

INI CET Obstetrics and Gynaecology

Sample Paper – 10

Duration: 14 Minutes

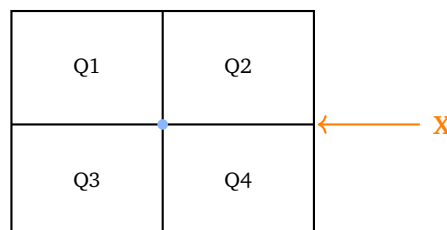
Maximum Marks: 15

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 for the clinical or physiological fact asked.
- 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.** The schematic shows the maternal abdomen divided by lines through the umbilicus for measuring the amniotic fluid index (AFI). The AFI is obtained by adding the deepest vertical fluid pocket from each region. The total number of quadrants used (marked **X**) is:



- (A) Four quadrants
(B) Two quadrants



- (C) One pocket only
- (D) Three quadrants

Q2. Oligohydramnios (amniotic fluid index below 5 cm) in the second trimester is most classically associated with which fetal anomaly?

- (A) Duodenal atresia
- (B) Bilateral renal agenesis (Potter sequence)
- (C) Anencephaly
- (D) Oesophageal atresia

Q3. Which of the following is the most common maternal cause of polyhydramnios (excess amniotic fluid)?

- (A) Bilateral renal agenesis
- (B) Post-term pregnancy
- (C) Uteroplacental insufficiency
- (D) Maternal diabetes mellitus

Obstetrics: Complications of Pregnancy

Q4. The box lists the TORCH group of congenital infections. The organism marked X, classically causing the triad of chorioretinitis, hydrocephalus and intracranial calcification, is:

X ↓				
T	O	R	C	H

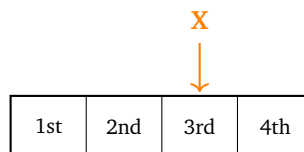
- (A) Rubella virus
- (B) Cytomegalovirus
- (C) Toxoplasma gondii
- (D) Herpes simplex virus



- Q5.** Intrapartum antibiotic prophylaxis (usually intravenous penicillin in labour) is given to prevent neonatal early-onset sepsis caused by which organism?
- (A) *Listeria monocytogenes*
 - (B) Group B *Streptococcus* (*Streptococcus agalactiae*)
 - (C) *Escherichia coli*
 - (D) *Toxoplasma gondii*
- Q6.** Congenital rubella syndrome classically produces which triad (Gregg triad)?
- (A) Cataracts, sensorineural deafness and cardiac defects (patent ductus arteriosus)
 - (B) Notched incisors and interstitial keratitis
 - (C) Chorioretinitis, hydrocephalus and intracranial calcification
 - (D) Limb hypoplasia with dermatomal skin scarring

Labour and Puerperium

- Q7.** The diagram grades perineal tears. A tear that involves the anal sphincter complex but spares the rectal (anal) mucosa (marked X) is classified as a:



- (A) First-degree tear
 - (B) Third-degree tear
 - (C) Second-degree tear
 - (D) Fourth-degree tear
- Q8.** With active management of the third stage, retained placenta is diagnosed when the placenta is not expelled within how long after delivery of the baby?



- (A) 30 minutes
- (B) 2 hours
- (C) 5 minutes
- (D) 24 hours

Gynaecology: Benign and Endocrine

- Q9.** The most common cause of hirsutism and hyperandrogenism in women of reproductive age is:
- (A) Cushing syndrome
 - (B) Idiopathic hirsutism
 - (C) Polycystic ovary syndrome (PCOS)
 - (D) Androgen-secreting ovarian tumour
- Q10.** Asherman syndrome, a cause of secondary amenorrhoea and infertility, is characterised by:
- (A) Intrauterine adhesions (synechiae), usually following uterine curettage
 - (B) Failure of ovarian development
 - (C) Congenital absence of the uterus and upper vagina
 - (D) An elevated serum prolactin from a pituitary adenoma
- Q11.** Hirsutism in women is objectively graded (hair growth over androgen-sensitive body areas) using which scoring system?
- (A) Bishop score
 - (B) Ferriman-Gallwey score
 - (C) Apgar score
 - (D) Tanner staging

