for the situation described. A fetal echocardiogram may nevertheless be offered because of the maternal history.

☆ MRCOG exam pearl

Repaired TOF + asymptomatic + mild pulmonary regurgitation + good cardiac function → pregnancy usually well tolerated.

Answer: B — Likely to tolerate pregnancy well.

Q21. The options shown are:

- * Alice – bioprosthetic aortic valve replacement
- * Bushra – mitral regurgitation
- * Caroline – aortic regurgitation
- * Delia – mild aortic stenosis
- * Elaine – mechanical prosthetic valve

The image appears to have “ANS” marked beside Elaine, so the intended answer is Elaine – mechanical prosthetic valve.

Why?

A mechanical prosthetic heart valve is one of the highest-risk cardiac conditions in pregnancy because pregnancy creates a hypercoagulable state and increases cardiac workload.

The major concern is prosthetic valve thrombosis, particularly if anticoagulation becomes inadequate.

Pregnancy therefore requires:

- * Specialist maternal-cardiology care
- * Careful anticoagulation planning
- * Close monitoring of valve function
- * Balancing maternal thrombosis risk against fetal effects of anticoagulants

Why the others are generally lower risk?

- * Bioprosthetic valve: Usually does not require lifelong anticoagulation and is generally lower risk than a mechanical valve.
- * Mitral regurgitation: Often tolerated relatively well because systemic vascular resistance falls during pregnancy.
- * Aortic regurgitation: Mild/moderate regurgitation is often tolerated.
- * Mild aortic stenosis: Mild disease is usually well tolerated; severe stenosis is the major concern.

👉 Exam pearl: Mechanical prosthetic valve = major pregnancy risk because of anticoagulation + valve thrombosis.

Q22.

- * Has repaired Tetralogy of Fallot
- * Is asymptomatic
- * Has a recent echocardiogram showing mild pulmonary regurgitation
- * Is planning her first pregnancy

The important point is that she has good functional status and only mild residual pulmonary regurgitation.

Correct answer: B. Likely to tolerate pregnancy well

This is the most appropriate answer.

Pregnancy can generally be tolerated well in women with successfully repaired TOF, particularly when:

- * They are asymptomatic
- * Ventricular function is good
- * There is no significant residual pulmonary stenosis
- * Pulmonary regurgitation is mild
- * There are no significant arrhythmias
- * There is no pulmonary hypertension

Pregnancy increases cardiac output, but a woman with good cardiac reserve can usually accommodate this change.

Why the other options are wrong?

A. Planned caesarean section at term is recommended ✗

A repaired TOF by itself is not an indication for elective caesarean delivery. Vaginal delivery is generally preferred unless there is an obstetric or significant cardiac indication.

C. May develop arrhythmias and left heart failure ✗

Arrhythmias can occur in repaired TOF, particularly with significant ventricular scarring or dilation, but an asymptomatic woman with mild pulmonary regurgitation does not automatically have a high risk of left-heart failure.

D. Significant chance of admission for bed rest and diuretics ✗

Not expected in an asymptomatic woman with mild residual disease.

E. Requires a high-risk cardiac scan because offspring risk is 25% ✗

The recurrence risk of congenital heart disease in the fetus is increased compared with the general population, but 25% is much too high for the general situation described.

🔑 Key exam point:

Repaired TOF + asymptomatic + good ventricular function + mild pulmonary regurgitation
→ pregnancy is usually well tolerated.

Q23

The woman is:

- * 25 years old
- * 8 weeks pregnant
- * Has well-controlled epilepsy
- * Taking lamotrigine
- * Has been stable for the past year

The question asks what advice should be given about continuing treatment.

Correct answer: B. Increase the dose of lamotrigine during pregnancy and reduce it again postpartum (as indicated by the answer marking in the image).

Why?

The key pharmacokinetic principle is that lamotrigine clearance increases during pregnancy.

As pregnancy progresses:

- * Plasma volume increases.
- * Hepatic metabolism changes.
- * Renal clearance increases.
- * Lamotrigine concentrations can fall substantially.

Therefore, a woman who was previously well controlled may experience breakthrough seizures if the dose is not adjusted.

The dose should be guided by:

- * Clinical seizure control
- * Pre-pregnancy baseline lamotrigine concentration, when available
- * Drug levels where clinically appropriate

After delivery, lamotrigine clearance falls relatively rapidly, so the dose may need to be reduced postpartum to avoid toxicity.

Why not change to another antiepileptic?

✗ Changing a well-controlled woman to another drug during pregnancy is generally undesirable.

Changing therapy can result in:

- * Loss of seizure control
- * Exposure to another antiepileptic
- * Potentially unnecessary fetal risk

Why not simply keep the same dose?

✗ Pregnancy can substantially lower lamotrigine concentrations, potentially causing breakthrough seizures.

Why not reduce the dose during pregnancy?

✗ This may worsen seizure control. Maternal seizures themselves can pose significant risks to both mother and fetus.

👉 Exam pearl:

Lamotrigine levels fall during pregnancy → monitor clinically/levels when appropriate → dose may need increasing → reduce toward the pre-pregnancy requirement postpartum.

Q24. Correct answer: A. Cerebral venous thrombosis (cerebral venous sinus thrombosis, CVST) ✓

This is a classic presentation of cerebral venous sinus thrombosis.

Important clues:

- * Postpartum state: the puerperium is a hypercoagulable period.
- * Severe headache is a common presentation.
- * Seizure and focal neurological deficit/hemiparesis can occur.
- * CT shows an “empty delta sign”, which is strongly suggestive of superior sagittal sinus thrombosis.

Her additional risk factors include:

- * BMI 44
- * Recent delivery
- * Family history of venous thrombosis

RCOG specifically lists cerebral venous sinus thrombosis among important differential diagnoses for seizures in pregnancy/postpartum.

Why not the others?

- * B. Epilepsy ✗ — does not explain the new severe headache, hemiparesis and characteristic CT finding.
- * C. Idiopathic intracranial hypertension ✗ — obesity is a risk factor, but the empty delta sign points toward venous sinus thrombosis.
- * D. Migraine ✗ — would not explain the CT finding and new focal neurological deficit with seizure.
- * E. Subarachnoid haemorrhage ✗ — can cause sudden severe headache and neurological symptoms, but the CT description is characteristic of CVST.

👉 Exam pearl:

Postpartum + severe headache + seizure/focal deficit + empty delta sign = CVST.

Q25. Correct answer: E. Prednisolone ☒

The presentation is typical of Bell's palsy (idiopathic facial nerve, CN VII, palsy):

- * Acute unilateral facial weakness
- * No vesicular lesions
- * No external auditory canal lesion
- * No other neurological findings mentioned

Why prednisolone?

Bell's palsy is due to inflammation/edema of the facial nerve. Early corticosteroid treatment, ideally within 72 hours, improves the likelihood of complete recovery.

Pregnancy is associated with an increased risk of Bell's palsy, particularly in the third trimester and early postpartum period.

Why not the other options?

- * A. Acyclovir ☒ — antiviral therapy is not routinely required for uncomplicated Bell's palsy.
- * B. Antibiotics ☒ — there is no evidence of bacterial infection.
- * C. Anticoagulants ☒ — no evidence of thromboembolism.
- * D. Aspirin ☒ — does not treat Bell's palsy.
- * E. Prednisolone ☒ — first-line treatment.

👉 Exam pearl:

Acute isolated LMN facial palsy in pregnancy → prednisolone; also ensure eye protection if eyelid closure is impaired.

Q26. Correct answer: C. 4 hours ☒

The question describes a woman who:

- * Is receiving therapeutic LMWH
- * Has had an epidural
- * Has the epidural catheter removed
- * Has no bleeding concerns

The key issue is avoiding spinal/epidural haematoma, a rare but potentially catastrophic complication of neuraxial anaesthesia in anticoagulated patients.

The RCOG guidance states that LMWH should not be given for 4 hours after spinal anaesthesia or after removal of an epidural catheter.

Therefore:

Epidural catheter removed → wait at least 4 hours → restart LMWH, provided there is adequate haemostasis and no other contraindication.

Why not 2, 3, 6 or 8 hours?

The relevant minimum interval in the RCOG guidance is 4 hours after epidural catheter removal.

There is an important distinction between:

- * Time from the last LMWH dose → neuraxial procedure, and
- * Time from catheter removal → next LMWH dose.

For high-dose/therapeutic LMWH, neuraxial techniques generally require a much longer interval after the last dose—RCOG notes 24 hours.

👉 Exam pearl:

After epidural catheter removal → minimum 4 hours before LMWH.

Before neuraxial anaesthesia in a woman on therapeutic LMWH → usually 24 hours from the last dose.

Q27. Correct answer: Intrauterine growth restriction (IUGR/FGR) ✓

The question asks which complication is significantly more common in women with sickle cell disease compared with uncomplicated pregnancies. The intended answer is intrauterine growth restriction.

Why?

Sickle cell disease can cause placental vascular dysfunction and placental insufficiency. This reduces effective oxygen and nutrient delivery to the fetus, increasing the risk of:

- * Fetal growth restriction
- * Small-for-gestational-age fetus
- * Preterm birth
- * Stillbirth

RCOG specifically notes that sickle cell disease can affect fetal growth because of effects on placental function, and recommends additional fetal growth surveillance.

Why not the other options?

- * Chest infection — infection risk is increased in SCD, but this is not the characteristic obstetric complication being tested.
- * Major postpartum haemorrhage — not the key increased fetal/placental complication.

- * Placental abruption — risk may be increased, but FGR is the more characteristic answer here.
- * Urinary tract infection — may occur but is not the best answer.

📖 Exam pearl:

Sickle cell disease → placental insufficiency → fetal growth restriction.

Important: The image says “sickle cell trait,” but if it truly means trait rather than sickle cell disease, the question is potentially flawed. The strong association with FGR applies to sickle cell disease, not uncomplicated sickle cell trait.

Q28. Correct answer: A. Benign/idiopathic intracranial hypertension (IIH) ✓

This is a very characteristic presentation of idiopathic intracranial hypertension, also called benign intracranial hypertension.

Important clues

- * Young woman
- * BMI 34 kg/m²
- * Severe headache
- * Vomiting
- * Sixth cranial nerve (abducens) palsy
- * No hypertension
- * No proteinuria
- * No other focal neurological abnormalities

The sixth nerve palsy occurs because increased intracranial pressure stretches/compresses the abducens nerve.

Why obesity is important

IIH classically occurs in young women with obesity. Pregnancy can also be associated with worsening of symptoms.

Why not pre-eclampsia?

At 21 weeks, pre-eclampsia is possible only in unusual circumstances, and more importantly:

- * BP is normal
- * No proteinuria
- * The neurological pattern is much more suggestive of raised intracranial pressure.

Severe headache and visual symptoms in pregnancy should nevertheless always prompt assessment for pre-eclampsia and other serious causes.

Why not migraine?

Migraine can cause severe headache and vomiting, but bilateral sixth nerve palsy is not a typical feature.

Why not space-occupying lesion?

A brain tumour can cause raised intracranial pressure and sixth nerve palsy, so it must be excluded before diagnosing IIH. However, in this clinical scenario, the classic phenotype is IIH.

👉 Exam pearl:

Young obese woman + headache/vomiting + sixth nerve palsy ± papilloedema → think IIH.

Q29. Correct answer: Acute myocardial infarction (AMI) ✓

This is the diagnosis marked in the image.

Why AMI?

Several important clues point toward acute coronary syndrome:

- * Acute onset of epigastric/chest pain
- * Breathlessness
- * Diabetes mellitus
- * Obesity (BMI 41 kg/m²)
- * Hyperlipidaemia
- * Previous pregnancy complications/risk factors
- * She is in the third trimester, when cardiovascular demand is substantially increased.

Pregnancy itself increases the risk of myocardial infarction compared with non-pregnant women of the same age, and recognized risk factors include diabetes, obesity, hypertension, smoking and dyslipidaemia.

Why can AMI present as epigastric pain?

Myocardial ischaemia does not always present with classic central crushing chest pain. Epigastric discomfort, nausea, dyspnoea or atypical chest symptoms can occur, particularly in patients with diabetes.

Why not pulmonary embolism?

PE is an important differential diagnosis in pregnancy, particularly when there is acute breathlessness. However, the combination of acute chest/epigastric pain + multiple cardiovascular risk factors makes AMI an important working diagnosis in this question.

Why not pulmonary oedema?

Pulmonary oedema usually produces prominent respiratory symptoms, hypoxia and signs of heart failure. It does not explain the acute pain as well as ACS.

Why not rib injury/musculoskeletal pain?

Musculoskeletal pain would not explain the overall cardiovascular risk profile and acute systemic presentation.

👉 Exam pearl:

Pregnancy + acute chest/epigastric pain + dyspnoea + diabetes/obesity/dyslipidaemia → consider acute MI seriously.

Q30. Correct answer: Admission and rapid assessment followed by morphine for pain relief. ✓

This woman has an acute painful sickle-cell crisis at 30 weeks.

Why morphine?

Severe sickle-cell pain requires rapid, effective analgesia. RCOG recommends that analgesia should be started promptly, with morphine appropriate for severe pain. Initial assessment should also look for complications such as acute chest syndrome, infection and dehydration.

Management includes:

- * Admit and assess rapidly.
- * Give strong opioid analgesia such as morphine for severe pain.
- * Assess hydration and give IV fluids if required.
- * Oxygen if hypoxic.
- * Investigate for infection/acute chest syndrome.
- * Give thromboprophylaxis because pregnancy plus sickle-cell disease increases VTE risk.

Why not pethidine?

Pethidine should be avoided in sickle-cell disease because of its metabolite nor-pethidine, which can cause neurotoxicity and seizures. RCOG specifically advises avoiding pethidine in this situation.

Why not NSAIDs?

At 30 weeks, NSAIDs should generally be avoided. RCOG guidance limits their use in pregnancy to the appropriate gestational window and recommends stronger opioids such as morphine for severe sickle pain.

Exam pearl:

Severe sickle crisis → rapid assessment + morphine; avoid pethidine.

Q31. Correct answer: Low-dose aspirin 75 mg/day + LMWH. ✓

This is a very important MRCOG combination.

The woman has:

- * Thalassaemia major
- * Previous splenectomy
- * Platelets $600 \times 10^9/L$

Thalassaemia, particularly after splenectomy, produces a prothrombotic state. The combination of splenectomy and marked thrombocytosis substantially increases VTE risk.

What does RCOG recommend?

For women with thalassaemia:

- * Splenectomy OR platelet count $>600 \times 10^9/L$ → low-dose aspirin 75 mg/day
- * Splenectomy + platelet count $>600 \times 10^9/L$ → LMWH + low-dose aspirin

Therefore, this patient meets both criteria.

Why not aspirin alone?

Aspirin provides antiplatelet protection, but this woman has sufficiently high thrombotic risk to warrant LMWH as well.

Why not LMWH alone?

Because the guideline specifically recommends both aspirin and LMWH when splenectomy is combined with platelet count $>600 \times 10^9/L$.

📖 Exam pearl:

Thalassaemia + splenectomy + platelets >600 → aspirin + LMWH.

Q32.

The stem describes a woman at 28 weeks with:

- * Platelets $85 \times 10^9/L$
- * No bruising/bleeding
- * Previous caesarean for breech
- * Otherwise well

The next question asks:

Which condition could NOT explain her thrombocytopenia?

Correct answer: A. Alloimmune thrombocytopenia ✓

Why?

Maternal alloimmune thrombocytopenia is not a usual cause of maternal thrombocytopenia.

The classic condition is fetal/neonatal alloimmune thrombocytopenia (FNAIT), where maternal antibodies cross the placenta and destroy fetal platelets.

The mother's own platelet count is generally normal.

Therefore, it cannot satisfactorily explain this woman's platelet count of $85 \times 10^9/L$.

The other options CAN cause maternal thrombocytopenia

B. Gestational thrombocytopenia ✓

Very common cause of mild thrombocytopenia in pregnancy.

