INI CET Obstetrics and Gynaecology

Sample Paper – 2

Duration: 14 Minutes **Maximum Marks: 15**

Instructions

- This paper contains **15** Multiple Choice Questions (Single Best Response), modelled on the Obstetrics and Gynaecology content of **INI CET** (Institutes of National Importance Combined Entrance Test) conducted by AIIMS New Delhi.
- The **15-question** length matches the number of Obstetrics and Gynaecology items you actually meet in the real 200-question paper.
- Each correct answer carries **+1 mark**. There is **negative marking of one-third (0.33) mark** for every incorrect answer; unattempted questions carry no penalty.
- Every question has **exactly one best answer**. Choose the single most appropriate option, whether it concerns antenatal care, labour monitoring or gynaecological disease.
- Attempt this practice paper in one timed sitting of about **14 minutes**, the pace the real computer-based test demands.

Obstetrics: Antenatal Care and Physiology

Q1. As per the 2016 WHO antenatal care model, the recommended minimum number of antenatal contacts a pregnant woman should have during pregnancy is:

(A) Four contacts

(B) Five contacts

(C) Six contacts

(D) Eight contacts

Q2. Which routine antenatal investigation, usually performed at 24 to 28 weeks of gestation, screens for gestational diabetes mellitus?

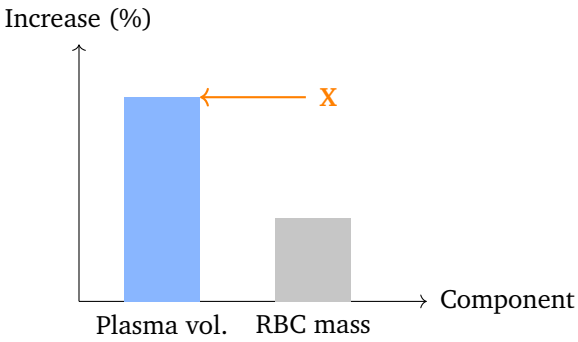
(A) Complete blood count

(B) Blood grouping and Rh typing

(C) Oral glucose tolerance test

(D) Urine routine and microscopy

Q3. The chart contrasts the rise in maternal plasma volume with the smaller rise in red cell mass during pregnancy, the mismatch that causes the physiological anaemia of pregnancy. The approximate increase in plasma volume at term (marked **X**) is:



(A) About 40 to 50 percent

(B) About 10 to 15 percent

(C) About 20 to 25 percent

(D) About 70 to 80 percent

Obstetrics: Complications of Pregnancy

Q4. Painless, causeless and recurrent vaginal bleeding appearing in the late second or third trimester is the classic presentation of:

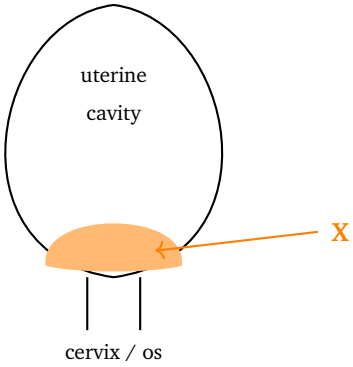
(A) Abruptio placentae

(B) Vasa previa

(C) Uterine rupture

(D) Placenta previa

Q5. The diagram shows a uterus in which the placenta (marked **X**) lies in the lower segment and covers the internal cervical os. This condition is:



(A) Placenta previa

(B) Normal fundal placenta

(C) Abruptio placentae

(D) Placenta accreta

Q6. A woman at 34 weeks presents after a road traffic accident with painful vaginal bleeding, a tense tender uterus and fetal distress. The most likely diagnosis is:

(A) Placenta previa

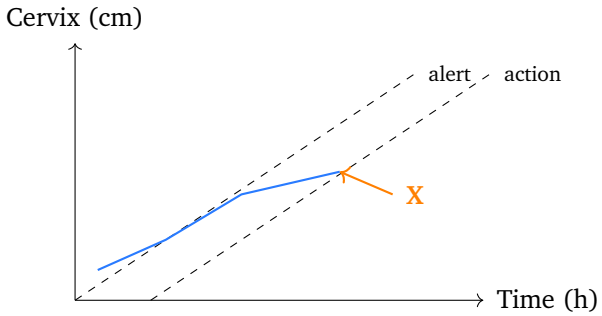
(B) Vasa previa

(C) Abruptio placentae

(D) Cervical ectropion

Labour and Puerperium

Q7. In the partogram shown, the plotted cervical dilatation (marked **X**) has moved to the right of and crossed the alert line. This most appropriately indicates:



