

OBSTETRICS & GYNECOLOGY

Practice Question Bank for 6th Year Seminars

12 Seminar Topics — ~120 MCQs

Original questions inspired by past-paper themes 2011–2023

Answers and reviewer notes follow each question

How to Use This Question Bank

This document contains approximately 120 MCQs across the 12 seminar topics, in the style and difficulty of past papers. Each question is followed by:

- Answer (in italic navy after the options) — the correct letter and brief explanation
- Past answer (where past-paper keys diverged from current best practice)
-  Reviewer's Note (in italic orange) — flagging conflicts, outdated keys, or clinical clarifications

Topics covered

- 1. Antenatal Care
- 2. Mental Health During Pregnancy
- 3. Malpresentation and Malposition
- 4. Cardiac Disease in Pregnancy
- 5. Epilepsy with Pregnancy
- 6. Thromboembolism in Pregnancy
- 7. Maternal Collapse
- 8. Anatomy of Female Pelvis
- 9. Gynaecological Procedures
- 10. Cervical Screening (including Pap Smear)
- 11. Induction of Ovulation
- 12. Ovarian Hyperstimulation Syndrome

Topic 1 — Antenatal Care

Q1. A 28-year-old woman attends for her booking visit at 9 weeks gestation. Which of the following investigations is NOT routinely performed at booking?

- A) Full blood count
- B) Blood group and Rhesus typing
- C) Liver function tests
- D) HIV serology
- E) Mid-stream urine

Answer: C. LFTs are not part of routine booking bloods. Routine: FBC, blood group + Rh + antibody screen, hemoglobinopathy, HIV, HBV, syphilis, rubella, urine. Risk-based: TFTs, OGTT, HCV.

Q2. A primigravida at 32 weeks gestation enquires about normal patterns of fetal movement. Which statement is correct?

- A) Movements must be at least 10 in 12 hours or admission is required
- B) A subjective reduction from her usual pattern warrants prompt assessment
- C) Movements normally cease before the onset of labour
- D) Reduced movements at 23 weeks should be assessed by Doppler
- E) Movement frequency naturally decreases in the third trimester

Answer: B. The current standard is that any subjective reduction in fetal movements from a woman's usual pattern requires assessment, usually with CTG. The fixed '10 in 12 hours' rule has been challenged.

Past answer: Some older keys gave the '10 movements / 12 hours' rule.

 **Reviewer's Note:** Current RCOG guidance (Green-top 57) is that any maternal concern about reduced movements is the trigger to assess — there is no validated absolute threshold.

Q3. Which of the following women requires the high-dose (5 mg) folic acid regimen rather than the standard 400 µg dose?

- A) A 24-year-old primigravida with no medical history
- B) A woman with BMI 26 and well-controlled gestational diabetes in a previous pregnancy
- C) A woman taking levothyroxine for hypothyroidism
- D) A woman taking sodium valproate for epilepsy
- E) A 38-year-old multipara with iron-deficiency anaemia

Answer: D. 5 mg folic acid is indicated for: previous NTD-affected pregnancy, anti-epileptic drug use, pre-existing diabetes, BMI ≥ 30, sickle cell or other haemoglobinopathy. Levothyroxine and IDA are not indications.

Q4. Regarding antenatal screening, which of the following is NOT routinely offered to all women in the UK?

- A) Hepatitis B surface antigen at booking
- B) HIV serology at booking
- C) Toxoplasmosis serology at booking
- D) Anomaly ultrasound at 18–20+6 weeks
- E) Asymptomatic bacteriuria screen at booking

Answer: C. Toxoplasmosis serology is NOT routine in NICE; women are counselled on avoidance instead. The other four are routine.

Q5. A 35-year-old G2P1 attends preconception clinic. Her last pregnancy was complicated by eclampsia at 34 weeks. Which intervention is most likely to reduce her risk of pre-eclampsia in the next pregnancy?

- A) Vitamin C and E supplementation from 12 weeks
- B) High-dose folic acid 5 mg daily
- C) Low-dose aspirin 75–150 mg daily from 12 weeks
- D) Low-molecular-weight heparin from the first trimester
- E) Strict bed rest in the third trimester

Answer: C. Low-dose aspirin from 12 weeks is the evidence-based intervention for women at high risk of pre-eclampsia. Vitamins C and E have been shown not to reduce risk.

Q6. A 30-year-old G1 is found to be RhD-negative at booking. The fetal father is RhD-positive. Which of the following is correct regarding routine antenatal anti-D prophylaxis (RAADP)?

- A) It should be given immediately at booking
- B) A single 1500 IU dose at 28 weeks is an acceptable regimen
- C) It should be given fortnightly from 28 weeks
- D) It is not necessary if the woman already has anti-D antibodies
- E) B and D are both correct

Answer: E. Single-dose RAADP at 28 weeks (1500 IU) and the two-dose regimen (500 IU at 28 + 34 weeks) are both accepted. Anti-D is not given to already-sensitised women (it cannot reverse sensitisation).

Q7. Symphysis-fundal height (SFH) measurement should begin from which gestation?

- A) 12 weeks
- B) 16 weeks
- C) 20 weeks
- D) 24 weeks
- E) 28 weeks

Answer: D. SFH measurement is used from 24 weeks; before this, the fundus is below the umbilicus and SFH is unreliable.

Q8. A 30-year-old woman with sickle-cell disease is planning a pregnancy. Which of the following is NOT part of her recommended antenatal management?

- A) Folic acid 5 mg daily
- B) Low-dose aspirin from 12 weeks
- C) Routine prophylactic exchange transfusion in the third trimester
- D) Postnatal LMWH thromboprophylaxis
- E) Serial growth scans from 24 weeks

Answer: C. Routine prophylactic exchange transfusion is not standard — transfusion is indicated for crisis or severe anaemia. The other four are recommended in sickle cell pregnancy.

Q9. Which of the following best describes the current NICE recommendation for routine antenatal visits in a low-risk nulliparous woman?

- A) Approximately 4 visits
- B) Approximately 7 visits
- C) Approximately 10 visits
- D) Approximately 14 visits
- E) Monthly visits throughout pregnancy

Answer: C. NICE recommends approximately 10 visits for low-risk nulliparous women and 7 for low-risk multiparas.

Q10. Which of the following lifestyle pieces of advice given at booking is INCORRECT?

- A) Limit caffeine to less than 200 mg per day
- B) Avoid unpasteurised cheese and pâté
- C) Avoid hot tubs and saunas in the first trimester
- D) Avoid all forms of physical exercise
- E) Stop smoking and alcohol consumption

Answer: D. Regular exercise is encouraged in pregnancy. The other four are correct.

Q11. Which of the following statements about ultrasound dating is correct?

- A) Last menstrual period is more accurate than ultrasound
- B) Crown-rump length is the most accurate dating method between 9 and 14 weeks
- C) Biparietal diameter is the most accurate dating method in the first trimester
- D) Mean sac diameter is preferred when a fetal pole is visible
- E) Ultrasound dating becomes more accurate as gestation advances

Answer: B. CRL is the most accurate dating measurement between 9 and 14 weeks. Ultrasound dating is more accurate than LMP, especially when LMP is uncertain or cycles are irregular. Dating becomes LESS accurate in later gestation.

Q12. A 32-year-old G3P2 has a booking blood pressure of 142/92 mmHg. Her two previous pregnancies were uncomplicated. Which of the following is the most appropriate next step?

- A) Reassure and review at next routine appointment
- B) Repeat BP after 4 hours rest; if persistently elevated, classify as chronic hypertension and refer for management
- C) Start methyldopa immediately
- D) Admit for 24-hour blood pressure monitoring
- E) Diagnose pre-eclampsia and start labetalol

Answer: B. Persistently elevated BP at booking (before 20 weeks) suggests chronic hypertension. Diagnosis of pre-eclampsia requires 20+ weeks gestation. Treatment is generally started if BP $\geq$ 140/90 confirmed; methyldopa or labetalol are both acceptable, but the immediate next step is to confirm BP.

Q13. All of the following are sensitising events that warrant additional anti-D in an RhD-negative woman EXCEPT:

- A) Spontaneous miscarriage at 14 weeks
- B) External cephalic version
- C) Threatened miscarriage with bleeding at 8 weeks (no instrumentation)
- D) Amniocentesis
- E) Abdominal trauma at 24 weeks

Answer: C. Threatened miscarriage before 12 weeks without instrumentation is generally NOT considered to require anti-D (sensitisation risk is very low). All other options are recognised sensitising events.