Typical features:

- * Usually develops in the second half of pregnancy.
- * Usually mild.
- * Patient is asymptomatic.
- * No bleeding.
- * Platelets generally remain $>70 \times 10^9/L$.

platelet count of $85 \times 10^9/L$ can occur, although other causes should be considered if the count is particularly low.

C. Immune thrombocytopenic purpura (ITP) ✓

ITP causes immune-mediated platelet destruction and can occur during pregnancy.

It may produce:

- * Isolated thrombocytopenia
- * Bruising/bleeding in some patients
- * Platelet counts considerably lower than those seen in typical gestational thrombocytopenia.

D. Pre-eclampsia ✓

Pre-eclampsia can cause thrombocytopenia through platelet activation and consumption.

More severe disease/HELLP may cause a significant fall in platelets.

Always assess:

- * BP
- * Urine protein
- * LFTs
- * Symptoms such as headache/visual disturbance/epigastric pain.

E. Antiphospholipid syndrome (APS) ☒

APS can be associated with mild-to-moderate thrombocytopenia because of immune-mediated platelet activation/destruction.

It is also strongly associated with:

- * Recurrent pregnancy loss
- * Placental insufficiency
- * Fetal growth restriction
- * Thrombosis.

Therefore, APS can explain thrombocytopenia

Q33. Correct answer: LMWH while in hospital and for 6 weeks post-discharge. ☒

This woman has sickle cell disease (SCD) and is:

- * Day 1 postpartum
- * Following caesarean section
- * Has no other risk factors

SCD itself is a significant VTE risk factor. Under RCOG VTE guidance, SCD carries 3 antenatal VTE risk points, and caesarean delivery adds further postpartum risk.

Therefore, she should receive LMWH thromboprophylaxis postpartum, and in this high-risk setting the appropriate duration is 6 weeks.

RCOG patient guidance also notes that women with SCD may need daily heparin for 6 weeks after birth when additional risk factors such as caesarean section are present.

Why not only while in hospital?

✗ The risk of VTE remains elevated throughout the 6-week puerperium, particularly in women with SCD and after caesarean delivery.

Why LMWH rather than UFH?

LMWH is generally preferred for obstetric thromboprophylaxis because of its predictable pharmacokinetics and convenient once-daily dosing.

👉 Exam pearl:

SCD + caesarean → postpartum LMWH for 6 weeks.

Q34. The question describes a woman with SCD planning pregnancy. She previously received:

- * Hib vaccine
- * Meningococcal C conjugate vaccine
- * Pneumococcal vaccine
- * Hepatitis B vaccine — 5 years ago
- * Influenza vaccine — 8 months ago

Correct answer: Influenza vaccine ☒

Women with SCD are at increased risk of serious infection, particularly respiratory infection. RCOG recommends that the influenza vaccine should be given if it has not been administered within the previous year.

She had her influenza vaccination 8 months ago, so she is now due for the next annual influenza vaccination.

RCOG also states that influenza vaccination should be recommended if it has not been given in the previous year.

Why not the other vaccines?

The question is testing the annual nature of influenza vaccination in SCD.

- * Hib vaccine: not an annual vaccine.
- * Meningococcal C: not routinely repeated annually.
- * Hepatitis B: not routinely repeated every year if the primary course has been completed and immunity is adequate.
- * Pneumococcal vaccine: may require scheduled boosters depending on vaccine type and local recommendations, but it is not an annual vaccine.

👉 Exam pearl:

SCD → ensure influenza vaccination is updated annually.

Q35. Correct answer: Red cell antibody screening

This is the important distinction.

Women with SCD require regular assessment for end-organ complications, including:

- * Renal disease
- * Pulmonary complications
- * Retinal disease
- * Liver/iron-overload complications
- * Cardiovascular complications where appropriate

RCOG recommends annual medical review and assessment for end-organ damage; retinal screening is specifically mentioned.

Why is red-cell antibody screening different?

Red-cell antibody testing is important in women with SCD, particularly because many patients have had previous blood transfusions and can develop red-cell alloantibodies.

However, it is not a routine annual end-organ screening test in the same way as renal/retinal assessment.

RCOG specifically recommends reviewing red-cell autoantibodies/antibodies as part of preconception or antenatal care, rather than considering it a yearly chronic end-organ screening test.

Easy way to remember

SCD annual surveillance = think “organ damage”:

Kidney → renal function

Lung → pulmonary assessment

Eye → retinal screening

Liver/iron → liver/iron assessment

Red-cell antibodies → important, but not an annual end-organ screen.

Q36. Correct answer: E. Cardiac failure is the primary cause of death in more than 50% of cases.

The major long-term problem in transfusion-dependent β -thalassaemia major is iron overload. Repeated blood transfusions cause progressive iron deposition in organs, particularly the myocardium.

Excess myocardial iron can cause:

- * Dilated cardiomyopathy
- * Arrhythmias
- * Heart failure
- * Ultimately, cardiac death

RCOG guidance notes that cardiac failure has historically been the primary cause of death in >50% of cases, although modern iron-chelation and cardiac MRI monitoring have substantially improved outcomes.

Why the other options are wrong

A. Diabetes is the most common endocrine complication ✗

Diabetes is an important complication caused by pancreatic iron deposition, but it is not the most common endocrine complication. Endocrine dysfunction, particularly hypogonadism, is very common in thalassaemia major.

B. Hyperthyroidism is a known complication ✗

The important thyroid disorder associated with iron overload is hypothyroidism, rather than hyperthyroidism. RCOG recommends thyroid-function assessment before pregnancy.

C. Desferrioxamine can be safely used throughout pregnancy ✗

This is an important MRCOG trap.

Desferrioxamine should be avoided in the first trimester because of limited safety data. In selected women at high risk of cardiac decompensation or with severe iron overload, it may be introduced from approximately 20–24 weeks under specialist haematology/cardiology supervision.

D. Pneumococcal vaccine should be given annually ✗

Pneumococcal vaccination is important in appropriate patients, particularly after splenectomy, but it is not an annual vaccine.

☆ Exam pearl

β-thalassaemia major → repeated transfusions → iron overload → cardiomyopathy/heart failure.

Q37. Answer in the MCQ: B. Regional anaesthesia is contraindicated. ✓*

The question is based on the traditional/exam threshold used in many obstetric MCQ resources.

However, there is an important modern update you should know for MRCOG/current clinical practice.

A platelet count of $70 \times 10^9/L$ is not automatically an absolute contraindication to neuraxial anaesthesia. Current consensus evidence indicates that, in a patient with known ITP and no bleeding/DIC, neuraxial anaesthesia can reasonably be considered at $\geq 70 \times 10^9/L$, with individual anaesthetic/obstetric assessment.

So, if the question's answer key marks "regional anaesthesia is contraindicated", it reflects the teaching convention used by this question bank, but I would not memorise it as an absolute modern rule.

Why are the other options incorrect?

A. Should be treated with immunosuppressants ✗

Treatment is not automatically required simply because the platelet count is $70 \times 10^9/L$. Treatment depends on bleeding, platelet level, gestational age and planned delivery/anaesthesia.

C. Instrumental delivery is contraindicated ✗

Instrumental delivery is not universally contraindicated in maternal ITP. The choice of instrument and fetal platelet risk need consideration.

D. Deliver by caesarean section at 37 weeks ✗

ITP itself is not an indication for elective caesarean section. Mode and timing of delivery should be based primarily on obstetric indications.

E. Neonatal thrombocytopenia occurs in 25% of cases ✗

There is a risk of neonatal thrombocytopenia because maternal antiplatelet antibodies can cross the placenta, but the exact frequency and severity vary. Importantly, maternal platelet count does not reliably predict the neonatal platelet count.

☆ Important updated exam note

Platelets $\geq 70 \times 10^9/L$ + known ITP + no bleeding/DIC → neuraxial anaesthesia may be reasonable after individual assessment.

So for your notes, write:

Old MCQ answer: regional anaesthesia contraindicated at $70 \times 10^9/L$.

Current evidence: $\geq 70 \times 10^9/L$ is generally considered low risk for neuraxial anaesthesia if other risk factors are absent.

Q38. Correct answer: B. Influenza vaccine ✓

This woman has sickle cell disease and has been taking folic acid since the beginning of pregnancy.

She is advised to obtain a prophylactic measure that she has not received during the last 12 months.

The answer is influenza vaccination because people with SCD are at increased risk of severe infection, and influenza vaccination should be updated annually. RCOG specifically recommends annual influenza vaccination for women with SCD.

Why not the others?

A. Penicillin ✗

Penicillin prophylaxis is important in SCD, particularly for prevention of pneumococcal infection, but this is generally a regular/daily prophylactic treatment, not something administered once every 12 months.

C. Refer to haematologist ✗

She is already being managed jointly by the obstetric and haematology teams, so this is not the specific annual prophylactic intervention being asked about.

D. Folic acid 5 mg ✗

She has already been taking folic acid since the beginning of pregnancy. RCOG recommends 5 mg daily throughout pregnancy in SCD.

E. Hydroxycarbamide/hydroxyurea ✗

Hydroxycarbamide should generally be stopped when pregnancy is recognised; it is not a routine prophylactic treatment to start during pregnancy.

☆ Exam pearl

SCD pregnancy → folic acid 5 mg daily + penicillin prophylaxis + low-dose aspirin + vaccination review.

Influenza vaccine → annual.

Q39. Correct answer: A. Administer oxygen therapy and check arterial blood gases ✓

This is an important acute sickle-cell management question.

The woman is in labour and her oxygen saturation has fallen to 93% after oxytocin.

In SCD, maternal hypoxia can precipitate or worsen sickling and may indicate a developing pulmonary complication, particularly acute chest syndrome.

RCOG guidance states that during labour, arterial blood gas analysis should be performed and oxygen therapy instituted when oxygen saturation is $\leq 94\%$.

Therefore:

$\text{SpO}_2 93\% \rightarrow \text{oxygen} + \text{ABG immediately.}$

Why not stop oxytocin alone?

Stopping oxytocin may be considered depending on the overall clinical situation, but it does not correct the immediate maternal hypoxaemia.

The first priority is to assess and correct oxygenation.

Why not immediately perform a caesarean?

A low maternal oxygen saturation alone does not automatically mean a category 1 caesarean. First assess the mother and fetus and determine the cause of hypoxia.

Why not antibiotics immediately?

Antibiotics may be required if infection or acute chest syndrome is suspected, but the immediate intervention for $\text{SpO}_2 93\%$ is oxygen and ABG assessment.

Why is ABG important?

Pulse oximetry tells you the oxygen saturation, while an ABG provides PaO_2 , PaCO_2 and acid-base status, helping identify significant respiratory compromise.

🔑 MRCOG pearl:

$\text{SCD in labour} + \text{SpO}_2 \leq 94\% \rightarrow \text{oxygen} + \text{ABG.}$

Q40. Correct answer: A. Azathioprine ✓

This is the intended answer in the question bank.

Why azathioprine?

Azathioprine is considered compatible with pregnancy and is commonly used when immunosuppression is required in pregnant women with SLE.

The placenta acts as a relative barrier to its active metabolite 6-mercaptopurine, limiting fetal exposure.

Current EULAR recommendations also consider azathioprine and ciclosporin compatible with pregnancy, whereas methotrexate and mycophenolate are contraindicated and cyclophosphamide is reserved for severe, life-threatening disease when necessary.

Why the other options are wrong?

B. Methotrexate ✗

Methotrexate crosses the placenta and is teratogenic. It must be discontinued before conception.

C. Mycophenolate mofetil ✗

It crosses the placenta and is associated with significant fetal toxicity, including miscarriage and congenital malformations. It should be stopped before pregnancy.

D. Cyclophosphamide ✗

Cyclophosphamide crosses the placenta and can cause fetal toxicity. It is avoided during pregnancy unless required for severe, life-threatening maternal disease, particularly after the first trimester.

E. Ciclosporin ✗

Ciclosporin can cross the placenta, although it is considered compatible with pregnancy when clinically indicated.

☆ Important distinction

Don't interpret the question as saying azathioprine never crosses the placenta at all. A more accurate statement is:

Azathioprine has very limited fetal exposure because placental metabolism limits transfer of its active metabolites, and it is considered compatible with pregnancy.

That is why A is the intended MRCOG answer.

Q41. Correct answer: B. Pemphigoid gestationis ✓

The most important clue is involvement of the umbilicus with vesicles.

Why?

Pemphigoid gestationis is an autoimmune blistering disorder of pregnancy. It typically presents with:

- * Severe pruritus
- * Erythematous urticarial/papular lesions
- * Progression to tense vesicles and bullae
- * Characteristically begins around the umbilicus
- * Usually occurs in the 2nd or 3rd trimester

- * May flare around delivery

The lesions can subsequently spread to the trunk and limbs.

Why not polymorphic eruption of pregnancy (PUPPP)?

PUPPP typically:

- * Occurs in the third trimester
- * Starts in the abdominal striae
- * Often spares the umbilicus
- * Does not typically produce true tense blisters/vesicles.

Therefore:

Umbilical involvement + vesicles/bullae → pemphigoid gestationis.

Why not atopic eruption?

Atopic eruption usually produces eczema-like or papular lesions, rather than tense vesicles centred around the umbilicus.

Why not erythema nodosum?

This causes tender red nodules, usually over the shins—not an intensely itchy vesicular eruption.

Why not pityriasis rosea?

Usually produces a herald patch followed by a characteristic generalized rash, not tense vesicles involving the umbilicus.

🔑 MRCOG pearl:

Pregnancy + intense itching + urticarial plaques → vesicles/bullae + umbilicus involved = pemphigoid gestationis.

Q42. Correct answer: C. Gonorrhoea, chlamydia, HIV and syphilis ✓

She has had multiple sexual partners, so a broader STI screen is appropriate rather than testing only for gonorrhoea.

Multiple sexual partners increase the risk of HIV and other STIs.

Why these four?

1. Gonorrhoea

- * She specifically requests testing for gonorrhoea.
- * NAAT testing is commonly used.

2. Chlamydia

- * Gonorrhoea and chlamydia frequently coexist.
- * Therefore, testing for both is appropriate.

3. HIV

- * Multiple sexual partners increase HIV exposure risk.
- * HIV testing should be offered as part of appropriate STI screening.

4. Syphilis

- * Syphilis is another important sexually transmitted infection that may be asymptomatic.
- * Therefore, it should be included in a comprehensive STI screen.

Why not HPV?

HPV testing is not performed as a routine STI screen in this context. HPV is primarily addressed through vaccination and cervical screening, rather than routine testing of an asymptomatic young woman simply because she has multiple partners.

Why not hepatitis C?

Hepatitis C testing is based on particular risk factors/exposures rather than being a routine component of this basic STI screen for every sexually active woman.

👉 MRCOG pearl:

When a sexually active patient has increased STI risk, think broadly:

Chlamydia + gonorrhoea + HIV + syphilis

rather than testing only for the infection she specifically asks about.

Q43. Correct answer: E. *Trichomonas vaginalis* ✓

This is an important distinction between STIs and non-STIs.

The woman has bacterial vaginosis (BV) and asks whether her sexual partner needs treatment.

BV

Routine treatment of an asymptomatic male sexual partner is not recommended for uncomplicated bacterial vaginosis.

BV is associated with disruption of the normal vaginal flora rather than being treated as a conventional STI requiring routine partner therapy.

Trichomoniasis is different

Trichomonas vaginalis is a sexually transmitted infection.

Therefore, when a patient has trichomoniasis:

- * The patient should be treated.
- * Current sexual partners should also be treated, even if asymptomatic.
- * This reduces the risk of reinfection and ongoing transmission.

CDC guidance emphasizes partner management as an important component of STI treatment.

Why not candidiasis?

Vulvovaginal candidiasis is not usually sexually transmitted, and routine treatment of an asymptomatic partner is not recommended.

Why not HPV?

HPV does not have treatment aimed at eradicating asymptomatic infection in a sexual partner. Management focuses on vaccination, screening and treatment of lesions when present.

Why not herpes simplex?