Gynaecological Oncology



- Q12.** Cervical cancer is most strongly associated with persistent infection by which high-risk human papillomavirus (HPV) genotypes, both targeted by the vaccine?
- (A) HPV 6 and 11
 - (B) HPV 1 and 2
 - (C) HPV 40 and 42
 - (D) HPV 16 and 18
- Q13.** Which screening test, by detecting precancerous cervical changes (dysplasia) before invasion, has most reduced cervical cancer mortality in populations?
- (A) Mammography
 - (B) Serum CA-125
 - (C) Papanicolaou (Pap) smear cytology
 - (D) Serum alpha-fetoprotein

Contraception, Infertility and Infections

- Q14.** For a sexually active adolescent seeking reversible, highly effective contraception, which category of method is recommended as first-line because of its very low typical-use failure rate?
- (A) Combined oral contraceptive pills
 - (B) Male condom used alone
 - (C) Long-acting reversible contraception (subdermal implant or intrauterine device)
 - (D) The withdrawal (coitus interruptus) method
- Q15.** Pelvic inflammatory disease, a leading cause of tubal-factor infertility, is most often caused by which sexually transmitted organisms?
- (A) *Candida albicans*
 - (B) *Gardnerella vaginalis*



- (C) *Trichomonas vaginalis*
- (D) *Chlamydia trachomatis* and *Neisseria gonorrhoeae*



Detailed Solutions**Q1.****Solution**

Concept – amniotic fluid index (AFI): The AFI is a semi-quantitative ultrasound estimate of amniotic fluid volume.

Step 1 – divide the uterus: The gravid uterus is divided into **four quadrants** by the midline (linea nigra) and a transverse line at the umbilicus.

Step 2 – measure and add: The deepest vertical fluid pocket free of cord and fetal parts is measured in each of the four quadrants, and the four values are added to give the AFI in centimetres.

Step 3 – interpret: A normal AFI is about 5 to 25 cm; below 5 cm is oligohydramnios and above 25 cm is polyhydramnios.

Why the other options are wrong:

- B and D, two or three quadrants: understate the technique; all four are summed.
- C, single pocket: that is the separate “single deepest pocket” method, not the AFI.

Final Answer: Four quadrants $\Rightarrow$ A

Answer: (A) [Go Back to Q1](#)

Q2.**Solution**

Concept – source of amniotic fluid: In the second and third trimesters fetal urine is the main source of amniotic fluid.

Step 1 – link low fluid to the kidneys: If the fetus makes no urine, fluid falls sharply; **bilateral renal agenesis** therefore causes severe oligohydramnios.

Step 2 – the sequence: Lack of fluid leads to the Potter sequence: limb contractures, flattened facies and pulmonary hypoplasia.

Why the other options are wrong:

- A, duodenal atresia: blocks fetal swallowing, so fluid accumulates (polyhydramnios).
- C, anencephaly: impaired swallowing gives polyhydramnios.



- D, oesophageal atresia: fluid cannot be swallowed, again causing polyhydramnios.

Final Answer: Bilateral renal agenesis ⇒ B

Answer: (B) [Go Back to Q2](#)

Q3.

Solution

Concept – polyhydramnios: Excess amniotic fluid follows either overproduction or reduced fetal swallowing.

Step 1 – name the commonest maternal cause: Maternal diabetes mellitus is the most frequent maternal cause; fetal hyperglycaemia drives osmotic diuresis and increased urine output.

Step 2 – clinical note: Idiopathic and fetal-anomaly causes exist, but among the maternal causes listed, diabetes leads.

Why the other options are wrong:

- A, renal agenesis: reduces fluid (oligohydramnios), not polyhydramnios.
- B, post-term pregnancy: tends to reduce amniotic fluid.
- C, uteroplacental insufficiency: causes oligohydramnios through reduced fetal perfusion.

Final Answer: Maternal diabetes mellitus ⇒ D

Answer: (D) [Go Back to Q3](#)

Q4.

Solution

Concept – TORCH infections: TORCH is a mnemonic for congenital infections crossing the placenta: Toxoplasma, Other (syphilis), Rubella, Cytomegalovirus, Herpes.

Step 1 – read the marked letter: X marks the leading “T”, which stands for Toxoplasma gondii.

Step 2 – match the triad: Congenital toxoplasmosis classically gives chorioretinitis, hydrocephalus and diffuse intracranial calcification.

Why the other options are wrong:



- A, rubella: cataracts, deafness and cardiac defects.
- B, cytomegalovirus: periventricular calcification, microcephaly and hearing loss.
- D, herpes simplex: neonatal skin, eye and CNS disease acquired mainly at delivery.