Q14. Regarding screening for gestational diabetes, which of the following is correct?

- A) All women should have a 75g OGTT at booking
- B) NICE recommends risk-based OGTT screening at 24–28 weeks
- C) Glycosuria on dipstick is sufficient to diagnose GDM
- D) HbA1c at booking is the gold-standard screening test for GDM
- E) Universal OGTT at 16 weeks is recommended in low-risk women

Answer: B. NICE recommends OGTT at 24–28 weeks for women with one or more risk factors. ACOG recommends universal screening — a difference reflected in past papers.

 **Reviewer's Note:** ACOG vs NICE differ here: ACOG recommends universal screening; NICE risk-based. Read the stem carefully — past papers may follow either guideline.

Topic 2 — Mental Health During Pregnancy

Q1. A 28-year-old woman with bipolar disorder is taking sodium valproate. She presents at 6 weeks of an unplanned pregnancy. Which of the following is the most appropriate management?

- A) Continue valproate at the lowest possible dose
- B) Stop all psychiatric medication immediately
- C) Urgent psychiatric review with a view to switching to a safer mood stabiliser such as lamotrigine
- D) Switch to lithium for the remainder of the pregnancy
- E) Recommend termination of pregnancy because of teratogenic exposure

Answer: C. Valproate is highly teratogenic (NTD, cardiac, cleft, fetal valproate syndrome). Urgent psychiatric review for transition to a safer agent (lamotrigine, levetiracetam) is appropriate. Abrupt cessation risks severe relapse. Lithium is not first-line in T1 (Ebstein anomaly risk). Termination is not automatically indicated.

Q2. Which of the following is the highest-risk period for relapse in a woman with a known history of bipolar disorder?

- A) First trimester
- B) Second trimester
- C) Third trimester
- D) First 6 weeks postpartum
- E) After 6 months postpartum

Answer: D. The early postpartum period (especially within 2 weeks) is the highest-risk period for relapse of bipolar disorder, with up to 50% recurrence risk if mood stabilisers are stopped.

Q3. A 32-year-old woman who is breastfeeding develops moderate depression at 6 weeks postpartum. Which antidepressant is the most appropriate first-line choice?

- A) Fluoxetine
- B) Paroxetine
- C) Sertraline
- D) Lithium
- E) Venlafaxine

Answer: C. Sertraline has the lowest milk transfer among SSRIs and is the preferred SSRI in breastfeeding. Fluoxetine has a long half-life and accumulates. Paroxetine is associated with cardiac defects in T1 (relevant if planning further pregnancy). Lithium is generally avoided in breastfeeding.

Q4. Which of the following statements about postpartum blues ("baby blues") is correct?

- A) Affect approximately 10% of postpartum women
- B) Typically present after 4 weeks postpartum
- C) Require pharmacological treatment in most cases
- D) Are self-limiting and usually resolve within 2 weeks
- E) Have a 50% risk of progressing to postpartum psychosis

Answer: D. Baby blues affect 50–80% of women, present between days 3 and 10, and are self-limited within 2 weeks. They do not require pharmacological treatment. Risk of progression to psychosis is very low.

Q5. Postpartum psychosis most typically presents:

- A) Within 24 hours of delivery
- B) Between days 2 and 14 postpartum
- C) Around 2 to 3 months postpartum
- D) Beyond 6 months postpartum
- E) Only in women with prior psychiatric illness

Answer: B. Postpartum psychosis classically presents between days 2 and 14 postpartum. It is a psychiatric emergency requiring admission. PPD typically presents around 2–3 months. PPP can occur in women without prior psychiatric history.

Q6. A 26-year-old primigravida with previously well-controlled epilepsy on lamotrigine 200 mg BD develops increased seizure frequency at 24 weeks. The most likely explanation is:

- A) Drug-resistance has developed and an alternative agent is needed
- B) Lamotrigine levels fall in pregnancy due to increased glucuronidation; dose may need to be increased
- C) She has developed eclampsia
- D) Sleep deprivation is the only contributing factor
- E) Lamotrigine is teratogenic and should be discontinued

Answer: B. Lamotrigine levels can fall by ~50% in pregnancy due to increased glucuronidation. Dose adjustment is usually required, guided by levels and clinical seizures.

Q7. All of the following are recognised risk factors for postpartum depression EXCEPT:

- A) Previous history of depression
- B) Domestic violence
- C) Lack of social support
- D) Routine vaginal delivery without complications
- E) Adolescent pregnancy

Answer: D. Routine uncomplicated vaginal delivery is not a risk factor. The other four are recognised risk factors for PPD.

Q8. Which of the following is the most validated screening tool for postnatal depression?

- A) Beck Depression Inventory
- B) Edinburgh Postnatal Depression Scale (EPDS)
- C) Hamilton Depression Rating Scale
- D) Whooley questions alone
- E) PHQ-2

Answer: B. EPDS is the most validated and widely-used postnatal depression screen. A score ≥ 13 suggests probable depression. Whooley questions are used at booking but EPDS is more sensitive postnatally.

Q9. Regarding postpartum psychosis, which of the following is correct?

- A) Lifetime prevalence is approximately 5%
- B) It does not recur in subsequent pregnancies
- C) Recurrence risk in a subsequent pregnancy is approximately 50%
- D) It can be managed safely as an outpatient
- E) ECT is contraindicated

Answer: C. PPP affects ~0.1–0.2% of women but recurs in approximately 50% of subsequent pregnancies. It is an emergency requiring inpatient management; ECT may be life-saving in severe cases.

Q10. All of the following are screening or assessment components for perinatal mental health at booking EXCEPT:

- A) Whooley questions
- B) GAD-2
- C) Past psychiatric history
- D) Routine MRI brain
- E) Family history of perinatal mental illness

Answer: D. Routine MRI brain is not part of perinatal mental health screening. The other components are standard.

Q11. Which of the following antipsychotics is generally preferred when treatment is needed during pregnancy?

- A) Clozapine
- B) Olanzapine or quetiapine
- C) Long-acting depot first-generation antipsychotics
- D) Lithium
- E) Sodium valproate

Answer: B. Olanzapine and quetiapine are commonly used in pregnancy when antipsychotic treatment is required. Clozapine is associated with agranulocytosis and gestational diabetes. Lithium is a mood stabiliser not an antipsychotic. Valproate is contraindicated.

Q12. A 30-year-old woman who has been on sertraline 100 mg for moderate depression discovers she is pregnant at 7 weeks. The most appropriate management is:

- A) Stop sertraline immediately because of teratogenicity
- B) Switch to paroxetine, which is safer in pregnancy
- C) Continue sertraline, balancing risks of relapse against medication risks; review with psychiatry
- D) Switch to St John's Wort
- E) Reduce dose to 25 mg in T1

Answer: C. For moderate depression, the risk of untreated illness usually outweighs the small risk of SSRI continuation. Sertraline is among the safer SSRIs. Paroxetine is associated with cardiac defects in T1 and is not preferred. Abrupt cessation risks relapse.

Topic 3 — Malpresentation and Malposition

Q1. A 32-year-old G3P2 is in spontaneous labour at term. On examination the cervix is 7 cm dilated and the presenting part is the chin, which is anterior. What is the presenting diameter?

- A) Suboccipito-bregmatic (9.5 cm)
- B) Submento-bregmatic (9.5 cm)
- C) Mento-vertical (13.5 cm)
- D) Occipito-frontal (11.5 cm)
- E) Suboccipito-frontal (10.5 cm)

Answer: B. This is a face presentation, mentum anterior — submento-bregmatic diameter (9.5 cm). Vaginal delivery is possible if the chin is anterior; mento-posterior face presentation requires CS.

Q2. Brow presentation has which of the following presenting diameters?

- A) Suboccipito-bregmatic (9.5 cm)
- B) Submento-bregmatic (9.5 cm)
- C) Suboccipito-frontal (10.5 cm)
- D) Occipito-frontal (11.5 cm)
- E) Mento-vertical (13.5 cm)

Answer: E. Brow presentation has the largest presenting diameter, mento-vertical (13.5 cm) — generally incompatible with vaginal delivery in an average-sized pelvis. Either the head must extend further (face) or flex (vertex), or CS is required.

Q3. The denominator in face presentation is:

- A) Occiput
- B) Sinciput
- C) Mentum
- D) Sacrum
- E) Acromion

Answer: C. Mentum is the denominator for face. Occiput = vertex; sacrum = breech; acromion = shoulder; sinciput is not a standard denominator.

Q4. A persistent face presentation is most classically associated with which fetal anomaly?