An asymptomatic partner is not routinely treated with antiviral medication simply because their partner has genital herpes. Management depends on whether the partner has infection/symptoms and on

**Q44. Correct answer: C. Herpes simplex virus (HSV) **

The description is very characteristic of genital herpes:

- * Multiple small ulcers
- * Occur in groups/clusters
- * Painful
- * Often preceded by painful vesicles
- * May be associated with tender inguinal lymph nodes
- * Ulcers have an erythematous/inflamed base

The pattern of multiple, shallow, painful grouped ulcers is much more typical of HSV than the other genital ulcer diseases.

Why not chancroid?

Chancroid usually produces deeper, painful ulcers with ragged/undermined edges and may cause painful suppurative inguinal lymphadenopathy.

Why not syphilis?

Primary syphilis classically produces a single, painless, clean-based chancre with usually non-tender regional lymphadenopathy.

Why not LGV?

Lymphogranuloma venereum typically starts with a small, often painless genital lesion, followed later by prominent painful inguinal lymphadenopathy.

Why not granuloma inguinale?

Granuloma inguinale causes painless, progressive, beefy-red ulcers that bleed easily.

👉 MRCOG pearl:

Grouped + multiple + painful genital ulcers = genital herpes.

Q45. Correct answer: C. Haemophilus ducreyi ✓

This is chancroid.

Classic features of chancroid

- * Painful genital ulcers
- * Usually multiple
- * Deep ulcers with ragged/undermined edges
- * Purulent/yellow-gray exudate
- * Painful, tender inguinal lymphadenopathy
- * May develop into suppurative buboes

The CDC describes the combination of deep painful genital ulcers + tender suppurative inguinal adenopathy as characteristic of chancroid.

The causative organism is:

Haemophilus ducreyi

It is a Gram-negative coccobacillus.

Why not HSV?

HSV causes grouped vesicles progressing to shallow painful ulcers, rather than the typical deep ulcer with purulent base described here.

Why not syphilis?

Syphilitic chancre is classically painless.

Why not Chlamydia trachomatis?

Certain C. trachomatis serovars cause lymphogranuloma venereum, but the primary ulcer is usually small and often painless.

Why not *Treponema pallidum*?

Again, primary syphilis produces a painless chancre.

📖 Easy memory:

Chancroid = painful ulcer + painful nodes = *H. ducreyi*.

Q46. Correct answer: D. *Neisseria gonorrhoeae* ✓

This is a classic microbiology question.

Why?

Neisseria gonorrhoeae is:

- * Gram-negative
- * Diplococcal
- * Often seen intracellularly within neutrophils
- * Oxidase positive
- * A sexually transmitted organism

The CDC identifies Gram-negative intracellular diplococci in an appropriate specimen as presumptive evidence of gonococcal infection.

Why the other organisms are wrong?

A. *Actinomyces israelii* ✗

Gram-positive, filamentous, branching anaerobic bacterium; associated with IUD use and pelvic actinomycosis.

B. *Chlamydia trachomatis* ✗

An obligate intracellular bacterium that cannot be visualised as Gram-negative diplococci on routine Gram stain.

C. *Haemophilus ducreyi* ✗

Gram-negative coccobacillus causing chancroid, not diplococci.

E. *Trichomonas vaginalis* ✗

A flagellated protozoan, not a bacterium.

☆ High-yield microbiology

Gram-negative intracellular diplococci → *Neisseria gonorrhoeae*.

Q47.

The options shown are:

- A. 5-fluorouracil
- B. Cryotherapy
- C. Imiquimod
- D. Podophylline
- E. Trichloroacetic acid

Correct answer: B. Cryotherapy ☒

HPV types 6 and 11 are the commonest causes of anogenital warts (condylomata acuminata). Type 11 is a low-risk HPV type and is not the type typically associated with cervical cancer.

Because the woman is pregnant, treatment options are restricted.

Why cryotherapy?

Cryotherapy with liquid nitrogen is a suitable provider-administered treatment for genital warts during pregnancy. It destroys the wart tissue by freezing it and does not involve systemic drug exposure.

CDC guidance lists cryotherapy as a provider-administered treatment for external anogenital warts and specifically advises avoiding podofilox/podophyllin and imiquimod during pregnancy.

Why not the other options?

A. 5-Fluorouracil ✗

5-FU is an antimetabolite and is not used for genital warts in pregnancy because of potential fetal toxicity.

C. Imiquimod ✗

Although imiquimod is used for genital warts in non-pregnant patients, pregnancy data are limited. Current CDC guidance recommends avoiding imiquimod during pregnancy until more safety data are available.

D. Podophylline/podophyllin ✗

Contraindicated in pregnancy because of potential systemic toxicity and fetal harm.

E. Trichloroacetic acid (TCA) ⚠

TCA is a provider-administered treatment for anogenital warts and is used in some pregnancy protocols. Therefore, this option makes the question slightly less straightforward if the

question is asking for a treatment that can be used in pregnancy. CDC lists TCA as a provider-administered option for genital warts.

However, if this MCQ has “cryotherapy” as the marked answer, cryotherapy is the classic MRCOG answer because it is a well-established physical treatment for genital warts during pregnancy.

☆ MRCOG memory point

Genital warts in pregnancy → use physical treatment:

- * Cryotherapy ☒
- * Surgical excision/laser if appropriate
- * Avoid podophyllin/podofilox
- * Avoid 5-FU
- * Avoid imiquimod

Answer: B — Cryotherapy.

PAPER 7 ANSWER

Q1. Correct answer: B. Full STI screen

A 20-year-old pregnant woman was diagnosed with chlamydia and treated with azithromycin 1 g single dose. Since she has an STI, she should be offered a full STI screen, including testing for other infections such as gonorrhoea, syphilis and HIV.

- * A. Follow-up after 6 months — Incorrect: Retesting is generally recommended earlier, particularly because reinfection is common.
- * B. Full STI screen — Correct: Other STIs may coexist with chlamydia.
- * C. Nothing to be done — Incorrect: Further STI assessment is appropriate.
- * D. Test of cure during this visit — Incorrect: Only 2 weeks have passed. NAAT can remain positive because of residual non-viable organisms.
- * E. Test of cure after 5 weeks — In pregnancy, a test of cure is appropriate, but the question asks for the next step now, which is the full STI screen. BASHH guidance has recommended a pregnancy test of cure several weeks after treatment.

Exam point:

👉 Pregnant + chlamydia → treat + full STI screen + arrange appropriate test of cure.

Q2. Correct answer: E. Endocarditis

Neisseria gonorrhoeae commonly causes:

- * Urethritis → very common
- * Proctitis → particularly with rectal infection
- * Conjunctivitis → can be severe, especially neonatal gonococcal conjunctivitis
- * Pharyngitis → can occur following oral sexual exposure

Endocarditis, however, is a rare complication of disseminated gonococcal infection rather than a common manifestation.

So:

👉 E. Endocarditis = the exception.

Exam point:

Remember the common anatomical sites of gonorrhoea: genital, rectal, pharyngeal and ocular. Disseminated disease can produce arthritis, skin lesions and, rarely, endocarditis.

Q3. Correct answer: C. Two doses of benzathine penicillin G, 1 week apart

The painless vulval ulcer with inguinal lymphadenopathy is typical of a primary syphilitic chancre.

Penicillin is the treatment of choice in pregnancy because it is the only proven therapy that effectively treats maternal infection and prevents congenital syphilis.

For early syphilis in pregnancy, the regimen used in this question is:

Benzathine penicillin G 2.4 million units IM → repeat after 1 week.

CDC guidance has noted that an additional dose one week later may be given to pregnant women with primary, secondary or early latent syphilis.

Why the other options are wrong:

- * A. Single dose benzathine penicillin G: This is the standard early-syphilis regimen in many non-pregnant patients, but the question specifically tests the additional-dose approach in pregnancy.
- * B. Azithromycin: Not reliable for preventing congenital syphilis; penicillin is required.
- * D. Three weekly doses: This is the regimen for late latent syphilis or syphilis of unknown duration, not primary syphilis.
- * E. Tetracycline: Contraindicated in pregnancy and not appropriate.

Exam memory:

👉 Early syphilis in pregnancy → benzathine penicillin; consider/recommend an additional dose 1 week later according to the guideline being tested.

Q4. Correct answer according to the question: D. Cardiovascular signs and symptoms

CSF examination is primarily considered when there is concern for neurosyphilis, such as:

- * Neurological signs/symptoms
- * Ophthalmic/ocular manifestations
- * Treatment failure
- * Certain high-risk situations involving HIV and late syphilis, depending on the guideline.

Therefore, the question's expected answer is:

👉 D. Cardiovascular signs and symptoms

Important guideline nuance

There is a guideline-dependent distinction here. Current CDC material considers tertiary syphilis with cardiovascular manifestations an indication for CSF evaluation in the assessment of possible neurosyphilis, whereas some older MRCOG-style question banks list cardiovascular manifestations as not an indication for routine CSF examination.

So for this particular MCQ, follow the marked answer D, but remember the modern guideline nuance for clinical practice.

Q5. Correct answer: Start empirical IV antibiotic treatment.

The combination of:

- * Lower abdominal/pelvic pain
- * Fever 38.5°C
- * Bilateral adnexal tenderness

is highly suggestive of pelvic inflammatory disease (PID).

Her negative gonorrhoea/chlamydia tests from the previous week do not exclude PID, because PID can be polymicrobial and may occur without a positive STI test.

Why IV antibiotics?

A high fever and significant pelvic tenderness suggest moderate/severe PID, for which hospital assessment and parenteral antibiotics may be appropriate.

- * Reassure and discharge: ✗ Inappropriate because she has objective signs of infection.
- * Repeat STI tests in one week: ✗ Delays treatment.
- * Wait for test results before treatment: ✗ PID treatment should be started empirically.
- * IV antibiotics: ☒ Appropriate when PID is clinically significant/severe.

Exam point:

👉 Suspected PID → treat empirically; don't wait for STI test results.

Q6. Correct answer: 7 months.

Vasectomy is not considered immediately effective. The patient needs post-vasectomy semen analysis (PVSA) to demonstrate clearance of sperm.

If motile sperm persist, this indicates that the vasectomy has not achieved effective occlusion and repeat vasectomy may be required.

The question is testing the time point at which persistent motile sperm should be regarded as a vasectomy failure:

☞ 7 months is the expected answer in this question.

Important distinction:

- * A few non-motile sperm may persist and do not necessarily mean failure.
- * Persistent motile sperm are clinically important because they indicate continuing fertility.

Exam memory:

☞ Motile sperm after vasectomy = failure until proven otherwise.

Q7. Correct answer: Pregnancy test.

In any reproductive-age woman with acute pelvic/lower abdominal pain, pregnancy must be excluded first.

The critical diagnosis not to miss is ectopic pregnancy.

Even if the clinical picture suggests PID, ectopic pregnancy can present with:

- * Lower abdominal/pelvic pain
- * Adnexal tenderness
- * Vaginal bleeding, sometimes absent
- * Haemodynamic instability in a ruptured case

Therefore, the first investigation is:

☞ Urine/serum β -hCG pregnancy test.

Why not the others?

- * Endocervical gonorrhoea/chlamydia swab: useful if PID is suspected, but pregnancy must first be excluded.
- * HIV antibody test: not the immediate investigation for acute pelvic pain.
- * Pelvic ultrasound: may subsequently be required, especially if pregnancy test is positive.
- * Total leucocyte count: nonspecific and does not exclude ectopic pregnancy.

Exam rule:

☞ Any woman of reproductive age + acute abdominal/pelvic pain → pregnancy test first.

Q8. 21-year-old woman with fever and bilateral adnexal tenderness

Correct answer: Start empirical oral antibiotic treatment.

This is again a clinical picture of PID:

- * Bilateral lower abdominal pain
- * Fever 38.5°C
- * Bilateral adnexal tenderness
- * Negative gonorrhoea/chlamydia testing does not rule out PID.

The important principle is:

PID is a clinical diagnosis and treatment should not be delayed while waiting for microbiological confirmation.

For a woman who is clinically stable and suitable for outpatient management, empirical oral antibiotics covering the likely organisms are appropriate.

- * Reassure and discharge: ✗ No treatment is inadequate.
- * Painkillers and repeat STI testing later: ✗ Does not treat the suspected PID.
- * Repeat tests and wait for results: ✗ Treatment should not be delayed.
- * Empirical oral antibiotics: ✓ Correct.

Q5 vs Q8 — important MRCOG distinction

Q9. Correct answer: D. Oral PID-targeted antibiotics and, if no improvement in symptoms, remove the IUCD in 48 hours.

She has clinical features of pelvic inflammatory disease (PID):

- * Lower abdominal pain
- * Vaginal mucopurulent discharge
- * Adnexal tenderness
- * New sexual partner and no barrier contraception

The important point is that the IUCD does not need to be removed immediately.

Treatment should be started with appropriate PID-directed antibiotics, while the IUCD can initially remain in place. The patient should be reviewed after 48–72 hours. If there is no clinical improvement, removal of the IUCD should be considered.

Therefore, among the options shown:

☞ D. Treat with oral PID antibiotics and remove the IUCD if there is no improvement at 48 hours.

Why not immediate removal?

Routine immediate removal does not improve PID outcomes and is unnecessary.

Exam point:

PID + IUCD → antibiotics first; do NOT routinely remove IUCD. Reassess at 48–72 h; remove if no improvement.

Q10. Correct answer: C. Inguinal lymph nodes

The vulva has rich lymphatic drainage. The first and most important regional lymph nodes involved in vulval squamous cell carcinoma are the:

☞ Superficial and deep inguinal lymph nodes

From there, lymphatic drainage proceeds to the femoral/deep inguinal and pelvic nodes.

Why the other options are incorrect:

- * External iliac: More proximal/pelvic drainage; not the initial site.
- * Femoral: Can be involved as part of deep inguinal drainage, but the classic initial nodal basin is inguinal.
- * Inguinal: ☒ First regional nodal basin.
- * Internal iliac: Pelvic drainage, later.
- * Para-aortic: Distant/upper lymphatic spread.

Easy memory

Vulva → Inguinal nodes → Pelvic nodes

Q11.

The question asks:

A 70-year-old woman has vulval squamous cell carcinoma with a depth of invasion of 1 mm. What is the likelihood of lymph-node involvement?

Correct answer: A. 1%

The depth of stromal invasion is extremely important in determining the risk of lymph-node metastasis.

For very superficial vulval SCC, particularly ≤ 1 mm invasion, the risk of nodal metastasis is very low—around 1%.

This is why lesions with ≤ 1 mm stromal invasion generally do not require groin lymph-node assessment.

Once invasion exceeds approximately 1 mm, the risk becomes clinically significant and sentinel lymph-node assessment may be considered depending on tumour characteristics.

Depth of invasion

Clinical significance

≤ 1 mm

Very low nodal risk → usually no groin node assessment

> 1 mm

Nodal assessment becomes relevant

Larger/deeper lesions

Increasing risk of nodal metastasis

Q12. Correct answer: B. Colon

Secondary ovarian tumours are metastases to the ovary from another primary cancer.

The gastrointestinal tract is an important source of ovarian metastases. Among the options given, colorectal carcinoma is the best answer.

Options:

- * Breast: Can metastasise to ovaries, but not the most common source among these options.
- * Colon: ☒ Important and common source of secondary ovarian malignancy.
- * Endometrium: Can spread to the ovaries, but is not the commonest source.
- * Lung: Ovarian metastases can occur but are uncommon.
- * Pancreas: Can metastasise to the ovary but is less common.

Important distinction

A classic metastatic ovarian tumour is the Krukenberg tumour, traditionally associated with a gastric signet-ring cell carcinoma. However, stomach is not one of the options in this question.

So, with the options provided:

☞ Colon is the best answer.

Q13. Correct answer: A. CT of abdomen and pelvis

The patient is 65 and has:

- * A complex ovarian cyst
- * Raised CA-125

* RMI = 280

An RMI (Risk of Malignancy Index) >200 is considered high risk for ovarian malignancy and warrants referral to a specialist gynaecological oncology service and further imaging.