(A) Normal, satisfactory progress of labour

(B) Slow progress of labour requiring reassessment

(C) Onset of the second stage of labour

(D) Completed delivery of the placenta

Q8. On the classic WHO partogram, cervical dilatation is plotted on the alert and action lines from the start of the active phase of the first stage of labour, which conventionally begins at a dilatation of:

(A) 4 cm

(B) 2 cm

(C) 6 cm

(D) 8 cm

Gynaecology: Benign and Endocrine

Q9. By the Rotterdam criteria, polycystic ovary syndrome is diagnosed when a woman has at least how many of the three features (oligo/anovulation, clinical or biochemical hyperandrogenism, polycystic ovarian morphology)?

(A) Any one of the three

(B) Any two of the three

(C) All three

(D) Hyperandrogenism alone is mandatory

Q10. For a woman with polycystic ovary syndrome who wishes to conceive, the current first-line pharmacological agent for ovulation induction is:

(A) Metformin

(B) Letrozole

(C) Injectable gonadotropins

(D) Bromocriptine

Q11. Which hormonal pattern is classically described in polycystic ovary syndrome?

(A) A raised FSH to LH ratio

(B) Low LH with a high FSH

(C) A raised LH to FSH ratio

(D) A markedly high prolactin as the defining feature

Gynaecological Oncology

Q12. The most common presenting symptom of endometrial carcinoma, and the one that mandates prompt evaluation with endometrial sampling, is:

(A) A palpable abdominal mass

(B) Chronic pelvic pain

(C) Watery vaginal discharge

(D) Postmenopausal bleeding

Q13. Type I endometrial carcinoma, the more common oestrogen-driven subtype linked to obesity and unopposed oestrogen, is characteristically of which histological type?

(A) Serous, and oestrogen-independent

(B) Endometrioid, and oestrogen-dependent

(C) Clear cell, and high grade at onset

(D) Squamous cell carcinoma

Contraception, Infertility and Infections

Q14. In the evaluation of female infertility, the single most reliable and commonly used blood test to confirm that ovulation has occurred is:

(A) Mid-luteal (around day 21) serum progesterone

(B) Basal body temperature charting

(C) Day 2 serum FSH

(D) Serum thyroid-stimulating hormone

Q15. The usual first-line, minimally invasive investigation to assess tubal patency in a woman being worked up for infertility is:

(A) Diagnostic laparoscopy with chromopertubation

(B) Transvaginal ultrasound alone

(C) Hysterosalpingography

(D) Endometrial biopsy

Detailed Solutions

Q1.

Solution

Concept – WHO antenatal care model: The recommended schedule of contacts changed with the 2016 WHO guidance.

Step 1 – recall the number: The 2016 WHO model recommends a minimum of **eight antenatal contacts** (up from the earlier four-visit focused model).

Step 2 – schedule: One contact in the first trimester, two in the second and five in the third, aiming to reduce perinatal mortality.

Why the other options are wrong:

- A, four: the older focused antenatal care model, now superseded.
- B and C, five and six: not the figure specified by the 2016 model.

Final Answer: Eight contacts $\Rightarrow$ D

Answer: (D) Go Back to Q1

Q2.

Solution

Concept – screening for gestational diabetes: GDM is detected by a glucose challenge in mid-pregnancy.

Step 1 – name the test: The **oral glucose tolerance test** at 24 to 28 weeks screens for gestational diabetes.

Step 2 – rationale: Placental hormones peak in this window, unmasking impaired glucose tolerance.

Why the other options are wrong:

- A, complete blood count: screens for anaemia, not glucose.
- B, blood grouping and Rh typing: identifies Rh isoimmunisation risk.
- D, urine routine: screens for proteinuria and infection, not GDM.

Final Answer: Oral glucose tolerance test $\Rightarrow$ C

Answer: (C) Go Back to Q2

Q3.

Solution

Concept – haemodynamic changes in pregnancy: Plasma volume and red cell mass rise unequally.

Step 1 – read the value at X: Plasma volume rises by about **40 to 50 percent** at term, more than the red cell mass rise of roughly 20 to 30 percent.