- A) Renal agenesis
- B) Anencephaly
- C) Spina bifida
- D) Down syndrome
- E) Hydrocephalus

Answer: B. Anencephaly classically causes face presentation because the fetus has no calvarium and cannot flex normally. Hydrocephalus is associated with breech presentation.

Q5. All of the following are recognised risk factors for breech presentation at term EXCEPT:

- A) Placenta praevia
- B) Polyhydramnios
- C) Bicornuate uterus
- D) Severe oligohydramnios
- E) Hydrocephalus

Answer: D. Polyhydramnios (more space for movement) is a risk factor. Severe oligohydramnios actually fixes the fetus in whatever position it has and is less commonly listed; however, of the options given, oligohydramnios is the LEAST consistent with breech as a primary risk factor.

Past answer: Some past papers list this stem with 'oligohydramnios' as the false answer.

 **Reviewer's Note:** In severe oligohydramnios the fetus is restricted from spontaneous version, so it can be 'fixed' in a breech presentation. Most textbooks list polyhydramnios (not oligo) as the major fluid-related risk factor for breech. Read the stem options carefully.

Q6. A 36-year-old G2P1 is at 36+0 weeks gestation with a confirmed breech presentation. She wishes to attempt vaginal delivery. Regarding external cephalic version (ECV), which statement is correct?

- A) Success rate is approximately 90%
- B) ECV is generally offered from 36 weeks in nulliparas and 37 weeks in multiparas
- C) Continuous CTG is not required before or after the procedure
- D) Anti-D is not needed in RhD-negative women undergoing ECV
- E) Tocolysis decreases ECV success

Answer: B. ECV is generally offered from 36 wks (nullipara) or 37 wks (multipara). Success ~60% (higher in multiparas). CTG before and after is mandatory. Anti-D required for RhD-negative women. Tocolysis (e.g., terbutaline) increases success.

Q7. Which is the most common type of breech presentation at term?

- A) Frank (extended)
- B) Complete (flexed)
- C) Footling
- D) Knee presentation
- E) All equally common

Answer: A. Frank breech (hips flexed, knees extended — feet near head) is the most common type at term, accounting for ~65%.

Q8. Which type of breech carries the highest risk of cord prolapse?

- A) Frank breech
- B) Complete breech
- C) Footling breech
- D) All equal
- E) Knee breech

Answer: C. Footling breech carries the highest cord prolapse risk because the irregular presenting part does not block the cervix. Frank breech has the lowest.

Q9. A woman is in labour at 40+2 weeks with a transverse lie noticed on admission. The fetal heart is normal, the membranes are intact, and the cervix is 4 cm dilated. The most appropriate management is:

- A) External cephalic version with continuous CTG
- B) Allow spontaneous version in active labour
- C) Immediate cesarean section
- D) Augmentation of labour with oxytocin
- E) Internal podalic version

Answer: C. Transverse lie in active labour is an indication for immediate CS. ECV is not appropriate in active labour with engaged presenting part. Internal podalic version is reserved for second twin in selected circumstances.

Q10. All of the following are absolute contraindications to ECV EXCEPT:

- A) Major placenta praevia
- B) Antepartum hemorrhage in the last 7 days
- C) Multiple pregnancy
- D) Previous lower-segment cesarean section
- E) Abnormal CTG

Answer: D. Previous lower-segment CS is a relative — not absolute — contraindication to ECV; many centres still offer ECV in this situation. The other four are absolute contraindications.

Q11. A 28-year-old G1 is in labour at term in the second stage. After 90 minutes of pushing the head has descended to the perineum but is in a direct occipito-posterior position. Which is the most appropriate next step?

- A) Immediate cesarean section
- B) Allow further pushing with maternal repositioning
- C) Manual rotation to occipito-anterior or rotational instrumental delivery if no progress
- D) Symphysiotomy
- E) Vacuum delivery without any rotation attempt

Answer: C. Persistent OP at full station is best managed by manual rotation to OA, or rotational instrumental delivery (Kielland forceps or rotational vacuum) by a trained operator. Most rotate spontaneously; a defined trial of pushing is usually allowed first.

Q12. Which of the following is the key reference change introduced by the Term Breech Trial (Hannah et al, 2000)?

- A) Routine vaginal breech delivery improves perinatal outcomes
- B) Planned cesarean section reduces perinatal mortality compared with planned vaginal breech delivery
- C) ECV should not be offered after 35 weeks
- D) Vacuum extraction is contraindicated in breech delivery
- E) Selective use of forceps improves vaginal breech outcomes

Answer: B. The Term Breech Trial showed that planned CS reduced perinatal mortality by approximately 75% compared with planned vaginal breech delivery. As a result, most breech term babies are delivered by planned CS in many countries.

Topic 4 — Cardiac Disease in Pregnancy

Q1. Which of the following cardiac conditions is associated with the HIGHEST maternal mortality and is generally considered an indication for termination of pregnancy?

- A) Mild mitral regurgitation
- B) Repaired ventricular septal defect
- C) Eisenmenger syndrome
- D) Mitral valve prolapse without significant regurgitation
- E) Mechanical mitral valve prosthesis on warfarin

Answer: C. Eisenmenger syndrome (pulmonary hypertension with shunt reversal) carries 30–50% maternal mortality and is in WHO Class IV — pregnancy is contraindicated. Mechanical valves require complex anticoagulation but are not absolute contraindications.

Q2. Which of the following findings on cardiovascular examination during pregnancy should always be considered pathological rather than physiological?

- A) Soft systolic ejection murmur
- B) Loud first heart sound
- C) Third heart sound (S3)
- D) Diastolic murmur
- E) Mild ankle edema in the third trimester

Answer: D. Diastolic murmurs are NEVER physiological in pregnancy. Soft systolic ejection murmurs occur in up to 90% of pregnant women, S3 is common, and mild dependent edema is normal.

Q3. A 32-year-old with severe mitral stenosis presents at 28 weeks with worsening dyspnea. Which of the following is the most appropriate first-line medical management?

- A) ACE inhibitor
- B) Beta-blocker (e.g. metoprolol) and consideration of diuretic
- C) Warfarin
- D) Nifedipine alone
- E) Routine elective cesarean section

Answer: B. Mitral stenosis worsens in pregnancy because tachycardia and increased CO ↑ pulmonary congestion. Beta-blockers (slow HR → ↑ diastolic filling time) are first-line. Diuretics for pulmonary congestion. Severe symptomatic MS may require balloon valvuloplasty in pregnancy.

Q4. All of the following are features of peripartum cardiomyopathy EXCEPT:

- A) Onset in the last month of pregnancy or up to 5 months postpartum
- B) Ejection fraction less than 45%
- C) No identifiable other cause of heart failure
- D) Diagnosis confirmed only after 6 months postpartum
- E) Future pregnancy is contraindicated if EF does not normalize

Answer: D. PPCM is defined as heart failure occurring in the last month of pregnancy or up to 5 months postpartum, with EF < 45% and no other identifiable cause. Diagnosis is not delayed to 6 months.

Q5. A woman with Marfan syndrome attends preconception counselling. Which of the following aortic root diameters represents a contraindication to pregnancy?

- A) Aortic root > 25 mm
- B) Aortic root > 35 mm
- C) Aortic root > 45 mm
- D) Aortic root > 55 mm
- E) Aortic root size is not relevant

Answer: C. Marfan syndrome with aortic root > 45 mm is WHO Class IV — pregnancy is contraindicated due to the high risk of aortic dissection. Below this, careful management is possible with cardiology input.

Q6. Regarding management of labour and delivery in cardiac disease, which of the following is INCORRECT?

- A) Vaginal delivery is generally preferred unless an obstetric or specific cardiac indication for CS exists
- B) The second stage may be shortened with operative vaginal delivery to reduce Valsalva
- C) Ergometrine should be avoided
- D) Epidural analgesia is contraindicated
- E) Multidisciplinary team management is essential

Answer: D. Epidural is generally safe and can blunt the sympathetic response to pain, but should be titrated cautiously in fixed cardiac output states (severe AS, MS, pulmonary HTN). Ergometrine causes vasoconstriction and is avoided. Vaginal delivery with shortened second stage is usually preferred.

Q7. Which of the following is the most common rheumatic valvular lesion encountered in pregnancy?

- A) Mitral stenosis
- B) Mitral regurgitation
- C) Aortic stenosis
- D) Aortic regurgitation
- E) Tricuspid regurgitation

Answer: A. Mitral stenosis is the most common rheumatic valvular lesion in pregnancy and the most clinically important one (poorly tolerated due to tachycardia and ↑ CO).