Why CT abdomen and pelvis?

CT is used to assess:

- * Local pelvic disease
- * Omental/peritoneal disease
- * Lymphadenopathy
- * Liver involvement
- * Distant metastases

Therefore:

☞ RMI >200 → CT abdomen and pelvis for staging.

Why not MRI?

MRI can help characterise an indeterminate adnexal mass, but once the RMI indicates a significant suspicion of malignancy, CT is preferred for staging.

Why not PET-CT?

PET-CT is not routinely the initial staging investigation for suspected ovarian cancer.

Exam point:

RMI $\geq$ 200 → CT abdomen/pelvis + gynae oncology referral.

Q14. Correct answer: A. Differentiated VIN

There are two major pathways of vulval squamous carcinogenesis:

1. HPV-associated pathway

Usually associated with:

- * Usual-type VIN / vulvar HSIL
- * High-risk HPV, particularly HPV-16
- * Younger women

2. HPV-independent pathway

Associated with:

- * Differentiated VIN (dVIN)

- * Older women
- * Often associated with lichen sclerosus
- * Much higher risk of progression to invasive vulval SCC

Therefore:

☞ Differentiated VIN = highest risk of progression to vulval SCC.

Q

Correct answer

Key concept

13

A. CT abdomen & pelvis

RMI >200 → investigate/stage suspected ovarian cancer

14

A. Differentiated VIN

Highest risk of progression to vulval SCC

Q15

B. Hysteroscopy + targeted biopsy

Tamoxifen + PMB → assess endometrium, especially focal lesions

Q16

B. 7%

Approx. 7% reduction in ovarian cancer risk per year of COC use

Q17. Correct answer: A. 0–20 years

Ovarian germ-cell tumours arise from the ovarian germ cells and are characteristic of younger females. Malignant ovarian germ-cell tumours occur predominantly in children, adolescents and young women, with many cases occurring during the teenage years.

Therefore, among the age groups given:

☞ A. 0–20 years

High-yield point:

- * Young woman + ovarian mass → think germ-cell tumour.
- * Older/postmenopausal woman → epithelial ovarian cancer is much more likely.

The commonest ovarian germ-cell tumour overall is dysgerminoma.

Q18. Correct answer: B. Family history of ovarian cancer

A significant family history of ovarian cancer, particularly in a first-degree relative, is an important risk factor because it may indicate an inherited cancer-predisposition syndrome, particularly BRCA1/BRCA2-associated disease.

Why the other options are less appropriate:

- * A. Family history of breast cancer: Can be relevant because BRCA mutations predispose to both breast and ovarian cancer, but an ovarian cancer family history is more directly associated with ovarian cancer risk.
- * B. Family history of ovarian cancer: ☒ Strong risk factor.
- * C. Fertility treatment: Some associations have been investigated, but it is not the strongest established risk factor here.
- * D. Nulliparity: Associated with increased risk, but less important than a strong hereditary history.
- * E. Smoking: Not the major risk factor for epithelial ovarian cancer.

Exam memory:

🔑 Family history → think BRCA/Lynch syndrome.

Q19. Correct answer: E. No screening recommended

There is no recommended population screening programme for ovarian cancer in women at average risk.

Routine screening with:

- * CA-125
- * Transvaginal ultrasound
- * RMI

has not demonstrated sufficient benefit to justify population screening. RCOG also states that there is currently no ovarian cancer screening programme.

Therefore:

🔑 E. No screening recommended

Important distinction:

This applies to average-risk women. Women with a significant hereditary risk, such as BRCA1/2 pathogenic variants, require a different risk-management strategy.

MRCOG memory:

Average risk + asymptomatic → NO routine ovarian cancer screening.

Q20.

The question asks about the likelihood of developing primary peritoneal cancer after risk-reducing bilateral salpingo-oophorectomy.

Correct answer: B. 2% (as expected by this question)

Risk-reducing salpingo-oophorectomy dramatically reduces the risk of ovarian/fallopian-tube cancer in BRCA carriers, but it does not completely eliminate the risk of high-grade serous carcinoma arising from the peritoneum.

Why?

The peritoneum remains after removal of the ovaries and tubes, and the biology of high-grade serous carcinoma overlaps with tubal/ovarian cancer. Therefore, a small residual risk persists.

Older studies have reported residual risks around 1–3%, which explains why 2% is the expected answer in this question.

Important current-data nuance

More recent evidence suggests that the exact risk depends substantially on BRCA1 vs BRCA2, age at surgery, duration of follow-up and whether STIC was present at RRSO. A large recent study estimated a 20-year cumulative risk of about 2.7% for BRCA1 and 0.9% for BRCA2 after oophorectomy.

So for the exam question, remember:

☞ BRCA + RRSO → residual primary peritoneal cancer risk $\approx$ 2%.

Q21. Correct answer: C. Epithelial ovarian cancer

Epithelial ovarian cancers are the commonest ovarian malignancies, particularly in older women. They commonly spread by peritoneal dissemination, producing:

- * Omental deposits
- * Ascites
- * Peritoneal carcinomatosis
- * Adhesions and bowel involvement

Advanced epithelial ovarian cancer can therefore cause intestinal obstruction.

The other options are much less likely to produce this typical pattern of extensive peritoneal disease.

MRCOG point:

☞ Ovarian cancer + ascites + omental/peritoneal disease + bowel obstruction → think epithelial ovarian carcinoma.

Q22. Answer shown: A. Late first trimester or late second trimester

Colposcopy is safe during pregnancy and should not be avoided when cancer is suspected. The principal purpose is to exclude invasive disease.

For an abnormal cervical screening result requiring colposcopy, UK guidance recommends assessment in the late first or early second trimester. Women assessed early in pregnancy may require a further assessment toward the late second trimester, depending on the findings.

Why is timing important?

Pregnancy causes:

- * Cervical hypervascularity
- * Eversion of the transformation zone
- * Decidual changes
- * Increased bleeding tendency

These can make interpretation more difficult.

Important: If there is a strong clinical suspicion of invasive cancer, investigation should not be unnecessarily delayed simply because the patient is pregnant.

Exam memory:

☞ Abnormal cervix in pregnancy → expert colposcopy; aim is to exclude invasion.

Q23. Correct answer: C. MRI of pelvis

MRI is the preferred imaging modality for staging cervical cancer during pregnancy when imaging is clinically indicated. It provides excellent assessment of:

- * Cervical tumour
- * Parametrial involvement
- * Pelvic structures
- * Lymph nodes

MRI avoids ionising radiation and is therefore particularly useful in pregnancy. NCI guidance specifically identifies MRI as the most appropriate imaging modality in pregnancy when indicated.

Why not CT?

CT uses ionising radiation and is therefore avoided when MRI can provide the necessary information.

Why not ultrasound?

Ultrasound is useful in pregnancy but is not adequate for comprehensive staging of cervical cancer.

Why not PET-CT?

PET-CT involves radiation and is generally avoided during pregnancy unless there is an exceptional clinical indication.

☞ Pregnant + cervical cancer staging → MRI.

Q24. Correct answer: C. Cone biopsy

Stage IA1 represents very early microscopic cervical cancer. If there is no lymphovascular space invasion (LVSI), the risk of lymph-node metastasis is extremely low.

In a pregnant woman wishing to continue the pregnancy, conization (cone biopsy) can provide diagnostic assessment and, when margins are clear, can be definitive treatment for IA1 disease.

Current evidence supports conization as an option for IA1 disease in pregnancy, particularly when there is no LVSI.

Why not radical trachelectomy?

Too radical for IA1 without LVSI and carries considerably greater obstetric consequences.

Why not hysterectomy?

It would terminate the pregnancy and is unnecessary for appropriately selected IA1 disease.

Why not simple trachelectomy?

Again, unnecessarily extensive for IA1 without LVSI.

Key distinction:

IA1 + no LVSI → cone biopsy

IA1 + LVSI → more extensive assessment/treatment may be required.

Q25. Timing of cone biopsy in pregnancy

Correct answer: B. 14–20 weeks

The question asks for the optimal timing of cone biopsy during pregnancy.

👉 14–20 w...

Q

Answer

Key concept

21

C. Epithelial cancer

Advanced epithelial ovarian cancer can cause bowel obstruction

22

A. Late 1st / late 2nd trimester

Colposcopy in pregnancy aims to exclude invasion

23

C. MRI pelvis

Preferred staging imaging for cervical cancer in pregnancy

24

C. Cone biopsy

IA1 without LVSI → conservative treatment

25

B. 14–20 weeks

Preferred timing for cone biopsy in pregnancy

Q26. Correct answer: C. 3 weeks

Chemotherapy should generally be stopped sufficiently before delivery to allow maternal and fetal bone-marrow recovery.

The main concerns if chemotherapy is given too close to delivery are:

- * Maternal neutropenia → infection/sepsis
- * Maternal thrombocytopenia → bleeding
- * Neonatal myelosuppression

Current guidance generally recommends the last chemotherapy dose 2–4 weeks before delivery, and many exam questions use 3 weeks as the standard interval.

Therefore, for this MCQ:

☞ C. 3 weeks

Exam memory:

Chemotherapy → delivery: approximately 3 weeks.

Q27. Correct answer: A. 4 weeks

Chemotherapy drugs can pass into breast milk and potentially expose the neonate. Therefore, breastfeeding is contraindicated during active chemotherapy.

A commonly taught exam rule is to allow approximately 3–4 weeks after the final chemotherapy dose before breastfeeding, depending on the drug.

Current guidance is more individualized: for most chemotherapy agents, a 3-week safety interval is commonly advised, while some drugs—particularly certain platinum agents—may require longer.

So, given the options and the answer indicated in the question bank:

☞ A. 4 weeks

Important: This is not the same rule for every chemotherapy drug. The exact washout period depends on the drug's pharmacokinetics.

Easy distinction

Chemotherapy → delivery: approximately 3 weeks

Chemotherapy → breastfeeding: approximately 3–4 weeks, depending on drug.

Q28. Correct answer: C. Inhibin

Inhibin is a glycoprotein hormone belonging to the TGF- β superfamily.

It is produced by:

* Granulosa cells in females

* Sertoli cells in males

Its major physiological action is:

☞ Inhibition of FSH secretion from the anterior pituitary.

Why is this clinically important?

Granulosa-cell tumours can produce inhibin, particularly inhibin B, and inhibin can therefore act as a tumour marker.

The other options:

- * CA-19-9: Tumour marker associated mainly with pancreatic and biliary malignancies.
- * Epithelial antigen: Not the hormone described.
- * Inhibin: ☒ TGF- β superfamily; Sertoli + granulosa cells.
- * Oestriol: Pregnancy-related oestrogen.
- * LDH: Enzyme; useful as a marker in some germ-cell tumours, particularly dysgerminoma.

👉 Answer = Inhibin.

MRCOG memory:

Granulosa cell tumour $\rightarrow$ $\uparrow$ inhibin $\pm$ oestrogen.

Q29. Correct answer: D. Estriol (E3)

Estriol is the major oestrogen of pregnancy.

Its production involves the:

Fetal adrenal gland $\rightarrow$ DHEA-S $\rightarrow$ fetal liver $\rightarrow$ placenta $\rightarrow$ estriol

Therefore, estriol production depends on the fetoplacental unit.

In a non-pregnant woman, estriol levels are very low. During pregnancy, production rises dramatically.

Q30. Vulval cancer with metastases to inguinofemoral AND pelvic lymph nodes

Correct answer: A. Stage IVB

This is a very important staging question.

The inguinofemoral nodes are the regional lymph nodes for vulval cancer.

However, pelvic lymph nodes are considered distant nodal metastases in the traditional FIGO staging system used by many older exam questions.

Therefore:

Vulval cancer + pelvic lymph-node metastasis $\rightarrow$ Stage IVB.

Why?

The older FIGO 2009 classification specifically included:

Stage IVB = any distant metastasis, including pelvic lymph nodes.

So the question bank's answer:

👉 A. IVB

⚠ Important modern staging update

The 2021 FIGO revision still classifies pelvic lymph-node involvement as distant metastasis, hence IVB. Regional nodes are specifically the inguinal and femoral nodes.

So this is a useful fact to remember for both older and current staging:

Vulval cancer → inguinofemoral = regional

Pelvic nodes = distant → FIGO IVB

Q31. Correct answer: A. FIGO stage IC1

The important detail is:

- * Ovarian capsule was intact before surgery
- * The cyst ruptured during the operation
- * Peritoneal washings taken before rupture are clear
- * No evidence of disease outside the ovary is described

In the FIGO staging system for ovarian cancer:

- * IA: One ovary, capsule intact, no tumour on surface, negative washings.
- * IB: Both ovaries, capsules intact, negative washings.
- * IC1: Surgical spill — capsule ruptures during surgery.
- * IC2: Capsule ruptured before surgery or tumour on ovarian surface.
- * IC3: Malignant cells in ascites/peritoneal washings.

Therefore, because the rupture occurred during surgery, this is:

👉 IC1 — surgical spill.

Very important MRCOG distinction:

Rupture during surgery → IC1

Spontaneous/preoperative rupture → IC2

Positive washings/ascites → IC3

Q32. Correct answer: B. Repeat cervical cytology in 3 months

The question describes a woman attending for routine cervical screening where:

The examination is difficult and an inadequate result is returned.

An inadequate sample means the laboratory cannot reliably determine whether abnormal cells are present.

Therefore, she should have the cervical sample repeated, rather than being immediately referred for colposcopy.

The commonly tested interval is:

☞ Repeat in 3 months.

Why not colposcopy?

An inadequate smear does not mean an abnormal smear. It simply means the sample cannot be assessed adequately.

Why not 6 months?

Waiting longer unnecessarily delays obtaining an adequate sample.

Why not routine recall?

Because the screening episode has not produced a satisfactory result.

Exam memory:

☞ Inadequate cytology → repeat cytology in 3 months.

Q33. Correct answer: D. Refer to colposcopy

The woman has a cervical screening result showing high-grade dyskaryosis.

The appropriate next step is urgent referral to colposcopy.

Why?

High-grade dyskaryosis may represent:

- * CIN2
- * CIN3
- * Occasionally invasive cervical cancer

Colposcopy allows direct assessment of the transformation zone and targeted biopsy.

Why not HPV test of cure?

An HPV test of cure is used after treatment for cervical intraepithelial neoplasia, not as the next step for a newly detected high-grade abnormality.

Why not HPV triage?

HPV triage is mainly relevant to lower-grade abnormalities. A high-grade cytology result already carries sufficient risk to warrant colposcopy.

Why not treatment immediately?

The abnormality needs appropriate colposcopic assessment and histological confirmation unless an appropriate see-and-treat pathway is specifically being used.

👉 High-grade dyskaryosis → colposcopy.

MRCOG memory:

High-grade cytology = don't delay → colposcopy.

Q34. Correct answer: Cervical cancer

This is a classic clinical presentation of possible invasive cervical cancer.

Important clues:

- * Intermenstrual bleeding
- * A visible 2-cm friable lesion on the cervix
- * Previous cervical screening was 5 years ago

A friable, irregular cervical lesion that bleeds easily should be considered malignant until proven otherwise.

Why not cervical ectropion?

Ectropion can cause contact bleeding, particularly in younger women, but it typically appears as a smooth red area around the external os rather than a friable mass.

Why not cervical polyp?

A polyp can cause bleeding but is usually a discrete polypoid lesion rather than a suspicious friable cervical mass.

Why not cervical warts?

Warts are usually exophytic/cauliflower-like lesions and do not fit this presentation.

👉 Most likely diagnosis = cervical cancer.

Important exam principle:

A suspicious visible cervical lesion requires urgent assessment/biopsy regardless of the previous screening result.

Q35. Correct answer: Total abdominal hysterectomy with bilateral salpingo-oophorectomy

The woman is 53 years old, has stage IA1 squamous cell carcinoma, and has completed or is presumed to have completed childbearing.

For appropriately selected IA1 disease without LVSI, treatment can be conservative with conization, particularly when fertility preservation is desired. However, in a 53-year-old who does not require fertility preservation, hysterectomy is an appropriate definitive treatment.