Step 2 – consequence: This disproportion dilutes the haemoglobin, producing the physiological (dilutional) anaemia of pregnancy.

Why the other options are wrong:

- B and C, 10 to 15 and 20 to 25 percent: underestimate the plasma volume rise.
- D, 70 to 80 percent: far higher than the physiological increase.

Final Answer: About 40 to 50 percent $\Rightarrow$ A

Answer: (A) Go Back to Q3

Q4.

Solution

Concept – antepartum haemorrhage: The character of the bleed separates previa from abruption.

Step 1 – match the picture: Painless, causeless and recurrent bleeding in the late trimester is classic for **placenta previa**.

Step 2 – mechanism: The placenta lies in the lower segment; its stretching and separation bleed without pain.

Why the other options are wrong:

- A, abruptio placentae: painful bleeding with a tense uterus.
- B, vasa previa: sudden bleeding with membrane rupture and rapid fetal compromise.
- C, uterine rupture: acute pain, collapse and loss of uterine contour.

Final Answer: Placenta previa $\Rightarrow$ D

Answer: (D) Go Back to Q4

Q5.

Solution

Concept – placental location: Where the placenta sits defines the diagnosis.

Step 1 – identify X: The placenta at X lies in the lower segment and covers the internal os, which is **placenta previa**.

Step 2 – clinical link: This position explains the painless bleeding and the need to avoid a vaginal examination.

Why the other options are wrong:

- B, normal fundal placenta: would sit at the top of the cavity, away from the os.
- C, abruptio placentae: premature separation of a normally sited placenta, not a low position.
- D, placenta accreta: abnormal depth of invasion, not defined by covering the os.

Final Answer: Placenta previa $\Rightarrow$ A

Answer: (A) Go Back to Q5

Q6.

Solution

Concept – abruptio placentae: Painful bleeding with a rigid uterus points to abruption.

Step 1 – match the picture: Trauma, painful bleeding, a tense tender uterus and fetal distress indicate **abruptio placentae**.

Step 2 – mechanism: Premature separation of a normally sited placenta causes retroplacental clot and uterine irritability.

Why the other options are wrong:

- A, placenta previa: painless bleeding, soft non-tender uterus.
- B, vasa previa: fetal vessel bleeding at membrane rupture, not trauma related.
- D, cervical ectropion: causes minor painless spotting, not this severe picture.

Final Answer: Abruptio placentae $\Rightarrow$ C

Answer: (C) Go Back to Q6

Q7.

Solution

Concept – reading the partogram: The alert line flags labour that is falling behind.

Step 1 – interpret X: When the dilatation plot crosses to the right of the alert line, progress is **slow and needs reassessment**.

Step 2 – action: Review the woman, consider amniotomy and augmentation, and transfer if in a peripheral unit; crossing the action line prompts definitive intervention.

Why the other options are wrong:

- A, normal progress: would keep the plot on or left of the alert line.
- C, second stage: marked by full dilatation, not by crossing the alert line.
- D, delivery of the placenta: a third-stage event, not shown on the cervicograph.

Final Answer: Slow progress needing reassessment $\Rightarrow$ B

Answer: (B) Go Back to Q7

Q8.

Solution

Concept – active phase on the partogram: Plotting starts once the active phase begins.

Step 1 – recall the threshold: On the classic WHO partogram, the active phase is taken from **4 cm** of cervical dilatation, where the alert line starts.

Step 2 – expected pace: From this point a rate of about 1 cm per hour is expected in the active phase.

Why the other options are wrong:

- B, 2 cm: still the latent phase, not plotted on the active-phase lines.
- C and D, 6 and 8 cm: fall within the active phase but are not its starting point on the classic chart.

Final Answer: 4 cm $\Rightarrow$ A

Answer: (A) Go Back to Q8

Q9.

Solution

Concept – Rotterdam criteria: PCOS is diagnosed on a two of three rule.

Step 1 – apply the rule: The Rotterdam criteria need at least **two of the three** features: oligo/anovulation, hyperandrogenism, and polycystic ovarian morphology.

Step 2 – caveat: Other causes such as thyroid disease, hyperprolactinaemia and congenital adrenal hyperplasia must be excluded first.

Why the other options are wrong:

- A, any one: too loose; one feature alone does not qualify.
- C, all three: stricter than the Rotterdam definition requires.
- D, hyperandrogenism mandatory: true for the AES criteria, not for Rotterdam.