Q8. A woman with a mechanical mitral valve replacement attends preconception counselling. The major dilemma in her anticoagulation management is:

- A) LMWH crosses the placenta and is teratogenic
- B) Warfarin is teratogenic in T1 but more reliable for valve thrombosis prevention than LMWH
- C) DOACs are first-line
- D) Aspirin alone is sufficient
- E) Anticoagulation can be discontinued during pregnancy

Answer: B. Warfarin causes warfarin embryopathy in T1 (nasal hypoplasia, stippled epiphyses) but is more effective than LMWH for preventing mechanical valve thrombosis. The standard approach is to switch to LMWH peri-conception and around delivery, with warfarin in T2/T3 in some cases — a difficult balance requiring specialist input.

Q9. Cardiac output during pregnancy peaks at approximately:

- A) 8 weeks gestation
- B) 20–28 weeks gestation
- C) 32 weeks gestation
- D) Term
- E) First week postpartum

Answer: B. Cardiac output increases by ~40% during pregnancy, peaking at 20–28 weeks. There is a further transient increase during labour (15% in 1st stage, 50% in 2nd stage) before returning to baseline within 2 weeks postpartum.

Q10. Cardiac disease is currently the leading cause of which of the following?

- A) Direct maternal death in high-income countries
- B) Indirect maternal death in high-income countries
- C) Stillbirth in high-income countries
- D) Neonatal death in high-income countries
- E) Postpartum hemorrhage in high-income countries

Answer: B. Cardiac disease is the leading INDIRECT cause of maternal death in high-income countries (MBRRACE-UK and similar registries). The leading DIRECT cause is thromboembolism.

Topic 5 — Epilepsy with Pregnancy

Q1. A 24-year-old with epilepsy controlled on sodium valproate 1000 mg daily presents for preconception counselling. Which of the following is the most appropriate management?

- A) Continue valproate and start folic acid 5 mg
- B) Continue valproate but reduce to lowest effective dose
- C) Refer to neurology with a view to switching to lamotrigine or levetiracetam before conception, and start folic acid 5 mg
- D) Stop all anti-epileptic medication immediately
- E) Continue valproate and reassure that risks are exaggerated

Answer: C. Valproate is the most teratogenic AED (NTD ~1–2%, cardiac, cleft, fetal valproate syndrome with cognitive impairment 30–40%). Pre-conception switching to a safer agent (lamotrigine or levetiracetam) is essential. High-dose folic acid (5 mg) is recommended.

Q2. Regarding the safety of anti-epileptic drugs in pregnancy, which TWO are considered to have the most favourable teratogenic profile?

- A) Sodium valproate and carbamazepine
- B) Phenytoin and phenobarbital
- C) Lamotrigine and levetiracetam
- D) Topiramate and clonazepam
- E) Carbamazepine and phenytoin

Answer: C. Lamotrigine and levetiracetam are considered the safest AEDs in pregnancy and breastfeeding.

Q3. A pregnant woman on lamotrigine 200 mg twice daily reports increased seizure frequency at 26 weeks. The most likely explanation is:

- A) Drug-resistance has developed
- B) Increased glucuronidation in pregnancy reduces lamotrigine levels by up to 50%
- C) She has developed eclampsia
- D) Lamotrigine is teratogenic and should be discontinued
- E) She is non-compliant

Answer: B. Lamotrigine clearance is markedly increased in pregnancy due to upregulated glucuronidation, with levels falling by up to 50%. Dose adjustment guided by clinical seizures and (where available) drug levels is often needed.

Q4. All of the following are correct regarding epilepsy and pregnancy EXCEPT:

- A) High-dose folic acid (5 mg) should be taken pre-conception and through T1
- B) Anti-epileptic medication should be stopped at confirmation of pregnancy to avoid teratogenicity
- C) Maternal mortality is increased compared with the general population
- D) Vitamin K from 36 weeks is recommended in women on enzyme-inducing AEDs
- E) Most women with epilepsy have normal pregnancy outcomes

Answer: B. Stopping AEDs in pregnancy risks status epilepticus and is dangerous to mother and fetus. The benefits of seizure control generally outweigh the medication risks. Pre-conception optimization is the key.

Q5. A 26-year-old woman at 30 weeks with a known history of epilepsy presents with a tonic-clonic seizure. Which of the following is the most appropriate immediate management?

- A) Magnesium sulfate as first-line agent
- B) Left lateral position, airway management, IV lorazepam
- C) Immediate cesarean section
- D) IV labetalol
- E) Phenytoin loading without first-line benzodiazepine

Answer: B. Standard seizure management: position safely (left lateral), airway and oxygen, IV benzodiazepine (lorazepam or diazepam). MgSO₄ is for ECLAMPTIC seizures (after pre-eclampsia is identified), NOT for primary epileptic seizures. BP and proteinuria should be checked to exclude eclampsia.

Q6. Regarding the safety of breastfeeding in women on AEDs, which statement is correct?

- A) All AEDs are contraindicated in breastfeeding
- B) Breastfeeding is generally encouraged on most AEDs, including lamotrigine, levetiracetam, valproate, and carbamazepine
- C) Only women on phenobarbital can safely breastfeed
- D) Breastfeeding doubles the risk of seizures in the infant
- E) AEDs all cross into breast milk in clinically significant amounts

Answer: B. Most AEDs are compatible with breastfeeding. Risk of relapse in mother (sleep deprivation) is more clinically significant than the small amount transferred in milk. Counselling on safe baby-handling is advised.

Q7. Which of the following antiepileptic drugs is associated with neural tube defect risk of approximately 1–2% in offspring?

- A) Levetiracetam
- B) Lamotrigine
- C) Sodium valproate
- D) Gabapentin
- E) Carbamazepine

Answer: C. Sodium valproate carries an NTD risk of approximately 1–2%. Carbamazepine has a smaller risk (~1%). Lamotrigine and levetiracetam do not have a defined NTD risk.

Q8. A pregnant woman on phenytoin should additionally receive which of the following from 36 weeks?

- A) Vitamin C
- B) Vitamin K
- C) Vitamin D
- D) Folic acid 5 mg
- E) Iron supplementation

Answer: B. Vitamin K from 36 weeks is recommended for women on enzyme-inducing AEDs (phenytoin, carbamazepine, phenobarbital, primidone) to reduce risk of neonatal haemorrhagic disease. Folic acid 5 mg is given throughout T1 (not started at 36 weeks).

Q9. Approximately what proportion of women with epilepsy will experience an increase in seizure frequency during pregnancy?

- A) Less than 5%
- B) Approximately 10%
- C) Approximately 30–40%
- D) More than 70%
- E) 100%

Answer: C. *Approximately one-third of women experience increased seizure frequency in pregnancy. Causes include sleep deprivation, hormonal changes, altered drug pharmacokinetics, and non-compliance.*

Q10. A 22-year-old known epileptic presents at 28 weeks with her first seizure of pregnancy. BP 168/108 mmHg, urine dipstick 3+ protein. Which of the following is the most appropriate management?

- A) Continue regular AEDs and reassure
- B) Start magnesium sulfate, control BP, deliver as appropriate
- C) Loading dose of phenytoin
- D) Increase her usual AED dose
- E) Start labetalol alone

Answer: B. *This is eclampsia. MgSO₄ is the first-line agent (4 g IV load + 1 g/h infusion for 24 hours). BP control with labetalol or hydralazine. Plan for delivery once stable. Although she has a history of epilepsy, the BP and proteinuria support eclampsia.*

Topic 6 — Thromboembolism in Pregnancy

Q1. A 32-year-old at 22 weeks gestation presents with sudden left calf swelling and pain. The most appropriate first-line investigation is:

- A) D-dimer
- B) Compression duplex ultrasound of the leg veins
- C) CT pulmonary angiogram
- D) MRI venogram
- E) Wells score

Answer: B. Compression duplex ultrasound is first-line for suspected DVT in pregnancy. D-dimer is not useful (physiologically elevated) and Wells score is not validated in pregnancy.

Q2. Which of the following statements about DVT in pregnancy is correct?

- A) Most pregnancy DVTs occur in the right leg
- B) Approximately 80% of pregnancy DVTs occur in the left leg due to compression of the left iliac vein by the right iliac artery
- C) Pregnancy DVT is most often calf-confined
- D) D-dimer is highly specific in pregnancy
- E) Risk of DVT is highest in the first trimester

Answer: B. Approximately 80–90% of pregnancy DVTs occur in the left leg (left iliac vein compressed by right iliac artery). Iliofemoral DVT is more common than calf-confined DVT in pregnancy. Risk is highest postpartum, especially in the first 2 weeks.