Because she is 53, the question expects:

☞ Total abdominal hysterectomy + bilateral salpingo-oophorectomy (TAH + BSO).

Why not conisation?

Conisation is particularly useful when:

- * Fertility preservation is desired, or
- * A very conservative approach is appropriate.

At 53, definitive hysterectomy is more appropriate in this exam scenario.

Why not radical hysterectomy?

IA1 disease is microinvasive. Radical surgery is excessive when there are no high-risk features such as significant LVSI. Modern guidelines specifically state that radical hysterectomy/trachelectomy is overtreatment for T1a1 disease.

Why not radical trachelectomy?

This is a fertility-sparing procedure and is unnecessary in a 53-year-old who does not need fertility preservation.

Why remove the ovaries?

At 53, she is around/after the menopausal transition, so ovarian conservation is less beneficial than in a young woman. Hence the exam's expected option is TAH + BSO.

Q36. Correct answer: MRI of abdomen and pelvis

Why?

- * MRI is the best imaging modality for local assessment of cervical cancer.
- * It accurately evaluates:
 - * Tumour size
 - * Stromal invasion
 - * Parametrial involvement
 - * Pelvic sidewall involvement

- * Suspicious pelvic lymph nodes
- * Current ESGO guidance considers pelvic MRI the preferred imaging investigation for assessing local cervical cancer extent.
- * CT/PET-CT can additionally be used when assessment for distant metastatic disease is required.

Exam point:

☞ Cervical cancer → MRI pelvis = best for local staging.

Q37. Correct answer: No further therapy ✓

This is the most important calculation in the question.

- * Stromal invasion = 2.5 mm
- * ≤ 3 mm invasion = FIGO stage IA1
- * No lymphovascular space invasion (LVSI)
- * Cone margins are clear.
- * She wants to preserve fertility.

Therefore, conization is definitive treatment.

Current ESGO guidance states that for T1a1/IA1 disease, particularly when margins are clear and LVSI is absent, conization can be definitive treatment; radical surgery would be overtreatment.

Why not radiotherapy?

- * IA1 disease with clear margins and no LVSI has a very low risk of lymph-node involvement.
- * Radiotherapy would unnecessarily destroy fertility.

Why not radical hysterectomy?

- * It is excessive treatment for IA1 disease.
- * It eliminates fertility.

Exam pearl:

☞ Invasion ≤ 3 mm + clear margins + LVSI negative + fertility desired → conization alone/no further treatment.

Q38. 35-year-old with BRCA1 mutation

Correct answer: 35–40 years 

A woman with a BRCA1 mutation has a substantially increased lifetime risk of ovarian/fallopian tube cancer.

The risk-reducing operation is:

Risk-reducing bilateral salpingo-oophorectomy (RRSO)

= removal of both fallopian tubes and ovaries.

For BRCA1, RRSO is generally recommended around 35–40 years, or after completion of childbearing. ACOG specifically recommends considering it between 35 and 40 years for BRCA mutation carriers.

Why not 45–50 years?

* Waiting until this age leaves a BRCA1 carrier exposed to significant ovarian cancer risk.

Important consequence:

* RRSO causes immediate surgical menopause in a premenopausal woman.

* Therefore, timing must consider fertility plans and menopause management.

Exam pearl:

👉 BRCA1 → RRSO at 35–40 years

👉 BRCA2 → often slightly later, around 40–45 years.

Q39. Correct answer: Echocardiography (Echo)

The key clue is doxorubicin.

Doxorubicin is an anthracycline and can cause dose-dependent cardiotoxicity, particularly left ventricular systolic dysfunction/cardiomyopathy.

Pregnancy itself increases:

* Blood volume

* Cardiac output

* Cardiac workload

Therefore, a woman previously exposed to anthracyclines requires assessment of cardiac function, and echocardiography is the appropriate investigation.

Why Echo?

It can assess:

* Left ventricular ejection fraction (LVEF)

- * LV systolic function
- * Structural abnormalities
- * Other cardiac dysfunction

Why not CT scan?

- * Unnecessary radiation exposure during pregnancy unless specifically indicated.

Why not mammography?

- * Mammography may have a role in breast cancer surveillance, but it does not assess the major pregnancy-related concern from previous doxorubicin exposure—cardiac function.

Exam pearl:

🔑 Previous anthracycline (doxorubicin) exposure + pregnancy → assess cardiac function with echocardiography.

Q40. Correct answer: B) Yolk sac tumour

Why?

A 13-year-old girl with a solid ovarian tumour and the tumour markers:

- * ↑ AFP (alpha-fetoprotein) → strongly suggests a yolk sac (endodermal sinus) tumour
- * ↑ LDH → can be elevated in germ-cell tumours
- * β-hCG normal → makes a significant hCG-secreting germ-cell tumour less likely
- * CA-125 normal → argues against an epithelial ovarian tumour

[5:40 pm, 18/9/2026] Mamta Singh: Tumour

Typical marker

Yolk sac tumour

☆ AFP ↑↑

Dysgerminoma

LDH ↑; sometimes β-hCG

Choriocarcinoma

β-hCG ↑↑

Mature teratoma

Usually no specific tumour-marker elevation

Epithelial ovarian tumour

CA-125 may be elevated

Mamta Singh: Important exam point: In a young girl/adolescent, a solid ovarian mass + markedly elevated AFP = yolk sac tumour until proven otherwise.

So the answer is B. Yolk sac tumour.

Q41. Correct answer: D. Immediate CS and radical hysterectomy with pelvic lymph-node dissection ✓

The important points are:

- * Pregnancy = 32 weeks
- * Cervical tumour = 4 cm
- * Tumour confined to cervix
- * No parametrial invasion

A 4-cm cervical tumour corresponds approximately to FIGO IB3 when confined to the cervix.

At 32 weeks, the fetus is sufficiently mature that delivery can be planned, followed by definitive treatment of the cervical cancer.

For cervical cancer diagnosed during pregnancy, the treatment must balance:

1. Fetal maturity
2. Cancer stage
3. Risk of delaying definitive treatment

For locally advanced disease, treatment can be coordinated around delivery; ESGO guidance recommends cesarean delivery rather than spontaneous vaginal delivery, with definitive cancer treatment at the time of/after delivery according to stage.

Because this is a 4-cm tumour, simple trachelectomy is not appropriate.

Why not A – Trachelectomy + LSCS?

- * Fertility-sparing trachelectomy is generally considered for carefully selected small, early-stage tumours, not a 4-cm tumour.

Why not B – Continue pregnancy and CS followed only by lymphadenectomy?

- * Lymphadenectomy alone does not provide definitive treatment for a 4-cm cervical cancer.

Why not C – Immediate CS and hysterectomy?

- * A radical hysterectomy, rather than simple hysterectomy, is required when surgery is the definitive treatment for a tumour of this size.

Exam pearl:

🔑 Pregnancy + cervical cancer ≥ 4 cm + disease confined to cervix → delivery by CS followed by definitive radical treatment.

Q42. Correct answer: B. Brachytherapy ✓

This is an early-stage endometrioid endometrial cancer with:

- * Grade 2
- * $\geq 50\%$ myometrial invasion
- * Apparently no mention of extrauterine disease.

Deep myometrial invasion increases the risk of vaginal recurrence.

For stage I endometrioid carcinoma, grade 1–2 with $\geq 50\%$ myometrial invasion, vaginal brachytherapy is an accepted/recommended adjuvant treatment to reduce vaginal recurrence, particularly when other high-risk features are absent.

Why not A – ERB plus brachytherapy?

- * Combined external-beam radiotherapy and brachytherapy is generally more treatment than necessary for an otherwise intermediate-risk, node-negative case.

Why not C – Nothing?

- * With deep ($>50\%$) myometrial invasion, observation alone is less appropriate because recurrence risk is increased.

Why not D – Radiotherapy alone?

- * If adjuvant radiation is indicated in this setting, vaginal brachytherapy is particularly effective for reducing vaginal recurrence with less toxicity than pelvic EBRT.

Exam pearl:

👉 Grade 1–2 + $\geq 50\%$ myometrial invasion + otherwise low/intermediate-risk disease → vaginal brachytherapy.

Q43. Correct answer: B. USG (ultrasound) ✓

Ultrasound is the first-line imaging investigation for an adnexal/ovarian mass.

Q44. Correct answer: C. Estrogen plus progesterone ✓

The key issue is whether the uterus is still present.

- * Bilateral salpingo-oophorectomy causes an abrupt fall in estrogen → surgical menopause → hot flushes and other menopausal symptoms.
- * She has no personal history of breast cancer, so menopausal hormone therapy can be considered.
- * Because the uterus is intact, estrogen must be combined with a progestogen to protect the endometrium from hyperplasia and endometrial cancer.
- * Therefore: Estrogen + progesterone is the best answer.

Why not estrogen alone?

Unopposed estrogen stimulates the endometrium and increases the risk of endometrial hyperplasia/cancer.

Why not tibolone?

It is an alternative menopausal therapy in selected women, but in this question the standard answer is combined HRT because the uterus is intact.

Exam pearl:

☞ Hysterectomy done → estrogen alone

☞ Uterus present → estrogen + progestogen

Q45. Correct answer: B. High-risk serous tumour ✓

BRCA1 and BRCA2 mutations are strongly associated with high-grade serous carcinoma of the ovary/fallopian tube/peritoneum.

The important association is:

BRCA1/2 → homologous recombination defect → high-grade serous carcinoma

This is the most important epithelial ovarian cancer subtype associated with hereditary BRCA mutations.

Why not mucinous tumour?

Mucinous ovarian cancers are not the characteristic BRCA-associated tumour.

Why not low-risk serous tumour?

Low-grade serous carcinoma has a different molecular pathway and is not the classic BRCA-associated tumour.

Why not yolk sac tumour?

Yolk sac tumour is a germ-cell tumour, not the typical hereditary BRCA-associated ovarian cancer.

Exam pearl:

☞ BRCA1/2 → High-grade serous ovarian carcinoma ☆

Q46. Correct answer: C. Chemotherapy ✓

The important clue is intraoperative surgical spill.

If an ovarian tumour that was apparently confined to the ovary is ruptured/spilled during surgery, this can result in FIGO stage IC1 disease.

For epithelial ovarian cancer, treatment generally consists of:

Surgical staging/debulking → platinum-based chemotherapy when indicated

Chemotherapy is therefore the appropriate adjuvant treatment in this question.

Why not intraperitoneal chemotherapy?

Intraperitoneal chemotherapy is not the routine answer simply because a surgical spill occurred.

Why not external-beam radiotherapy?

Radiotherapy has a very limited role in epithelial ovarian cancer.

Why not brachytherapy + chemotherapy?

Brachytherapy is not standard treatment for ovarian cancer.

Exam pearl:

👉 Epithelial ovarian cancer → surgery ± platinum-based chemotherapy

👉 Radiotherapy is generally not the standard adjuvant treatment.

Q47. Correct answer: A. USG (ultrasound) ✓

Ultrasound is the preferred initial imaging investigation for a palpable breast mass during pregnancy, particularly in a young woman.

Why?

- * No ionising radiation.
- * Can distinguish solid from cystic lesions.
- * Can identify suspicious features.
- * It can guide biopsy if necessary.

If ultrasound shows suspicious findings, core needle biopsy can be performed during pregnancy.

What about mammography?

Mammography can be performed during pregnancy when clinically indicated, with appropriate abdominal/pelvic shielding, but it is not the first-line investigation for a new palpable breast mass in this young pregnant woman.

What about MRI?

MRI is not the routine first investigation for a palpable breast lump during pregnancy.

Exam pearl:

👉 Pregnancy + palpable breast lump → Ultrasound first ☆

👉 If suspicious → core biopsy

Ideally, this includes:

- * Transvaginal ultrasound (TVUS)
- * $\pm$ transabdominal ultrasound

It can determine:

- * Cystic vs solid nature
- * Septations
- * Papillary projections
- * Bilaterality
- * Ascites
- * Doppler vascularity
- * Features suspicious for malignancy

If ultrasound suggests malignancy or the disease appears advanced, CT is then useful for staging.

Why not PET-CT?

- * Not the initial investigation.
- * It is generally reserved for selected staging/restaging situations.

Why not MRI?

- * MRI is excellent for problem-solving/characterisation of an indeterminate adnexal mass, but it is not the usual first-line test.

Why not pelvic examination?

- * Pelvic examination is important clinically but cannot adequately characterise an ovarian mass.

Exam pearl:

👉 Suspected ovarian/adnexal mass → Ultrasound first.

Q48. Correct answer: A. Measure CA-125 

Key findings:

- * Postmenopausal woman
- * Bilateral ovarian cysts
- * 4 cm and 5 cm
- * Septations → these are not simple cysts
- * No ascites/free fluid

In a postmenopausal woman with an ovarian/adnexal mass, the initial assessment is:

TVS + CA-125 → calculate RMI

CA-125 alone does not diagnose ovarian cancer, but it is incorporated into the Risk of Malignancy Index (RMI).

Why not reassure?

Because bilateral and septated cysts are not simple benign cysts.

Why not immediate bilateral salpingo-oophorectomy?

You need risk stratification first.

Why not staging laparotomy immediately?

You would generally establish the malignancy risk before proceeding to definitive oncological surgery.

Exam pearl:

👉 Postmenopausal ovarian mass → CA-125 + ultrasound → RMI.

Q49.

The stem shown for Q49 is essentially identical to Q48.

The options are:

- * A. Reassure
- * B. Bilateral salpingo-oophorectomy
- * C. Staging laparotomy
- * D. CA-125

Therefore, D. CA-125 is the appropriate answer if this is the initial assessment. 

This appears to be a duplicate/repeated question, with the answer moved from option A in Q48 to option D in Q49.

The clinical reasoning remains the same:

Postmenopausal + complex/septated ovarian cysts → CA-125 → RMI calculation.

Only after calculating the RMI can you decide whether the patient needs surveillance, surgery, or referral to a gynaecological oncology service.

Q50. Correct answer: A. CT scan

This question tests the RMI threshold.

The RMI is:

$\text{RMI} = \text{Ultrasound score} \times \text{Menopausal status} \times \text{CA-125}$

An RMI ≥ 200 is considered high risk for ovarian malignancy in the commonly used RMI-I system.

Here:

RMI = 296 $\rightarrow$ >200 $\rightarrow$ high risk

Therefore, the next step is CT imaging to assess the extent of disease and plan management.

CT helps assess:

- * Peritoneal disease
- * Omental involvement
- * Lymphadenopathy
- * Liver/splenic involvement
- * Distant metastases
- * Overall operability

Why not immediately perform staging laparotomy?

Because once the RMI is ≥ 200 , cross-sectional imaging is performed to determine the extent of disease and guide referral/management.

Why not bilateral salpingo-oophorectomy?

This is not a straightforward benign ovarian cyst. The combination of bilaterality + ascites + raised CA-125 + RMI 296 is highly suspicious for malignancy, so oncological assessment and staging are required.

👉 RMI ≥ 200 $\rightarrow$ CT + referral to gynaecological oncology.

☆ Very important exam sequence

Postmenopausal ovarian mass

TVUS $\rightarrow$ CA-125 $\rightarrow$ RMI

Then:

- * RMI <200 $\rightarrow$ manage according to morphology/risk
- * RMI ≥ 200 $\rightarrow$ CT + gynaecological oncology referral

Memory trick:

⊗ Mass $\rightarrow$ CA-125 + US $\rightarrow$ RMI

⊙ RMI ≥ 200 $\rightarrow$ CT + gyn-oncology referral

PAPER 8 ANSWER

Q1. Correct answer: A. Re-excision

The lesion was excised, but histology shows VIN1 extending up to the margin.

- * VIN1 corresponds to low-grade squamous intraepithelial lesion (LSIL) and is usually associated with HPV.
- * If abnormal epithelium is present at the excision margin, the lesion has not been completely removed.
- * In the context of this MCQ, the expected management is re-excision to obtain clear margins.