Final Answer: Any two of the three $\Rightarrow$ B

Answer: (B) Go Back to Q9

Q10.

Solution

Concept – ovulation induction in PCOS: First-line therapy has shifted to an aromatase inhibitor.

Step 1 – name the drug: Letrozole is now the first-line agent for ovulation induction in PCOS, with higher live-birth rates than clomiphene.

Step 2 – mechanism: By blocking aromatase it lowers oestrogen, releasing FSH to drive follicular growth.

Why the other options are wrong:

- A, metformin: helps insulin resistance and is an adjunct, not first-line for ovulation.
- C, gonadotropins: second-line, used when oral agents fail.
- D, bromocriptine: for hyperprolactinaemia, not PCOS.

Final Answer: Letrozole $\Rightarrow$ B

Answer: (B) Go Back to Q10

Q11.

Solution

Concept – hormonal profile of PCOS: The gonadotropin ratio is classically disturbed.

Step 1 – name the pattern: PCOS classically shows a **raised LH to FSH ratio**, often around 2 to 3 to 1.

Step 2 – effect: High LH drives ovarian androgen production, contributing to hyperandrogenism.

Why the other options are wrong:

- A and B, raised FSH:LH or low LH with high FSH: the reverse of the PCOS pattern (high FSH suggests ovarian failure).
- D, high prolactin: not the defining hormonal feature of PCOS.

Final Answer: Raised LH to FSH ratio $\Rightarrow$ C

Answer: (C) Go Back to Q11

Q12.

Solution

Concept – presentation of endometrial carcinoma: Abnormal bleeding is the cardinal early sign.

Step 1 – name the symptom: Postmenopausal bleeding is the most common presentation and demands endometrial sampling.

Step 2 – work-up: Transvaginal ultrasound for endometrial thickness and endometrial biopsy establish the diagnosis.

Why the other options are wrong:

- A, abdominal mass: a late feature, not the usual presentation.
- B, chronic pelvic pain: non-specific and uncommon as the first sign.
- C, watery discharge: can occur but is far less common than bleeding.

Final Answer: Postmenopausal bleeding $\Rightarrow$ D

Answer: (D) Go Back to Q12

Q13.

Solution

Concept – type I versus type II endometrial cancer: The two types differ in histology and oestrogen dependence.

Step 1 – classify type I: Type I is **endometrioid and oestrogen-dependent**, linked to obesity and unopposed oestrogen, and is usually low grade.

Step 2 – contrast: Type II (serous, clear cell) is oestrogen-independent, high grade and carries a worse prognosis.

Why the other options are wrong:

- A and C, serous and clear cell: these are type II, oestrogen-independent tumours.
- D, squamous cell carcinoma: a cervical histology, not the usual endometrial type.

Final Answer: Endometrioid, oestrogen-dependent $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q13

Q14.

Solution

Concept – confirming ovulation: A luteal-phase hormone confirms that ovulation occurred.

Step 1 – name the test: A **mid-luteal (around day 21) serum progesterone** is the most reliable common test; a value above 3 ng/mL confirms ovulation.

Step 2 – timing: It is taken about seven days before the expected period, when the corpus luteum output peaks.

Why the other options are wrong:

- B, basal body temperature: retrospective and unreliable.
- C, day 2 FSH: assesses ovarian reserve, not ovulation.
- D, TSH: screens thyroid function, not ovulation.

Final Answer: Mid-luteal serum progesterone $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q14

Q15.

Solution

Concept – assessing tubal patency: Tubal factor is checked with a first-line imaging test.

Step 1 – name the test: Hysterosalpingography is the usual first-line, minimally invasive test of tubal patency and uterine cavity.

Step 2 – method: Radio-opaque dye is injected through the cervix; free spill into the peritoneum confirms patent tubes.

Why the other options are wrong:

- A, laparoscopy with chromopertubation: the gold standard but invasive, reserved for second-line or when pathology is suspected.
- B, transvaginal ultrasound: assesses ovaries and uterus, not tubal patency directly.
- D, endometrial biopsy: samples the lining, giving no information on the tubes.

Final Answer: Hysterosalpingography $\Rightarrow$ $\boxed{C}$

Answer: (C) Go Back to Q15

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	D	2	C	3	A	4	D	5	A
6	C	7	B	8	A	9	B	10	B
11	C	12	D	13	B	14	A	15	C