Q3. Which of the following anticoagulants is the agent of choice for VTE in pregnancy?

- A) Warfarin
- B) Direct oral anticoagulant (e.g. rivaroxaban)
- C) Low-molecular-weight heparin
- D) Aspirin
- E) Fondaparinux

Answer: C. LMWH is the anticoagulant of choice in pregnancy. It does not cross the placenta. Warfarin is teratogenic in T1 (warfarin embryopathy) and risks fetal hemorrhage T2/T3. DOACs lack pregnancy safety data and cross the placenta.

Q4. All of the following are recognised risk factors for VTE in pregnancy EXCEPT:

- A) Previous VTE
- B) BMI > 30
- C) Age > 35
- D) Multiple pregnancy
- E) Continuous moderate-intensity exercise

Answer: E. Regular moderate exercise is not a risk factor and may be protective. The other four are recognised RCOG risk factors.

Q5. A 30-year-old G1 has a BMI of 36, a personal history of VTE on the combined pill aged 22, and is now 8 weeks pregnant. The most appropriate VTE prophylaxis is:

- A) No prophylaxis required until postpartum
- B) Aspirin 75 mg until delivery
- C) Compression stockings only
- D) Prophylactic-dose LMWH from the first trimester, continuing until 6 weeks postpartum
- E) Therapeutic-dose LMWH from the first trimester

Answer: D. Previous oestrogen-related VTE indicates high antenatal risk; RCOG guidance is for prophylactic LMWH from T1 + 6 weeks postpartum.

Q6. A 28-year-old at 32 weeks presents with sudden pleuritic chest pain and dyspnea. CXR is normal. The most appropriate next investigation is:

- A) D-dimer
- B) Compression Doppler of the leg veins
- C) Empirical CTPA
- D) Empirical V/Q scan
- E) Repeat in 24 hours

Answer: B. Begin with leg Doppler — if positive, anticoagulation is initiated without further imaging. If negative and PE remains suspected, choose between CTPA and V/Q scan based on local protocol (V/Q is lower fetal radiation; CTPA is lower maternal breast radiation).

Q7. How long should anticoagulation typically be continued after VTE diagnosed during pregnancy?

- A) Until delivery only
- B) For 6 weeks postpartum, with a minimum total duration of 3 months
- C) For 6 months postpartum
- D) Until the first menstrual period postpartum
- E) Lifelong

Answer: B. Standard duration: throughout the remainder of pregnancy + at least 6 weeks postpartum, with a minimum total duration of 3 months.

Q8. Which of the following is correct regarding anticoagulation around delivery?

- A) LMWH should be continued until labour begins
- B) Therapeutic-dose LMWH should be omitted 24 hours before planned delivery
- C) Spinal/epidural anaesthesia is unaffected by recent LMWH dose
- D) LMWH should be restarted within 1 hour of vaginal delivery
- E) Postpartum LMWH is not necessary if antenatal prophylaxis was given

Answer: B. Therapeutic LMWH is omitted 24 hours before planned delivery (12 hours for prophylactic dose) because of regional anaesthesia bleeding risk. Restart 4–6 hours after vaginal delivery, 6–12 hours after CS. Postpartum prophylaxis is required even if antenatal was given.

Q9. Compared with the non-pregnant state, the risk of VTE in pregnancy is approximately:

- A) Unchanged
- B) 2-fold higher
- C) 5-fold higher
- D) 20-fold higher
- E) 100-fold higher

Answer: C. Pregnancy increases VTE risk approximately 5-fold compared with non-pregnant women. The postpartum period (especially first 6 weeks) is even higher — approximately 20-fold.

Q10. DVT in pregnancy is best explained by which of the following components of Virchow's triad?

- A) Endothelial injury alone
- B) Hypercoagulability and venous stasis
- C) Reduced venous return only
- D) Increased platelet activation alone
- E) Reduced fibrinogen levels

Answer: B. Pregnancy provides both hypercoagulability ($\uparrow$ factors VII/VIII/IX/X, $\downarrow$ protein S, APC resistance) and venous stasis (gravid uterus compresses IVC and iliac veins). Endothelial injury contributes around delivery and surgery.

Q11. A 35-year-old G2P1 with antiphospholipid syndrome (previous DVT) becomes pregnant. The most appropriate management is:

- A) Aspirin alone
- B) Therapeutic-dose LMWH plus low-dose aspirin throughout pregnancy and 6 weeks postpartum
- C) Warfarin throughout pregnancy
- D) DOAC therapy
- E) No anticoagulation required

Answer: B. APS with previous VTE requires therapeutic LMWH + low-dose aspirin throughout pregnancy + 6 weeks postpartum. APS without prior VTE but with recurrent miscarriage: prophylactic LMWH + aspirin.

Topic 7 — Maternal Collapse

Q1. A 32-year-old woman at 36 weeks gestation collapses at home. CPR is in progress on arrival in the emergency department. Which of the following is the most important pregnancy-specific modification to standard advanced life support?

- A) Increase compression rate to 150/min
- B) Hand position should be moved higher on the sternum
- C) Manual displacement of the uterus to the left, or 15–30° left lateral tilt
- D) Defibrillation should be avoided
- E) Adrenaline dose should be halved

Answer: C. The pregnant uterus (≥ 20 weeks) compresses the IVC, reducing venous return by ~30%. Manual uterine displacement to the left (or 15–30° left lateral tilt) is essential. Compression rate, hand position, defibrillation energy and drug doses are unchanged.

Q2. In a maternal cardiac arrest at 30 weeks gestation, perimortem cesarean section should be commenced if return of spontaneous circulation has not been achieved within how many minutes?

- A) 1 minute
- B) 2 minutes
- C) 4 minutes
- D) 10 minutes
- E) Only if the fetus is viable

Answer: C. Perimortem CS should be commenced within 4 minutes of arrest if no ROSC, with delivery aimed by 5 minutes. The primary goal is maternal resuscitation (relieving aortocaval compression dramatically improves CO); fetal salvage is secondary.

Q3. A 28-year-old G3P2 collapses suddenly during labour with hypoxia, hypotension and disseminated intravascular coagulopathy. The most likely diagnosis is:

- A) Pulmonary embolism
- B) Amniotic fluid embolism
- C) Eclampsia
- D) Septic shock
- E) Myocardial infarction

Answer: B. Amniotic fluid embolism classically presents with the triad of sudden hypoxia + hypotension + DIC during labour, delivery, or with uterine manipulation. Mortality is 20–60%.

Q4. Which of the following is the most common cause of haemorrhagic maternal collapse?

- A) Placental abruption
- B) Placenta praevia
- C) Postpartum hemorrhage
- D) Uterine rupture
- E) Ectopic pregnancy

Answer: C. Postpartum hemorrhage (most often from atony) is the leading haemorrhagic cause of maternal collapse. The other conditions can cause collapse but are less common overall.

Q5. Regarding amniotic fluid embolism, all of the following are correct EXCEPT:

- A) Risk factors include induction of labour, advanced maternal age, and multiparity
- B) It is most often confirmed by CT pulmonary angiogram
- C) Management is supportive — airway, oxygen, fluids, vasopressors, and treatment of DIC
- D) Maternal mortality remains high, around 20–60%
- E) Diagnosis is essentially clinical

Answer: B. AFE diagnosis is CLINICAL, based on the triad of sudden hypoxia + hypotension + DIC in an appropriate setting. CTPA is not the diagnostic modality. Some old criteria included the presence of fetal squamous cells in maternal pulmonary circulation but this is not required.

Q6. Which of the following is the correct sequence of the "Sepsis Six" within 1 hour of identifying maternal sepsis?

- A) Oxygen, blood cultures, IV antibiotics, IV fluids, lactate, urine output
- B) Antibiotics only — other steps can wait
- C) Vasopressors first, antibiotics second
- D) Imaging first, treatment later
- E) Blood cultures must wait until temperature settles

Answer: A. The Sepsis Six (deliver within 1 hour): oxygen, blood cultures, broad-spectrum IV antibiotics, IV fluids, serum lactate, monitor urine output.

Q7. Perimortem cesarean section should be performed:

- A) In the operating room only, never at the resuscitation site
- B) At the site of arrest, even outside an operating theatre
- C) Only if the fetus is viable (≥ 24 weeks)
- D) Only after a senior obstetrician arrives
- E) Only if maternal death is confirmed

Answer: B. PMCS should be performed at the site of arrest, not transferred to theatre — every minute counts. The primary goal is maternal resuscitation; even at gestations < 24 weeks, delivery may be required to relieve aortocaval compression.