Why not colposcopy?

Colposcopy may be useful for assessment of other lower genital tract lesions, but it does not remove the residual VIN at the positive margin.

Why not oncology referral?

VIN1 itself is not invasive cancer.

Exam pearl:

👉 VIN extending to the excision margin → ensure complete excision/appropriate treatment of residual disease.

Q2. Best answer from the clinical scenario: A. Reassure

The important information is:

- * Vulval basal cell carcinoma
- * Lesion has already been excised
- * Clear margin = 1 cm

A 1-cm margin is generally adequate for vulval BCC. If the lesion has been completely excised with clear margins, no additional radical surgery is required.

Why not vulvectomy?

BCC is usually a slow-growing, locally invasive tumour and does not routinely require radical vulvectomy when adequately excised.

Why not wide local radical excision?

The lesion has already been removed with a clear 1-cm margin.

Why not oncology referral?

Routine oncology treatment isn't required for a completely excised uncomplicated vulval BCC.

⚠ Important: The image appears to place "ANS" beside C, but that would be inconsistent with the clinical information if the margin is truly clear by 1 cm. For an exam question, I would verify the original answer key/source rather than blindly memorising C.

Exam pearl:

👉 Vulval BCC + complete excision + clear adequate margin → no further treatment, follow-up.

Q3. Correct answer: B. Laparoscopic bilateral salpingo-oophorectomy ✓

Important clues:

- * Age 52
- * Symptomatic: bloating, discomfort, fullness
- * 6-cm ovarian cyst
- * Described as simple
- * Small 2-cm calcified fibroid is unlikely to be responsible for the major symptoms.

At around/after menopause, a 6-cm ovarian cyst, particularly when symptomatic, requires active assessment/management rather than simple reassurance.

Because the patient is 52 and presumably does not require fertility preservation, laparoscopic bilateral salpingo-oophorectomy (BSO) is a reasonable definitive option in the context of this MCQ.

Why not observation?

A 6-cm symptomatic cyst in this age group is less suitable for simple observation.

Why not unilateral salpingo-oophorectomy?

In a woman around/after menopause who has completed childbearing, removal of both tubes and ovaries may be preferred to avoid future adnexal disease and eliminate ovarian cancer risk from the remaining ovary.

Why not total abdominal hysterectomy + BSO?

The small calcified fibroid alone does not justify major abdominal hysterectomy.

Exam pearl:

👉 Peri/postmenopausal + symptomatic sizeable ovarian cyst → surgical management; laparoscopy with BSO may be appropriate.

Q4. Correct answer: D. Chemotherapy ✓

The options visible are:

- * A. Surgical treatment
- * B. Brachytherapy
- * C. External-beam radiotherapy
- * D. Chemotherapy

The key is that this is ovarian cancer, not cervical cancer.

Ovarian epithelial cancer is primarily treated with:

Cytoreductive surgery + platinum-based chemotherapy

If the patient has already undergone laparotomy and the cancer has extended to the fallopian tube, systemic chemotherapy is the appropriate next treatment.

Typical chemotherapy is based on a platinum compound (usually carboplatin) + a taxane (usually paclitaxel).

Why not brachytherapy?

Brachytherapy is mainly used for cancers such as cervical/endometrial/vaginal cancer, not as standard treatment for ovarian cancer.

Why not external-beam radiotherapy?

Radiotherapy has a limited role in epithelial ovarian cancer because the disease is often intraperitoneal and systemic.

Why not more surgery?

If adequate staging/cytoreduction has already been performed, the next major treatment is systemic chemotherapy.

Exam pearl:

👉 Ovarian epithelial cancer → surgery + platinum-based chemotherapy.

👉 Radiotherapy is NOT the routine primary treatment

Q5. Correct answer: A. Reassure and discharge

An 8-mm = 0.8-cm simple cyst is extremely small.

The key features are:

- * Postmenopausal woman
- * Simple cyst
- * Only 8 mm
- * No suspicious features mentioned

Current RCOG guidance states that unilateral, unilocular simple cysts ≤ 3 cm in postmenopausal women do not require routine follow-up.

Therefore, reassurance and discharge is appropriate.

Why not follow-up at 4–6 months?

That approach is relevant to larger simple cysts, particularly >3 cm to ≤ 5 cm with normal CA-125. An 8-mm cyst is below this threshold.

Why not salpingo-oophorectomy?

There is no indication for surgery for such a tiny, simple cyst without suspicious features.

Exam pearl:

👉 Postmenopausal + simple unilateral cyst ≤ 3 cm $\rightarrow$ no routine follow-up.

Q6. Correct answer: D. Surgery plus chemotherapy

The question describes:

- * 50-year-old
- * Ovarian cancer
- * Tumour has extended to the fallopian tube
- * Referral to a gynaecological oncologist

The standard treatment of epithelial ovarian cancer is based on:

Cytoreductive/staging surgery + platinum-based chemotherapy

Chemotherapy commonly uses a platinum agent such as carboplatin, usually combined with a taxane such as paclitaxel.

Why not brachytherapy?

Brachytherapy has no routine role in treating ovarian cancer.

Why not brachytherapy + chemotherapy?

Again, brachytherapy is not standard ovarian cancer treatment.

Why not surgery alone?

Even when surgery is appropriate, epithelial ovarian cancer frequently requires systemic chemotherapy depending on stage and histology.

Exam pearl:

👉 Ovarian epithelial cancer = surgery + platinum-based chemotherapy.

Q7. Correct answer: A. Follow-up after 4 months ✓

This is a premenopausal woman with ovarian cysts.

The important point is that the cysts are relatively small and the question does not describe suspicious ultrasound features.

For simple ovarian cysts in premenopausal women, most small cysts are physiological and resolve spontaneously. RCOG notes that simple cysts <5 cm generally do not require treatment or routine follow-up when the scan is reassuring and the woman is asymptomatic.

However, the question specifically provides a 4-month follow-up option, and that is evidently the intended answer in this MCQ set.

Why not discharge?

Because there are two cysts, one measuring 4.5 cm, and the question appears to be testing conservative interval reassessment.

Why not MRI?

MRI is generally reserved for an indeterminate or very large lesion, not a straightforward benign-appearing cyst of this size.

Why not immediate surgery?

There are no malignant or acute complications described.

⚠️ Exam note: Current guidance can be more conservative than this older MCQ. If the cysts are truly simple and the patient is asymptomatic, routine follow-up may not be necessary for cysts <5 cm.

So for this question's answer key: A, but remember the modern guideline principle.

Q8. Correct answer: D. Juvenile granulosa cell tumour ✓

This is a classic estrogen-secreting ovarian tumour.

The clues are:

10-year-old + ovarian mass + breast development → estrogen-producing tumour

Juvenile granulosa cell tumours are sex-cord stromal tumours that commonly secrete estrogen. In prepubertal girls, excess estrogen can cause precocious puberty, including breast development and sometimes vaginal bleeding.

Why not teratoma?

Teratomas are germ-cell tumours and do not characteristically produce estrogen causing precocious puberty.

Why not dysgerminoma?

Dysgerminoma is a germ-cell tumour; its classic marker is LDH, not estrogen.

Why not yolk sac tumour?

Yolk sac tumour is associated with markedly elevated AFP.

Why not mucinous tumour?

Mucinous epithelial ovarian tumours are not characteristically associated with estrogen-induced breast development.

Yolk sac tumour

↑ AFP

Dysgerminoma

↑ LDH

Juvenile granulosa cell tumour

↑ Estrogen → precocious puberty

Choriocarcinoma

↑ β-hCG

5

A. Reassure & discharge

8-mm simple cyst

6

D. Surgery + chemotherapy

Ovarian cancer

7

A. Follow-up after 4 months

Small benign-appearing cysts; answer expected by this MCQ

8

D. Juvenile granulosa cell tumour

Estrogen → breast development

Q9. Correct answer: E. Surgery + chemotherapy ✓

The important clue is ovarian cancer with intraoperative spill.

Surgical rupture/spillage of an ovarian tumour can upstage an otherwise confined ovarian cancer (e.g., FIGO IC1 for surgical spill in epithelial ovarian cancer).

Management of epithelial ovarian cancer is generally:

Cytoreductive/staging surgery + platinum-based chemotherapy

The chemotherapy commonly includes:

* Carboplatin + paclitaxel

Why not intraperitoneal chemotherapy?

Intraperitoneal chemotherapy is not automatically indicated simply because surgical spill occurred.

Why not radiotherapy/brachytherapy?

Radiotherapy has no routine primary role in epithelial ovarian cancer.

Exam pearl:

👉 Ovarian cancer → surgery + platinum-based chemotherapy.

Q10. Correct answer: E. Surgery + chemotherapy ✓

Again, this is ovarian epithelial cancer.

Extension from the ovary to the fallopian tube represents spread within the pelvic reproductive organs. The appropriate treatment is based on surgical staging/cytoreduction followed by systemic chemotherapy when indicated.

The key distinction is:

* Ovarian cancer → surgery + chemotherapy

* Cervical cancer → surgery and/or chemoradiation depending on stage

* Endometrial cancer → surgery ± radiotherapy/chemotherapy depending on risk

Why not brachytherapy?

Brachytherapy is not standard treatment for ovarian cancer.

Why not external-beam radiotherapy?

It is not the routine primary adjuvant treatment for epithelial ovarian cancer.

Exam pearl:

👉 Ovarian cancer is primarily a surgical + systemic chemotherapy disease.

Q11. Correct answer: A. TVS (transvaginal ultrasound) ✓

TVS is the first-line imaging investigation for suspected ovarian/adnexal pathology in a woman who can undergo transvaginal imaging.

It allows assessment of:

- * Ovarian size
- * Cystic vs solid nature
- * Septations
- * Papillary projections
- * Bilaterality
- * Ascites
- * Doppler vascularity

If an ovarian mass is found, further assessment may include CA-125 and risk-of-malignancy scoring, particularly in postmenopausal women. RCOG guidance supports ultrasound as the key initial assessment and recommends CT when ultrasound/clinical findings and tumour markers suggest malignancy.

Why not MRI?

MRI is generally a second-line investigation for an indeterminate mass when ultrasound is inconclusive.

Why not CT?

CT is mainly used for further staging when malignancy is suspected, rather than as the initial investigation.

Why not pelvic examination alone?

It cannot adequately characterise an ovarian mass.

Exam pearl:

🔑 Suspected ovarian pathology → TVS first.

Q12. Correct answer: E. USG (ultrasound) ✓

The question is testing breast imaging during pregnancy.

Ultrasound is the preferred initial imaging modality for evaluating a breast problem during pregnancy because it:

- * Uses no ionising radiation
- * Is safe for the fetus
- * Is particularly useful in younger women with dense breasts
- * Can distinguish cystic from solid lesions

* Can guide biopsy when necessary

Current guidance continues to support ultrasound as a first-line modality for breast evaluation during pregnancy.

Why not CT scan?

CT involves ionising radiation and isn't the routine breast investigation during pregnancy.

Why not MRI breast?

MRI can have a role in selected circumstances, particularly for staging when ultrasound/mammography are insufficient, but contrast-enhanced breast MRI is generally avoided during pregnancy.

Why not mammography?

Mammography can be performed safely when clinically indicated during pregnancy, so it is not absolutely contraindicated. However, for a young pregnant woman with a breast concern, ultrasound is generally the initial test. If ultrasound is suspicious, diagnostic mammography can be added.

Important distinction:

☞ Pregnancy + breast lump → USG first

☞ Suspicious USG → mammography can be added + core biopsy

Q13. Correct answer: A. Immature teratoma 

The key findings are:

- * 13 years old
- * Solid ovarian tumour
- * β -hCG normal
- * CA-125 normal
- * AFP raised
- * LDH raised

The intended diagnosis is immature teratoma.

Why?

Immature teratoma is a germ-cell tumour occurring predominantly in children and young women. AFP may be elevated, particularly when there is an associated yolk-sac component, while LDH can also be elevated.

Why not yolk sac tumour?

Yolk sac tumour is the classic ovarian tumour associated with markedly elevated AFP. However, the question's combination of a young patient with a solid tumour and both AFP and LDH elevation is intended to point toward immature teratoma.

Why not dysgerminoma?

Dysgerminoma is classic...

Q14. Answer according to the question key: D. No need for screening ⚠

There is an important distinction here.

A transgender man who still has a cervix remains eligible for cervical cancer screening. Screening recommendations are based on anatomy, not gender identity. CDC and ACOG guidance support cervical screening for transgender men who have a cervix.

However, the question says that the patient refuses screening.

A competent adult has the right to decline screening after appropriate counselling. Therefore, the practical management is:

Explain the benefits/risks → offer screening → respect the informed refusal.

So I would not memorise “transgender man = no need for screening.” That statement is incorrect if the cervix is present.

Exam pearl:

👉 Transgender man + cervix → cervical screening according to age/risk.

👉 If the patient refuses → respect informed refusal; don't force screening.

This is one question where the wording/answer key appears problematic.

Q15. Correct answer: B. Continue pregnancy and trachelectomy after delivery ✓

The important factors are:

* Pregnancy = 32 weeks

* Cervical cancer = stage IB1

* No information suggesting an aggressive histological subtype or advanced disease.

At 32 weeks, the fetus is already approaching maturity. For selected early-stage cervical cancers diagnosed late in pregnancy, treatment can sometimes be deferred until delivery when clinically safe.

The goal is to avoid unnecessarily compromising the pregnancy while still providing definitive cancer treatment.

The intended approach in this MCQ is therefore:

Continue pregnancy → deliver → definitive fertility-sparing treatment (trachelectomy) after delivery.

Early-stage cervical cancer during pregnancy can sometimes be managed by delaying treatment until fetal maturity, depending on stage, tumour characteristics and gestational age.

Why not A — immediate CS + hysterectomy?

At 32 weeks, immediate radical treatment would expose the fetus to prematurity without necessarily providing an advantage if treatment can safely be delayed.

Why not C — deliver then lymphadenectomy alone?

Lymphadenectomy alone does not treat the primary cervical tumour.

Why not D — trachelectomy and CS now?

At 32 weeks, performing trachelectomy during pregnancy is not the usual approach when treatment can safely be deferred until delivery. Contemporary guidance considers trachelectomy in pregnancy only in highly selected cases.

Why not E — terminate pregnancy?

Termination isn't automatically required for an early-stage cervical cancer diagnosed at 32 weeks.

Exam pearl:

☞ Early-stage cervical cancer + late pregnancy + stable disease → consider continuing pregnancy and treating after fetal maturity.

Q16. Correct answer: B. 40% ✓

This is a very high-yield BRCA question.

A BRCA1 pathogenic variant substantially increases ovarian/fallopian-tube/primary peritoneal cancer risk.

Current estimates put the ovarian cancer risk for BRCA1 carriers at approximately 39–46% by age 70, depending on the population/study.

Therefore, among the options:

20% ✗

40% ✓

80% ✗

50% ✗

33% ✗

So 40% is the best answer.

Importantly, mastectomy reduces breast cancer risk but does not remove the ovarian cancer risk associated with BRCA1. BRCA1 carriers also have increased risk of fallopian tube and primary peritoneal cancers.

☆ BRCA numbers to remember

BRCA1

* Breast cancer: roughly 45–85% depending on estimate

* Ovarian cancer: roughly 40%

BRCA2

* Ovarian cancer: roughly 10–27%

Q17. Correct answer: C. CT abdomen, pelvis and chest ✓

The important clue is that histopathology has unexpectedly revealed adenocarcinoma.

Once an unexpected malignancy is diagnosed, the next step is to determine:

* Local/pelvic disease

* Lymph-node involvement

* Distant metastases, particularly in the chest

Therefore, CT chest + abdomen + pelvis is appropriate for staging.

Why not MRI?

MRI is excellent for local pelvic staging, particularly for assessing the uterus/cervix, but once an unexpected carcinoma has been diagnosed and the purpose is overall staging, CT chest/abdomen/pelvis is more appropriate.

Why not PET?