Q8. Which of the following is NOT one of the four obstetric causes of maternal collapse most commonly emphasised in obstetric algorithms?

- A) Eclampsia
- B) Amniotic fluid embolism
- C) Massive haemorrhage
- D) Uterine rupture
- E) Sepsis

Answer: D. The 'four obstetric causes' commonly listed are eclampsia, amniotic fluid embolism, hemorrhage, and sepsis. Uterine rupture causes haemorrhage but is generally categorised under haemorrhage. (The 4 H's and 4 T's apply to all arrests; the four obstetric causes are added in pregnancy.)

Topic 8 — Anatomy of Female Pelvis

Q1. Which of the following pelvic types is most favourable for vaginal delivery?

- A) Android
- B) Anthropoid
- C) Gynaecoid
- D) Platypelloid
- E) All equally favourable

Answer: C. Gynaecoid (round inlet) is the classic 'female' pelvis and the most favourable. Android resembles the male pelvis (heart-shaped inlet, narrow forepelvis, prominent ischial spines). Platypelloid is the least favourable.

Q2. Which of the following pelvic types most resembles the male pelvis?

- A) Gynaecoid
- B) Anthropoid
- C) Android
- D) Platypelloid
- E) None

Answer: C. The android pelvis (heart-shaped inlet, narrow forepelvis, prominent ischial spines, narrow subpubic arch) is most similar to the male pelvis.

Q3. The pudendal nerve is derived from which spinal segments?

- A) L4–S1
- B) L5–S2
- C) S1–S3
- D) S2–S4
- E) S3–S5

Answer: D. Pudendal nerve = S2, S3, S4 ('S2-3-4 keep the pelvis off the floor'). Sensory: perineum, vulva, lower vagina, clitoris. Motor: external anal sphincter and perineal muscles.

Q4. The obturator nerve is derived from which spinal segments?

- A) L1–L3
- B) L2–L4
- C) L3–L5
- D) L4–S1
- E) S1–S3

Answer: B. Obturator nerve = L2, L3, L4 (anterior divisions of the lumbar plexus). It supplies the medial thigh adductors.

Past answer: Some past papers state L1–L3, which is incorrect.

 **Reviewer's Note:** Standard anatomical teaching is L2–L4 for the obturator nerve. If you encounter a past key citing L1–L3, this is a known error.

Q5. The reference point for fetal station during labour is:

- A) Pelvic inlet
- B) Pubic symphysis
- C) Ischial spines
- D) Sacral promontory
- E) Pelvic outlet

Answer: C. Station 0 = level of the ischial spines. Negative stations are above (–1, –2, –3); positive stations below (+1, +2, +3).

Q6. Engagement of the fetal head is defined as the biparietal diameter passing through:

- A) Mid-pelvic cavity
- B) Pelvic outlet
- C) Pelvic inlet
- D) Ischial spines
- E) Pubic symphysis

Answer: C. Engagement = passage of the BPD (the widest transverse diameter of the head) through the pelvic INLET. Clinically, no more than 2/5 of the head should be palpable abdominally when engaged.

Q7. The diagonal conjugate is measured between:

- A) Sacral promontory and the upper border of the symphysis pubis
- B) Sacral promontory and the midpoint of the posterior surface of the symphysis
- C) Sacral promontory and the lower border of the symphysis pubis
- D) Coccyx and the lower border of the symphysis pubis
- E) Ischial tuberosities

Answer: C. Diagonal conjugate: from sacral promontory to lower border of symphysis pubis. Clinically measurable by vaginal examination; normal ≥ 12 cm. The true (obstetric) conjugate = diagonal – 1.5–2 cm.

Q8. Which ligament is the principal lateral support of the cervix and upper vagina?

- A) Round ligament
- B) Cardinal (Mackenrodt) ligament
- C) Broad ligament
- D) Ovarian ligament
- E) Infundibulopelvic ligament

Answer: B. The cardinal (Mackenrodt) ligaments provide the main lateral support of the cervix and upper vagina. The uterosacrals provide apical support. The broad and round ligaments contribute little to support.

Q9. Which of the following is NOT a component of the levator ani muscle group?

- A) Pubococcygeus
- B) Iliococcygeus
- C) Puborectalis
- D) Obturator internus
- E) All four are components

Answer: D. Levator ani = pubococcygeus + iliococcygeus + puborectalis. Obturator internus is a hip lateral rotator and forms part of the lateral pelvic wall but is NOT a component of the pelvic diaphragm.

Q10. Regarding the ureter in the female pelvis, which statement is correct?

- A) It is an intraperitoneal structure
- B) It passes ANTERIOR (over) the uterine artery near the cervix
- C) It passes POSTERIOR (under) the uterine artery near the cervix ('water under the bridge')
- D) It is approximately 5 cm lateral to the cervix at the level of the internal os
- E) It is rarely injured during hysterectomy

Answer: C. The ureter passes UNDER the uterine artery near the cervix — 'water under the bridge' — and is at risk during hysterectomy. It is retroperitoneal (NOT intraperitoneal). It is approximately 1.5 cm lateral to the cervix at the internal os.

Q11. The middle portion of the fallopian tube is termed:

- A) Fimbriae
- B) Infundibulum
- C) Ampulla
- D) Isthmus
- E) Interstitial part

Answer: C. Ampulla = middle (and longest) portion of the fallopian tube; site of fertilisation and most ectopic implantations. From distal to proximal: fimbriae → infundibulum → ampulla → isthmus → interstitial part.

Q12. The mid-cavity of the bony pelvis is bounded posteriorly by which landmark?

- A) L4–S1 junction
- B) Sacral promontory
- C) Junction of S2 and S3
- D) Coccyx
- E) Sacrospinous ligament

Answer: C. The mid-cavity of the bony pelvis is bounded posteriorly by the junction of S2 and S3, laterally by the ischial spines, and anteriorly by the symphysis.

Topic 9 — Gynaecological Procedures

Q1. Which of the following is the gold-standard investigation for endometrial cavity assessment when focal pathology is suspected?

- A) Transabdominal ultrasound
- B) Blind dilatation and curettage
- C) Hysteroscopy with directed biopsy
- D) MRI pelvis
- E) Pap smear

Answer: C. *Hysteroscopy with directed biopsy is the gold standard for endometrial cavity assessment, particularly for focal lesions (polyps, submucosal fibroids). Blind D&C can miss focal pathology.*

Q2. Which of the following is the gold-standard investigation for diagnosing endometriosis?

- A) Transvaginal ultrasound
- B) Serum CA-125
- C) MRI pelvis
- D) Laparoscopy with biopsy
- E) Hysteroscopy

Answer: D. *Laparoscopy with histological confirmation is the gold-standard. CA-125 may be elevated but is not diagnostic. TVUS detects endometriomas but not superficial peritoneal disease.*

Q3. Hysterosalpingography (HSG) is best performed at which point in the menstrual cycle?

- A) During menstruation
- B) Early follicular phase, after menstruation, before ovulation
- C) At ovulation
- D) Mid-luteal phase
- E) Premenstrual

Answer: B. *HSG is performed in the early follicular phase (after menses end, before ovulation) to avoid both menstrual debris and the risk of disturbing an early pregnancy. Pregnancy must be excluded.*

Q4. Which of the following is NOT a recognised contraindication to HSG?

- A) Pregnancy
- B) Active pelvic infection
- C) Iodine allergy
- D) Recent uterine surgery
- E) Previous miscarriage 6 months ago

Answer: E. *Previous miscarriage some months ago is not a contraindication. Pregnancy, active PID, severe iodine allergy and recent uterine surgery are recognised contraindications.*

Q5. Which of the following is the most common site of ureteric injury during hysterectomy?

- A) At the pelvic brim
- B) At the level of the cardinal ligament near the uterine artery
- C) Near the kidney
- D) At the bladder trigone
- E) Within the broad ligament at the round ligament

Answer: B. The most common site of ureteric injury at hysterectomy is at the level of the cardinal ligament, near the uterine artery (the 'water under the bridge'). Overall ureteric injury is ~0.5–1%.

Q6. A 28-year-old has a CIN III biopsy result. The most appropriate treatment is:

- A) Cryotherapy
- B) Repeat smear in 6 months
- C) Loop electrosurgical excision procedure (LEEP / LLETZ)
- D) Total abdominal hysterectomy
- E) Topical 5-fluorouracil

Answer: C. LEEP/LLETZ is the standard treatment for high-grade CIN, providing both removal of the lesion and a histological specimen. Cryotherapy is less reliable for CIN III. Hysterectomy is excessive unless other indications exist.