PET-CT can be useful in selected staging situations, but it is not routinely the first investigation for every newly diagnosed endometrial adenocarcinoma.

Exam pearl:

🔑 Unexpected endometrial adenocarcinoma → assess extent of disease with appropriate cross-sectional staging imaging.

Q18. Correct answer: C. 40 years ✓

Lynch syndrome is associated with increased risk of:

- * Endometrial cancer
- * Ovarian cancer
- * Colorectal cancer
- * Several other malignancies

Risk-reducing surgery consists of:

Total hysterectomy + bilateral salpingo-oophorectomy (TH + BSO)

The operation is generally recommended after completion of childbearing, commonly around 40–45 years, depending on the gene, family history and individual circumstances.

Since the options include 40 years, this is the best answer.

Why not 30 or 35?

This may unnecessarily cause premature surgical menopause in many women who have not completed their reproductive plans.

Why not 50 years?

Waiting until 50 leaves the woman exposed to substantial endometrial/ovarian cancer risk.

High-yield point

Lynch syndrome → complete childbearing → risk-reducing hysterectomy + BSO around 40–45 years.

So, in this MCQ:

☞ 40 years = best option.

Q19. Correct answer: A. BRCA1 mutation ✓

The strongest risk factor among the options is a BRCA1 pathogenic mutation.

BRCA1 is associated with a markedly increased lifetime risk of:

- * Breast cancer
- * Contralateral breast cancer
- * Ovarian/fallopian tube cancer

Let's compare the options:

A. BRCA1 mutation → highest risk ☆

B. BRCA2 mutation → also very high risk, but generally lower than BRCA1

- C. Family with Lynch syndrome → primarily colorectal/endometrial cancer risk
- D. Two first-degree relatives with breast cancer → significant familial risk, but less specific/high than a pathogenic BRCA mutation
- E. First-degree relative with lung cancer → not a major hereditary breast-cancer risk factor

Exam pearl:

☞ BRCA1 = very high breast cancer risk + high ovarian cancer risk.

Q20. Correct answer: D. Anthracycline ✓

This is a very important pregnancy pharmacology question.

Among the listed drugs, anthracyclines such as doxorubicin/epirubicin are commonly used for breast cancer during pregnancy when chemotherapy is required.

Chemotherapy is generally avoided during the first trimester because organogenesis is occurring and fetal exposure carries a high risk of malformations.

After the first trimester, several chemotherapy regimens can be used when clinically indicated, including anthracycline-based chemotherapy.

Why the other options are less appropriate?

A. Cyclophosphamide

It can be used as part of breast-cancer chemotherapy, but usually in combination with an anthracycline rather than as the best single answer here.

B. Steroid

Corticosteroids have selected obstetric and supportive uses but are not the principal cytotoxic treatment for breast cancer.

C. Etoposide

Not a standard drug for routine breast cancer chemotherapy during pregnancy.

E. Methotrexate ✗

Methotrexate is contraindicated in pregnancy because of its teratogenic and abortifacient effects.

Q21. Correct answer: C. Routine recall in 5 years ✓

The key is HPV negative.

In the current UK primary HPV screening pathway, if a woman is hrHPV negative, she is returned to routine recall. For a 50-year-old, the routine interval is 5 years.

The mild dyskaryosis does not change management when the current hrHPV test is negative in the routine screening pathway.

Why not colposcopy?

Colposcopy is required when hrHPV is positive with abnormal cytology, but not for an isolated mild cytological abnormality with a negative hrHPV result in this pathway.

Why not repeat HPV in 6 months?

This is not the standard pathway for a routine hrHPV-negative result.

Why not 3 years?

A 3-year interval applies in specific situations, particularly younger women with a recent previous HPV-positive result. A 50-year-old with a routine HPV-negative result goes to 5-year recall.

☆ Exam pearl:

HPV negative → routine recall

Age ≥ 50 → 5 years

Q22. Correct answer: C. Both respiratory function test and thyroid function test ✓

There are two important late-treatment effects in this question.

1. Bleomycin → lung toxicity

Bleomycin can cause pulmonary toxicity, including interstitial lung disease and reduced pulmonary function.

Therefore, respiratory assessment is relevant, particularly when planning pregnancy because pregnancy increases respiratory and cardiovascular demands.

2. Neck radiotherapy → thyroid dysfunction

Radiation involving the neck/thyroid can cause hypothyroidism, which may become clinically important during pregnancy.

Hodgkin lymphoma survivors who received neck radiation have an increased risk of hypothyroidism, and long-term thyroid surveillance is recommended.

Therefore:

Bleomycin → Respiratory function

Neck RT → Thyroid function

→ Both are required.

Why not echocardiography?

Mediastinal radiation can increase long-term cardiovascular risk, but there is no history here of anthracycline exposure or cardiac disease that makes echocardiography the best answer among these choices.

☆ Memory trick:

BLEO → LUNG

NECK RT → THYROID

Q23. Correct answer: E. Cone biopsy ✓

The important facts are:

- * Pregnancy = 17 weeks
- * Cervical cancer = stage IA
- * The disease is therefore microinvasive/early cervical cancer.

In pregnancy, treatment must balance maternal oncological safety with preservation of the pregnancy when appropriate. Management should be individualised by a specialist multidisciplinary team.

For suspected/confirmed microinvasive cervical cancer, conization (cone biopsy) is important because it:

- * Provides an adequate specimen to assess depth of invasion.
- * Determines whether the disease is truly microinvasive.
- * Can be therapeutic for selected IA1 lesions.

Why not LLETZ?

LLETZ can be used for CIN, but when invasive cancer is suspected, a cone biopsy provides a better specimen for assessing the depth and margins of invasion.

Why not hysterectomy?

A hysterectomy at 17 weeks would terminate the pregnancy and is excessive for appropriately selected stage IA disease.

Why not radical trachelectomy?

This is much more extensive than required for microinvasive disease.

Why not immediate caesarean + hysterectomy?

Again, this is unnecessarily radical for stage IA disease.

⚠ Important distinction for exams:

If the question specifies IA1 without LVSI, conization may be definitive treatment. Management becomes different for IA2 or LVSI-positive disease, so always look for the exact IA substage.

☆ Exam pearl:

Pregnancy + stage IA cervical cancer → cone biopsy to assess microinvasion.

Q24. Correct answer: D. Renal failure

This is a very important complication of locally advanced cervical cancer.

Stage IIB means the tumour has extended into the parametrial tissue.

As cervical cancer progresses laterally into the parametria, it can involve/compress the ureters.

This can cause:

Ureteric obstruction → hydronephrosis → reduced renal function → renal failure

Therefore, renal failure is the important immediate complication among the listed options.

Why not vesicovaginal fistula?

A vesicovaginal fistula can occur in advanced cervical cancer, particularly with direct bladder involvement or after treatment, but it is not the most characteristic immediate complication being tested here.

Why not severe anaemia?

Advanced cervical cancer can cause anaemia, particularly with bleeding, but this is not the key complication associated with parametrial extension.

Why not cardiovascular accident?

Morbid obesity and smoking increase cardiovascular risk, but they are distractors here.

Why renal failure is particularly important

Cervical cancer can obstruct one or both ureters. Bilateral obstruction can produce:

Hydronephrosis → rising creatinine → renal failure

This is also clinically important because renal impairment can affect the ability to administer cisplatin-based chemoradiotherapy, the standard treatment approach for many locally advanced cervical cancers.

☆ Exam pearl:

Cervical cancer + parametrial involvement → think ureteric obstruction → hydronephrosis → renal failure.

Q25. What is the percentage of bilaterality of dermoid?

Correct answer: B) 10%

Explanation

An ovarian dermoid cyst (mature cystic teratoma) is usually unilateral, but it can be bilateral in about 10–15% of cases.

For an MCQ with 10%, 15%, 20%, 25% as options, the expected answer is generally 10%.

Exam pearl:

👉 Dermoid/mature cystic teratoma → bilateral ≈ 10%

Q26. 52-year-old with CIN 1 + cGIN, and lesion extends to the margins after LLETZ

Correct answer: B) Cone biopsy

Why?

The important part of this question is cGIN (cervical glandular intraepithelial neoplasia) with positive/involved margins.

Unlike CIN 1 alone, glandular lesions can extend higher into the endocervical canal and may be difficult to completely assess with a standard LLETZ. Therefore, when the margins are involved, a further excisional procedure is required to obtain clear margins and exclude an occult invasive lesion.

A cone biopsy provides a deeper, more complete specimen of the endocervical canal and transformation zone. BSCCP notes that glandular abnormalities may require a cone biopsy depending on the findings.

Why not the other options?

- * A. Repeat LLETZ ✗ – Further excision may be needed, but for glandular disease with involved margins, a cone-shaped excision is preferred because it better evaluates the endocervical canal.
- * B. Cone biopsy ✔ – Provides a more adequate excisional specimen and helps establish clear margins.
- * C. HPV testing at 6 months ✗ – Surveillance alone is inappropriate when cGIN remains at the margin.
- * D. HPV at 6 months and annual testing ✗ – Again, this would be follow-up after adequate treatment, not when glandular disease has been incompletely excised.
- * E. Hysterectomy ✗ /not first step – Hysterectomy can be considered in women with cGIN who have completed their family, but it is not automatically the next step after the first incomplete excision. BSCCP notes that hysterectomy may be discussed particularly when the family is complete.

🔑 MRCOG exam point

cGIN + positive margins → further excision to achieve clear margins, commonly cone biopsy.

So:

Q25 → B. 10%

Q26 → B. Cone biopsy

Q27. Correct answer: D. Granulosa cell tumour ✓

Call-Exner bodies are the classic histological feature of granulosa cell tumours.

Granulosa cell tumours are sex-cord stromal tumours of the ovary and often produce estrogen.

The clinical clues may include:

- * Abnormal/irregular uterine bleeding
- * Endometrial hyperplasia
- * Endometrial carcinoma due to prolonged unopposed estrogen
- * In younger girls, precocious puberty

Why not the other options?

- * Teratoma → germ-cell tumour; may contain tissues from all three germ layers.
- * Cystadenoma → epithelial tumour, usually benign.
- * Mucinous carcinoma → epithelial ovarian malignancy.
- * Endometrioma → endometriosis-related “chocolate cyst.”

☆ Exam pearl:

Call-Exner bodies → granulosa cell tumour → estrogen → endometrial hyperplasia.

Q28. Correct answer: C. Wide local excision + bilateral groin lymph-node dissection



A malignant vulval lesion involving the clitoral region requires careful local excision and assessment of the inguinofemoral lymph nodes because vulval cancers commonly spread through the lymphatic system.

The clitoris is a midline structure. Therefore, there is potential for bilateral lymphatic drainage, making bilateral groin-node assessment important.

Why not A – Wide local excision alone?

Invasive vulval cancer requires assessment of regional lymph nodes when indicated by tumour characteristics.

Why not B – Unilateral groin dissection?

Unilateral treatment is more appropriate for carefully selected lateralised lesions with appropriate distance from the midline.

Why not D – Radical vulvectomy?

Modern treatment generally favours individualised wide local excision rather than automatically performing radical vulvectomy.

Why not E – Radiotherapy?

Radiotherapy can be used in selected situations, such as unresectable disease, positive margins/nodes or as part of chemoradiation, but it is not the first choice for a resectable lesion.

☆ Exam pearl:

Vulval cancer near the midline/clitoris → think bilateral groin-node assessment.

Q29. Correct answer: A. HPV 16

The majority of HPV-associated VIN (usual-type VIN) is related to high-risk HPV, particularly HPV 16.

HPV 16 is the most important HPV type associated with:

- * Vulval HSIL/VIN usual type
- * Cervical HSIL
- * Cervical cancer
- * Anal cancer

HPV 6 and 11 are low-risk types and are associated mainly with condyloma acuminata, not high-grade VIN.

HPV 18 is also high-risk, but HPV 16 is the dominant type in HPV-associated vulval disease.

☆ Memory:

HPV 16 → VIN/HSIL

HPV 6 & 11 → genital warts

Q30. Correct answer: C. 43%

This is a high-yield statistic.

Atypical endometrial hyperplasia / EIN has a significant risk of having an endometrial carcinoma already present at the time of hysterectomy, even when the initial biopsy shows only atypical hyperplasia.

The commonly quoted risk in older literature is approximately 40%, making 43% the best option in this MCQ.

Why does this happen?

Endometrial hyperplasia and endometrioid carcinoma can represent a continuum of endometrial neoplasia. A small biopsy may sample only the hyperplastic portion while missing an adjacent carcinoma.

Therefore, hysterectomy is often definitive management for women who have completed childbearing.

Why not 10%?

Too low for atypical hyperplasia/EIN.

Why not 27% or 33%?

These are closer to some reported estimates depending on diagnostic criteria and study population, but the classic exam figure used here is ~40–43%.

☆ Exam pearl:

Atypical hyperplasia/EIN → ~40% concurrent endometrial carcinoma.

Q31. Correct answer: B. 0.1% 

The key phrase is “simple ovarian cyst.”

In a young/premenopausal woman, a simple ovarian cyst is overwhelmingly benign. The risk that a truly simple cyst represents an ovarian malignancy is very low, and the figure used in this MCQ is approximately 0.1%.

This is why a simple cyst in a premenopausal woman is generally managed conservatively according to its:

- * Size
- * Symptoms
- * Ultrasound morphology
- * Persistence

Why not 1–3%?

Those figures are too high for a genuinely simple cyst in a young woman.

☆ Exam pearl:

Premenopausal + simple ovarian cyst → malignancy risk is extremely low (~0.1%).

Q32. Correct answer: B. Squamous cell carcinoma

This is a classic presentation of vulval squamous cell carcinoma (SCC).

The clues are very important:

- * 80 years old
- * Persistent itchy vulval lesion
- * Ulcer
- * Irregular, raised edges
- * Induration around the ulcer

An indurated ulcer with irregular raised edges is highly suspicious for invasive malignancy.

Why SCC?

SCC is the most common invasive vulval malignancy.

There are two major pathways:

HPV-associated pathway

- usually in younger women
- vulval HSIL/VIN

HPV-independent pathway

- usually older women
- differentiated VIN → invasive SCC
- often associated with lichen sclerosus

This 80-year-old woman's presentation fits the HPV-independent pathway particularly well.

Why not VIN?

VIN is a pre-invasive lesion. An ulcer with induration in an elderly woman should be considered invasive cancer until proven otherwise.

Why not syphilis?

A syphilitic chancre is classically a painless ulcer, whereas this lesion is itchy and has irregular raised/indurated edges.

Why not keratoacanthoma?

Keratoacanthoma is a rapidly growing keratinising skin tumour and is much less characteristic of this clinical presentation.

☆ Exam pearl:

Elderly woman + persistent vulval itching + ulcer/induration → vulval SCC.

Q33. Answer in this MCQ: E. After 3 months ⚠

The question asks when she can try to conceive after completing 5 years of tamoxifen.

The key issue is that tamoxifen has a long half-life and active metabolites, so pregnancy should not be attempted immediately after stopping it.

The answer key in your image appears to indicate:

☞ E. After 3 months

Why wait?

Tamoxifen can potentially affect the fetus, so a washout period is required before conception.

However, there is an important modern point for your MRCOG preparation:

Current recommendations generally use a minimum washout period of about 2 months, and the POSITIVE trial used a 3-month washout before attempting pregnancy. Therefore, 3 months is a reasonable exam answer, and it is the answer indicated in this question.

So don't memorise this as "tamoxifen → exactly 3 months" in every guideline.

Exam memory:

☞ Tamoxifen → stop → washout ~2–3 months → pregnancy attempt.

Q34. Correct answer: A. Re-excision ✓

The important finding is:

VIN 2 + excision performed + VIN reaches the margin

This means the abnormal lesion has not been completely excised.

The intended management in this MCQ is re-excision to obtain clear margins.

Why?

The aim of treatment of vulval intraepithelial neoplasia is to:

- * Remove the abnormal lesion
- * Exclude occult invasion
- * Reduce progression/recurrence risk
- * Preserve as much normal vulval tissue as possible

If the lesion extends to the margin, residual disease may remain.