Q7. Which of the following is a recognised complication of hysteroscopic surgery using glycine as the distending medium?

- A) Hyperkalemia
- B) Hyponatremia and fluid overload
- C) Sepsis specifically from glycine
- D) Air embolism
- E) Hyperthermia

Answer: B. Glycine (used with monopolar diathermy) is a hypotonic non-electrolyte solution and large absorbed volumes cause dilutional hyponatremia and fluid overload. Saline is preferred when bipolar instruments are used.

Q8. Which of the following is the standard initial out-patient sampling tool for endometrial pathology?

- A) Hysteroscopy with directed biopsy
- B) Pipelle endometrial biopsy
- C) Sharp curettage under anaesthesia
- D) Cervical Pap smear
- E) MRI

Answer: B. Pipelle is the first-line out-patient endometrial sampling device — no anaesthesia required, ~90% sensitivity for cancer. Hysteroscopy + directed biopsy is reserved if pipelle is non-diagnostic, focal lesions are suspected, or cervical stenosis prevents pipelle.

Q9. Which of the following is the LEAST likely complication of laparoscopic entry?

- A) Bowel injury
- B) Major vessel injury
- C) Subcutaneous emphysema
- D) Shoulder-tip pain from CO2 diaphragmatic irritation
- E) Ureteric transection at the pelvic brim

Answer: E. Ureteric injury during laparoscopic entry alone is uncommon — ureteric injury is more associated with dissection during hysterectomy or oophorectomy. The other four are common entry-related issues.

Q10. Which of the following best describes the role of a Wertheim (radical) hysterectomy?

- A)** Treatment of grade 1 endometrial cancer confined to endometrium
- B)** Treatment of small fibroids in a woman who has completed her family
- C)** Treatment of cervical cancer stage IA2 to IIA — with removal of uterus, parametrium, upper vagina and pelvic lymph nodes
- D)** Standard treatment for benign ovarian cysts
- E)** Treatment of severe endometriosis

Answer: C. *Radical (Wertheim) hysterectomy is the standard surgical option for cervical cancer stages IA2 to IIA — removal of uterus, parametria, upper vagina, and pelvic lymph nodes ($\pm$ ovaries depending on age and stage).*

Topic 10 — Cervical Screening (including Pap Smear)

Q1. Persistent infection with which of the following is responsible for the vast majority of cervical cancers?

- A) Herpes simplex virus type 2
- B) Chlamydia trachomatis
- C) High-risk human papillomavirus (especially types 16 and 18)
- D) Trichomonas vaginalis
- E) Cytomegalovirus

Answer: C. HPV is found in ~99.7% of cervical cancers; types 16 and 18 cause approximately 70%. Persistent infection with high-risk HPV is required for cervical carcinogenesis.

Q2. According to current guidance, the preferred cervical screening strategy in women aged 30–65 is:

- A) Cytology alone every year
- B) Cytology alone every 3 years
- C) HPV testing combined with cytology (co-testing) every 5 years
- D) Colposcopy every 5 years
- E) MRI every 3 years

Answer: C. HPV + Pap co-testing every 5 years is the preferred strategy in women aged 30–65 in many programs. Primary HPV testing every 5 years is also acceptable. Cytology alone every 3 years is now considered inferior.

Q3. A 27-year-old woman who has received the HPV vaccine asks when she should start cervical screening. The correct advice is:

- A) She does not need cervical screening
- B) Screening should start at the same age as unvaccinated women
- C) Screening should start 5 years earlier than for unvaccinated women
- D) Screening should start 10 years after the last vaccine dose
- E) Screening can be deferred until age 40

Answer: B. HPV vaccination does NOT change the age at which cervical screening should begin. The vaccine does not cover all oncogenic HPV types, and women may have been exposed before vaccination.

Q4. Which of the following is the appropriate management for a cytology result of HSIL (high-grade squamous intraepithelial lesion)?

- A) Repeat cytology in 12 months
- B) Repeat cytology in 6 months
- C) Reflex HPV test only; if negative, return to routine screening
- D) Colposcopy with directed biopsy
- E) Total hysterectomy

Answer: D. HSIL on cytology requires colposcopy + directed biopsy. The likelihood of underlying CIN 2/3 or worse is high enough that immediate colposcopic evaluation is required.

Q5. Which of the following best describes the appropriate management for ASC-US cytology?

- A) Reflex HPV testing — colposcopy if HPV positive, repeat cytology if negative
- B) Immediate colposcopy regardless of HPV status
- C) Total hysterectomy
- D) LEEP without biopsy
- E) No further follow-up

Answer: A. ASC-US is borderline; reflex HPV testing stratifies risk. HPV-positive ASC-US → colposcopy. HPV-negative ASC-US → repeat cytology in 1–3 years depending on age and program.

Q6. Which of the following types of HPV are covered by the nonavalent vaccine (Gardasil-9)?

- A) 16, 18 only
- B) 6, 11, 16, 18
- C) 6, 11, 16, 18, 31, 33, 45, 52, 58
- D) 16, 18, 31, 33
- E) 6, 11, 31, 33

Answer: C. Gardasil-9 covers 9 HPV types: 6, 11, 16, 18, 31, 33, 45, 52, 58 — covering approximately 90% of cervical cancers and the 90% of genital warts.

Q7. The optimal age for HPV vaccination is:

- A) After age 21, around the start of regular sexual activity
- B) Age 9–14, before sexual debut
- C) After confirmed HPV infection
- D) Postpartum
- E) After age 30

Answer: B. Optimal age is 9–14 (before sexual debut). A 2-dose schedule is used at this age. Catch-up to age 26 (3 doses); approval to age 45 in many countries with shared decision-making.

Q8. The transformation zone of the cervix is the most appropriate region for sampling because:

- A) It is the most accessible part of the cervix
- B) It is where the majority of cervical neoplasia arises (squamous-columnar junction)
- C) It contains the largest number of inflammatory cells
- D) It has the lowest rate of cellular turnover
- E) It is least likely to bleed during sampling

Answer: B. The transformation zone — the area around the squamocolumnar junction — is where active metaplasia occurs and where the majority of cervical neoplasia originates. Sampling must include this area.

Q9. All of the following are appropriate criteria to discontinue cervical screening EXCEPT:

- A) Age over 65 with adequate negative screening history
- B) Previous total hysterectomy for benign indication with no CIN history
- C) Age over 30 with one previous negative cytology
- D) Patient choice after counselling at any age
- E) Terminal illness with limited life expectancy

Answer: C. A single negative cytology at age 30 is not sufficient grounds to stop screening. Age > 65 with adequate negative history (typically 3 consecutive negative cytologies or 2 consecutive negative co-tests in the last 10 years, most recent within 5 years), or post-hysterectomy for benign indication, are recognised reasons to stop.

Q10. Which of the following groups should have annual cervical screening rather than at routine intervals?

- A) Women on combined oral contraceptives
- B) Pregnant women
- C) Women living with HIV / immunocompromised
- D) Women using copper IUDs
- E) Postmenopausal women

Answer: C. *Women living with HIV or other immunosuppression are at increased risk of HPV persistence and progression and should have annual cervical screening.*

Topic 11 — Induction of Ovulation

Q1. A 28-year-old with PCOS and primary anovulatory infertility (BMI 32) attends fertility clinic. Which is the most appropriate first-line management?

- A) IVF
- B) Lifestyle modification with weight loss as the cornerstone, before pharmacological induction
- C) Immediate gonadotropin therapy
- D) Laparoscopic ovarian drilling
- E) Bromocriptine

Answer: B. Weight loss (5–10%) is the cornerstone first-line for PCOS-related anovulation. It restores ovulation in 30–50% of obese women without medication. Pharmacological induction follows if weight loss is insufficient.

Q2. Which of the following is the current first-line pharmacological agent for ovulation induction in women with PCOS?

- A) Clomiphene citrate
- B) Letrozole
- C) Gonadotropins
- D) Metformin alone
- E) Pulsatile GnRH

Answer: B. Letrozole (an aromatase inhibitor) has been shown to be superior to clomiphene for live-birth rates in women with PCOS (PPCOS II trial 2014) and is current first-line in many guidelines.

Past answer: Older past papers list clomiphene as first-line.

 **Reviewer's Note:** Letrozole has overtaken clomiphene as first-line for PCOS-related ovulation induction since the PPCOS II trial. Older keys still showing clomiphene as first-line reflect the previous standard.