Why not colposcopy?

Colposcopy does not treat the residual vulval lesion.

Why not simply observe?

Observation can be appropriate for selected VIN lesions depending on type, size, symptoms, patient factors and treatment feasibility, but a positive excision margin in this exam is being treated as residual disease requiring further excision.

Why not radiotherapy?

Radiotherapy is not routine treatment for VIN.

☆ Exam pearl:

VIN excised but reaches margin → think re-excision.

Q35. Correct answer: B. 5% ✓

The question asks about the chance that an apparently healthy BRCA1 carrier undergoing risk-reducing salpingo-oophorectomy (RRSO) will have an occult ovarian/fallopian-tube malignancy discovered at surgery/pathology.

The risk is approximately a few percent, and 5% is the best option given.

Why does this happen?

BRCA1 carriers have a high lifetime risk of ovarian/fallopian-tube cancer. Some women may have:

- * Microscopic tubal carcinoma
- * Serous tubal intraepithelial carcinoma (STIC)
- * Occult invasive high-grade serous carcinoma

even though imaging and clinical examination are normal.

This is why RRSO specimens require careful pathological examination of the fallopian tubes, particularly the fimbrial ends.

Don't confuse two different numbers:

BRCA1 lifetime ovarian cancer risk $\approx 40\%$

versus

Occult cancer found at prophylactic surgery $\approx$ a few percent ($\sim 5\%$)

☆ Exam pearl:

BRCA1 + RRSO → occult malignancy $\approx 5\%$.

Q36. Correct answer: C. 40% ☒

This is a classic BRCA number.

A woman with a pathogenic BRCA1 mutation has a lifetime risk of ovarian/fallopian-tube/primary peritoneal cancer of approximately 40%.

So:

* 10% ☐

* 20% ☐

* 40% ☒

* 50% ☐

* 60% ☐

BRCA1 vs BRCA2

A useful MRCOG comparison:

Mutation

Approximate lifetime ovarian cancer risk

BRCA1

~40% ☆

BRCA2

~15–20%

The exact percentages vary between studies, but 40% for BRCA1 is the number being tested here.

Why is RRSO recommended?

Because the ovarian cancer risk is substantial and ovarian cancer screening is not sufficiently effective for preventing mortality.

After completion of childbearing, risk-reducing bilateral salpingo-oophorectomy substantially reduces ovarian/tubal cancer risk.

☆ Memory trick:

BRCA1 → ovary ~40%

BRCA2 → ovary ~20%

Q37. Correct answer: A. Repeat LLETZ procedure for further excision ✓

The key words are:

CIN3 + previous LLETZ + unclear/positive margins

This means there may be residual CIN3 remaining in the cervix.

Therefore, further excision is required to:

1. Remove residual high-grade disease.
2. Ensure clear margins.
3. Exclude occult invasive carcinoma.

Why repeat LLETZ?

A repeat excisional procedure allows the remaining abnormal cervical tissue to be removed and provides another specimen for histological assessment.

Why not simply monitor with HPV at 6 months?

Post-treatment HPV-based surveillance is important, but positive/unclear margins after treatment of CIN3 increase the risk of residual disease. In this particular MCQ, further excision is therefore the intended answer.

Why not cervical conization?

A cone biopsy is another excisional technique, but if the original treatment was LLETZ and further excision is required, repeat LLETZ is the answer offered by this question.

Why not hysterectomy?

At 52, hysterectomy may be considered in selected women who have completed their family, particularly with persistent/recurrent disease or when adequate excision cannot be achieved. But it is not automatically the first step simply because margins are unclear.

☆ Exam pearl:

CIN3 + incomplete/unclear excision → further excision.

Q38. Correct answer: E. 0.9% saline ✓

This is an important emergency-management question.

The patient has:

- * Type 1 diabetes
- * Pregnancy
- * Vomiting
- * Diabetic ketoacidosis (DKA)

The first priority is restoration of circulating volume.

Therefore, the initial IV fluid is an isotonic crystalloid, classically:

0.9% sodium chloride (normal saline) ☆

DKA causes major fluid losses due to:

- * Osmotic diuresis
- * Glycosuria
- * Vomiting
- * Dehydration

Fluid replacement improves:

- * Circulating volume
- * Renal perfusion
- * Glucose clearance
- * Ketone clearance

Why not 5% dextrose?

Dextrose is introduced later, when blood glucose falls to a certain level, so that insulin can be continued to suppress ketogenesis without causing hypoglycaemia.

Why not albumin?

Albumin is not the routine first-line fluid for DKA.

Why not Hartmann's?

Modern DKA protocols may use balanced crystalloids such as Hartmann's in some settings, but for this MCQ, the expected initial fluid is 0.9% saline.

Very important pregnancy point

DKA can occur in pregnancy at lower glucose levels than in non-pregnant patients, and it is a serious maternal and fetal emergency.

Management includes:

IV fluids → IV insulin → potassium/electrolyte management → dextrose when required → treat precipitating cause + close maternal/fetal monitoring

☆ Exam pearl:

DKA → first fluid = isotonic crystalloid; in this question = 0.9% saline.

Q39–40.

The patient has:

- * Type 1 diabetes
- * Prolonged vomiting
- * Bicarbonate = 13 mmol/L → metabolic acidosis
- * Glucose = 18 mmol/L → hyperglycaemia

These findings strongly support DKA, and the next question asks for the serum ketone threshold.

Correct answer: 3 mmol/L 

The important threshold is:

Blood ketones (β -hydroxybutyrate) ≥ 3.0 mmol/L → diagnostic of DKA in the appropriate clinical setting.

The other important diagnostic features are:

- * Ketonaemia
- * Metabolic acidosis
- * Usually elevated glucose, although euglycaemic DKA can occur, especially in pregnancy or with certain medications.

So remember:

DKA = ketones ≥ 3 mmol/L + metabolic acidosis

The image appears to have 3 mmol/L listed twice (A and D), which looks like a typographical duplication in the question.

Why bicarbonate 13 matters

Normal bicarbonate is approximately 22–29 mmol/L.

A value of 13 mmol/L indicates significant metabolic acidosis and supports DKA.

☆ Exam pearl:

Blood ketones ≥ 3 mmol/L = DKA threshold.

**Q40. Answer according to this MCQ: C. NSAIDs **

This question needs a little caution because the answer depends on what population/time period is being considered.

NSAIDs can cause AKI because they inhibit prostaglandin synthesis, causing renal afferent arteriolar vasoconstriction and reducing renal perfusion.

This risk is particularly important in a dehydrated patient—for example, someone with vomiting, haemorrhage or other volume depletion.

However, clinically:

In contemporary pregnancy-related AKI cohorts, hypertensive disorders such as pre-eclampsia/eclampsia are major causes, and postpartum haemorrhage is another important cause. For example, an Indian study found pre-eclampsia/eclampsia to be the most common cause of pregnancy-associated AKI.

So I would not memorise “NSAIDs are the most common cause of AKI in pregnancy” as a universal fact.

For this MCQ, however, the marked answer appears to be C, so learn the intended concept:

NSAIDs → ↓ prostaglandins → afferent vasoconstriction → ↓ renal blood flow → AKI.

Q41. Answer: B. 3–15% ✓

The question asks:

“What proportion of cases of HELLP syndrome will result in an acute kidney injury?”

The intended exam answer is 3–15%.

This is consistent with older literature reporting renal failure/AKI in approximately 10–15% of women with HELLP syndrome. One study reported acute renal failure in 15% of women with HELLP. Another study found 15.9% acute renal failure among women with HELLP.

Why does HELLP cause AKI?

HELLP involves:

H – Haemolysis

EL – Elevated liver enzymes

LP – Low platelets

It is associated with:

- * Severe endothelial dysfunction
- * Microangiopathy
- * Renal vasoconstriction
- * Reduced renal perfusion
- * Sometimes DIC, haemorrhage or placental abruption

All of these can contribute to acute kidney injury.

Why not 23–35%, 43–55% or 63–75%?

Those figures are too high for the traditional exam estimate.

⚠ Important modern evidence: The reported incidence varies substantially depending on the definition of AKI and the population studied. Some newer studies have reported much higher rates—for example, 48.1% in one hospital cohort—so 3–15% should be regarded as the classic figure being tested by this question, not a universal modern incidence.

Q42. Correct answer: D. 2 years ✓

The question asks how long after completing breast-cancer treatment she should wait before trying to conceive.

For an MRCOG-style answer, 2 years is the intended answer.

The reason is not that pregnancy itself is proven to increase recurrence. Rather, breast cancer has a higher risk of recurrence during the first few years after diagnosis, and pregnancy can complicate further cancer treatment if recurrence occurs.

Current RCOG patient guidance states that women treated for breast cancer are usually advised to wait 2 years before becoming pregnant, while emphasising that the decision should be individualised with the oncology team.

Important distinction with tamoxifen

If the patient is taking tamoxifen, she must stop it before attempting pregnancy because tamoxifen is contraindicated in pregnancy.

The older RCOG guidance specifically advised stopping tamoxifen 3 months before trying to conceive because of its long half-life.

So remember:

Breast cancer treatment completed → commonly wait ~2 years

Tamoxifen → stop and allow ~3-month washout

Q43.

The question appears to contain a wording error: it says “If oral hypoglycaemic agents are required”, but all the answer choices are insulin preparations.

The options are:

1. Insulin aspart
2. Insulin detemir
3. Insulin glargine
4. Insulin lispro
5. Isophane insulin (NPH)

If the question is asking for the preferred long-acting insulin:

Correct answer: 5. Isophane insulin (NPH) ✓

NICE recommends isophane insulin (NPH) as the first-choice long-acting insulin during pregnancy. Detemir or glargine can be continued in women who were already well controlled on them before pregnancy.

What about aspart and lispro?

These are rapid-acting insulins and are also considered safe in pregnancy. NICE specifically states that available evidence for insulin aspart and lispro does not show adverse effects on pregnancy or the baby.

Insulin

Role

NPH/isophane

☆ Preferred long-acting insulin in pregnancy

Detemir

Can be continued if already well controlled

Glargine

Can be continued if already well controlled

Aspart

Rapid acting; safe

Lispro

Rapid acting; safe

Important correction

If the original question genuinely says “oral hypoglycaemic agents”, then none of these five answers is an oral drug.

For pregnancy, NICE recommends insulin instead of other oral glucose-lowering agents, although metformin can be used as an adjunct or alternative when benefits outweigh risks.

Therefore, I would treat NPH as the intended answer only if the question was supposed to say “insulin therapy.”

Q44. Correct answer: B. 6 months ✓

Radioactive iodine (I-131) should never be given during pregnancy because it crosses the placenta and can damage the fetal thyroid.

After radioactive iodine treatment, pregnancy should be postponed to allow:

* Radiation exposure to decline

* Thyroid function to stabilise

* Appropriate levothyroxine treatment to be established if hypothyroidism develops

The American Thyroid Association recommends delaying pregnancy for at least 6–12 months after I-131 treatment.

Therefore, among the options shown:

3 months ✗

6 months ✓

9 months

12 months

15 months

→ 6 months is the best answer.

☆ Very important MRCOG memory

Radioactive iodine → avoid pregnancy for at least 6 months.

Also:

Pregnancy → radioactive iodine is contraindicated.

Q45. Correct answer: 1. Carbimazole ✓

The key clue is “aplasia cutis congenita.”

Carbimazole (the prodrug of methimazole) is associated with a characteristic embryopathy when exposure occurs, particularly in early pregnancy. Reported abnormalities include:

- * Aplasia cutis congenita — classically a scalp defect
- * Choanal atresia
- * Oesophageal/tracheoesophageal abnormalities
- * Abdominal-wall defects such as omphalocele
- * Other craniofacial and gastrointestinal abnormalities

Why not the others?

- * Hydroxyurea → teratogenic, but not the classic association tested here.
- * Levothyroxine → thyroid hormone replacement; not associated with aplasia cutis.
- * Methimazole → also associated with aplasia cutis. Carbimazole is converted to methimazole, so both are considered together.
- * Propylthiouracil (PTU) → preferred antithyroid drug in the first trimester because methimazole/carbimazole have the characteristic embryopathy.

☆ Exam pearl:

Aplasia cutis + maternal antithyroid treatment → Methimazole/Carbimazole.

Q46. Correct answer: A. Fetal head compression ✓

Early decelerations are caused by compression of the fetal head during uterine contractions.

The classic pattern is:

Contraction → fetal head compression → vagal stimulation → ↓ fetal heart rate

The deceleration:

- * Begins with the contraction
- * Reaches its nadir around the peak of the contraction
- * Recovers as the contraction ends

They are generally considered physiological/benign when isolated.

Differentiate the three classic decelerations

[11:13 am, 23/8/2026] Mamta Singh: Early

Fetal head compression ☆

Variable

Umbilical cord compression

Late

Uteroplacental insufficiency

Q47. Correct answer: C. Fetal stimulation ✓

This is a “NOT” question, so look for the option that does not decrease variability.

A. Fetal sleep cycle → decreases variability ✓

During fetal sleep, fetal movements and autonomic activity decrease, producing a temporary reduction in variability. A sleep cycle can last approximately 20–40 minutes.

B. Prematurity → can decrease variability ✓

The immature fetal autonomic nervous system can produce less beat-to-beat variability.

C. Fetal stimulation → does NOT decrease variability ✗

Stimulation of the fetus generally produces an increase in fetal activity and may produce accelerations, rather than reduced variability.

Therefore, C is the answer.

D. Maternal drug intake → can decrease variability ✓

Several drugs can reduce fetal heart-rate variability, particularly:

- * Opioids
- * Benzodiazepines
- * Magnesium sulfate
- * General anaesthetic agents
- * Some other CNS-depressant medications

☆ Exam pearl:

Decreased variability → sleep, prematurity, CNS depressant drugs, hypoxia/acidosis.

Q48. Correct answer: B. Decreased beat-to-beat variability ✓

This is an important CTG concept.

Reduced baseline variability, particularly when persistent and associated with other abnormal CTG features, is strongly associated with fetal compromise.

NICE considers variability <5 bpm for >30 minutes, particularly when combined with other risk factors/CTG abnormalities, concerning for adverse neonatal outcome; reduced variability together with other CTG changes is particularly concerning.

Why not absence of accelerations?

Absence of accelerations alone does not necessarily indicate fetal compromise, especially during fetal sleep.

Why not late decelerations?

Late decelerations indicate uteroplacental insufficiency and are concerning, but the question asks for the single most reliable sign.

Why not variable decelerations?

Variable decelerations usually reflect cord compression. They can be physiological or pathological depending on their duration, frequency and associated features.

☆ Key point:

Persistent reduced variability = important indicator of fetal compromise, especially when accompanied by other abnormalities.

Q49. Correct answer: D. Fetal head compression ✓

The key is that variable decelerations are classically due to umbilical cord compression. NICE specifically notes that variable decelerations are usually caused by cord compression.

Let's look at each option:

A. Post-term pregnancy — associated ✓

In post-term pregnancy, there may be reduced amniotic fluid (oligohydramnios) and reduced placental reserve. Less fluid allows the umbilical cord to become compressed more easily, producing variable decelerations.

B. Oligohydramnios — associated ✓

This is a classic association.

↓ Amniotic fluid → less cushioning around cord → cord compression → variable decelerations.

This is particularly important when membranes have ruptured.

C. Cord compression — associated ✓

This is the classic mechanism.

Cord compression → transient interruption of umbilical blood flow → fetal cardiovascular reflex → abrupt fall in FHR → variable deceleration.

D. Fetal head compression — NOT the classic cause of repeated variable decelerations ✗

Fetal head compression is classically associated with EARLY decelerations, not variable decelerations.

NICE specifically describes early decelerations as being associated with head compression.

Therefore:

Variable deceleration → cord compression

Early deceleration → fetal head compression

CTG finding

Classic association

Early deceleration

Fetal head compression

Variable deceleration

Umbilical cord compression

Late deceleration

Uteroplacental insufficiency