Q3. All of the following are recognised side-effects of clomiphene citrate EXCEPT:

- A) Hot flushes
- B) Multiple pregnancy
- C) Visual disturbance
- D) Hyperprolactinemia
- E) Mild OHSS

Answer: D. Clomiphene does not cause hyperprolactinemia. The other four are recognised side effects. Clomiphene also has anti-estrogenic effects on cervical mucus and endometrium that can paradoxically impair implantation.

Q4. Approximately what proportion of women with PCOS are clomiphene-resistant (fail to ovulate despite escalating dose)?

- A) Less than 5%
- B) Approximately 25%
- C) Approximately 50%
- D) Approximately 75%
- E) More than 90%

Answer: B. Approximately 25% of women with PCOS are clomiphene-resistant. Options for these women include letrozole, gonadotropins, laparoscopic ovarian drilling, or IVF.

Q5. A 32-year-old with hypogonadotropic hypogonadism (Kallmann syndrome) wishes to conceive. The most appropriate management is:

- A) Clomiphene
- B) Letrozole
- C) Pulsatile GnRH or gonadotropin therapy
- D) Cabergoline
- E) Spironolactone

Answer: C. In hypogonadotropic hypogonadism (WHO Group I), there is no endogenous GnRH/gonadotropin drive, so SERMs and aromatase inhibitors do not work. Pulsatile GnRH or gonadotropin therapy is the appropriate option.

Q6. A 30-year-old with hyperprolactinaemia (prolactin 2,400 mIU/L, no pituitary mass on MRI) is anovulatory. The most appropriate first-line treatment to restore ovulation is:

- A) Clomiphene
- B) Letrozole
- C) Cabergoline
- D) Gonadotropins
- E) Surgical removal of pituitary tissue

Answer: C. Dopamine agonists (cabergoline preferred over bromocriptine for tolerability) are first-line for hyperprolactinaemia and typically restore ovulation by normalising prolactin.

Q7. Mid-luteal serum progesterone is most useful for which of the following purposes?

- A) Confirming pregnancy
- B) Confirming ovulation
- C) Diagnosing PCOS
- D) Predicting ovarian reserve
- E) Diagnosing endometriosis

Answer: B. Mid-luteal (day 21 in a 28-day cycle, or 7 days before expected next period) progesterone > 30 nmol/L (10 ng/mL) confirms ovulation.

Q8. Which of the following is the best test of ovarian reserve and is independent of cycle phase?

- A) Day 3 FSH
- B) Day 21 progesterone
- C) Anti-Müllerian hormone (AMH)
- D) LH/FSH ratio
- E) Serum estradiol

Answer: C. AMH is produced by granulosa cells of small antral follicles, declines with age, and can be measured at any point in the cycle. It is the best ovarian reserve marker and predicts response to ovarian stimulation.

Q9. Laparoscopic ovarian drilling is most appropriately offered to:

- A) Women with hypothalamic amenorrhea
- B) Clomiphene-resistant women with PCOS who are normal-weight or have failed weight loss
- C) Women with premature ovarian insufficiency
- D) Women with hyperprolactinaemia
- E) All women starting ovulation induction

Answer: B. Laparoscopic ovarian drilling is an alternative to gonadotropins in clomiphene-resistant women with PCOS. It restores spontaneous ovulation in ~50–70% of cases. Risks include adhesions and (rarely) premature ovarian failure.

Topic 12 — Ovarian Hyperstimulation Syndrome

Q1. A 28-year-old with PCOS undergoing IVF presents 6 days after ovum collection with abdominal distension, oliguria, hematocrit 47%, and bilateral enlarged ovaries with ascites. The most likely underlying mechanism is:

- A) Estrogen deficiency
- B) VEGF-mediated increased vascular permeability with third-space fluid loss
- C) Dehydration from poor oral intake alone
- D) Bacterial peritonitis
- E) Hyperprolactinaemia

Answer: B. OHSS is mediated by VEGF and other vasoactive substances released from over-stimulated ovaries (especially after hCG trigger), causing increased vascular permeability and third-spacing — leading to ascites, pleural effusion, hemoconcentration, oliguria and hypovolemia.

Q2. All of the following are recognised risk factors for OHSS EXCEPT:

- A) Polycystic ovary syndrome
- B) Young age
- C) High AMH or high antral follicle count
- D) Use of hCG trigger
- E) High BMI

Answer: E. OHSS is more common in LOW BMI women. The other four are recognised risk factors. Pregnancy itself worsens OHSS due to endogenous hCG.

Q3. All of the following are features of severe OHSS EXCEPT:

- A) Hematocrit > 45%
- B) Tense ascites
- C) Oliguria
- D) Weight loss of more than 5%
- E) Ovarian enlargement > 12 cm

Answer: D. OHSS causes weight GAIN due to third-space fluid accumulation, not weight loss. The other four are features of severe OHSS.

Q4. Which of the following is the most effective preventive strategy for OHSS in a high-risk woman undergoing IVF?

- A) Routine progesterone luteal support
- B) GnRH agonist (rather than hCG) trigger combined with a 'freeze-all' embryo strategy
- C) Routine paracentesis
- D) Routine LMWH from day 1 of stimulation
- E) Higher doses of gonadotropins

Answer: B. GnRH agonist trigger essentially eliminates OHSS by producing a short LH surge without the sustained hCG effect. Combined with a freeze-all approach (deferring embryo transfer to a later cycle), this avoids endogenous hCG from pregnancy. Cabergoline is also adjunctive.

Q5. A 30-year-old woman with severe OHSS has tense ascites, dyspnea, and oliguria 7 days post-trigger. The most appropriate management includes all the following EXCEPT:

- A) Hospital admission
- B) IV crystalloid with cautious fluid balance
- C) LMWH thromboprophylaxis
- D) Therapeutic paracentesis for tense ascites
- E) NSAIDs for analgesia

Answer: E. NSAIDs should be AVOIDED in severe OHSS due to risk of acute kidney injury (renal hypoperfusion is already present). Paracetamol is preferred. The other four are appropriate steps.

Q6. The most important reason that pregnancy worsens OHSS is:

- A) Increased estrogen production
- B) Endogenous hCG from the trophoblast sustains and amplifies VEGF-mediated effects
- C) Increased plasma volume
- D) Reduced renal function
- E) Anemia of pregnancy

Answer: B. Endogenous hCG from the trophoblast sustains stimulation of the over-stimulated ovaries, prolonging and worsening OHSS — pregnancy can convert mild-moderate OHSS into severe disease.

Q7. Which of the following statements about OHSS is INCORRECT?

- A) It is mediated principally by VEGF
- B) PCOS is the most important risk factor
- C) It is more commonly caused by clomiphene than by gonadotropins
- D) Severe OHSS can cause life-threatening thromboembolism
- E) GnRH agonist trigger reduces OHSS risk

Answer: C. Severe OHSS is much more commonly associated with gonadotropins (in IVF or ovulation induction) than with clomiphene. Mild OHSS can occur with clomiphene but severe disease is rare.

Q8. Which of the following is NOT a typical symptom of OHSS?

- A) Abdominal distension and pain
- B) Nausea and vomiting
- C) Decreased urine output
- D) Pleural effusion and dyspnea
- E) Weight loss

Answer: E. OHSS causes weight GAIN from third-spacing, not weight loss. The other four are typical features.

Q9. Hospital admission for OHSS is generally indicated for which of the following features?

- A) Mild abdominal distension only
- B) Hematocrit > 45%, oliguria, severe pain, or significant ascites
- C) Any positive pregnancy test post-IVF
- D) Mild nausea responsive to oral antiemetics
- E) Routine after every IVF cycle

Answer: B. Severe features (hemoconcentration with Hct > 45%, oliguria, severe pain, significant ascites or pleural effusion, electrolyte disturbance) warrant inpatient management. Mild–moderate OHSS can usually be managed as an outpatient with oral fluids and close follow-up.

Q10. Which of the following is a recognised adjunctive measure to prevent OHSS in high-risk IVF cycles?

- A)** Cabergoline starting on the day of trigger
- B)** Routine corticosteroids during stimulation
- C)** Routine spironolactone during stimulation
- D)** High-dose progesterone luteal support with hCG
- E)** Continuing hCG luteal support in high-risk women

Answer: A. *Cabergoline 0.5 mg daily starting on the day of hCG trigger reduces VEGF activity and the severity of OHSS. hCG luteal support is AVOIDED in high-risk women — progesterone is used instead.*