Final Answer: Toxoplasma gondii ⇒ C

Answer: (C) [Go Back to Q4](#)

Q5.

Solution

Concept – neonatal early-onset sepsis: An organism colonising the maternal genital tract can infect the baby during labour.

Step 1 – name the organism: Group B Streptococcus (*Streptococcus agalactiae*) is the target of intrapartum antibiotic prophylaxis.

Step 2 – the strategy: Screening at 36 to 37 weeks or a risk-based approach identifies carriers, who receive intravenous penicillin in labour to prevent early-onset neonatal sepsis.

Why the other options are wrong:

- A, *Listeria*: prevented by food advice, not intrapartum penicillin prophylaxis.
- C, *E. coli*: a cause of neonatal sepsis but not the target of GBS prophylaxis.
- D, *Toxoplasma*: a congenital protozoal infection, unrelated to intrapartum antibiotics.

Final Answer: Group B Streptococcus ⇒ B

Answer: (B) [Go Back to Q5](#)

Q6.

Solution

Concept – congenital rubella syndrome: First-trimester rubella infection is teratogenic.

Step 1 – recall the Gregg triad: The classic triad is **cataracts, sensorineural deafness and congenital heart disease** (typically patent ductus arteriosus).

Step 2 – prevention: Pre-pregnancy MMR vaccination prevents the syndrome; the vaccine is avoided during pregnancy.



Why the other options are wrong:

- B, notched incisors and interstitial keratitis: features of congenital syphilis.
- C, chorioretinitis with hydrocephalus and calcification: congenital toxoplasmosis.
- D, limb hypoplasia with dermatomal scarring: congenital varicella syndrome.

Final Answer: Cataracts, deafness and cardiac defects ⇒ A

Answer: (A) [Go Back to Q6](#)

Q7.

Solution

Concept – degrees of perineal tear: Perineal tears are graded by the deepest tissue involved.

Step 1 – read the grading: First degree involves skin only; second degree extends into the perineal muscles; **third degree** involves the anal sphincter complex; fourth degree extends through into the anal or rectal mucosa.

Step 2 – match X: A tear reaching the anal sphincter but sparing the rectal mucosa is the **third degree**, marked X.

Why the other options are wrong:

- A, first degree: skin and vaginal mucosa only.
- C, second degree: perineal muscles, sphincter intact.
- D, fourth degree: sphincter torn and rectal mucosa breached.

Final Answer: Third-degree tear ⇒ B

Answer: (B) [Go Back to Q7](#)

Q8.

Solution

Concept – third stage of labour: The third stage is delivery of the placenta.

Step 1 – apply the time limit: With active management, the placenta should deliver quickly; failure to expel it within **30 minutes** defines retained placenta.

Step 2 – management: Persisting retention needs manual removal, usually under anaesthesia, because it risks postpartum haemorrhage and infection.



Why the other options are wrong:

- B, 2 hours: too long; intervention starts well before this.
- C, 5 minutes: normal placentas can take longer than this without concern.
- D, 24 hours: far exceeds the accepted definition.

Final Answer: 30 minutes $\Rightarrow$

Answer: (A) [Go Back to Q8](#)

Q9.

Solution

Concept – hirsutism and hyperandrogenism: Excess androgen action produces male-pattern terminal hair.

Step 1 – name the commonest cause: Polycystic ovary syndrome (PCOS) accounts for the large majority of hyperandrogenism in reproductive-age women.

Step 2 – associated features: Oligomenorrhoea, polycystic ovaries on ultrasound and insulin resistance support the diagnosis (Rotterdam criteria).

Why the other options are wrong:

- A, Cushing syndrome: rare, with additional cortisol-excess features.
- B, idiopathic hirsutism: a diagnosis of exclusion, less common than PCOS.
- D, androgen-secreting tumour: rare; suspected with rapid, severe virilisation.

Final Answer: Polycystic ovary syndrome $\Rightarrow$

Answer: (C) [Go Back to Q9](#)

Q10.

Solution

Concept – Asherman syndrome: This is an acquired uterine disorder.

Step 1 – define it: Asherman syndrome is **intrauterine adhesions (synechiae)**, most often after vigorous curettage, especially of a recently pregnant uterus.

Step 2 – consequences: Adhesions obliterate the cavity, causing secondary amenorrhoea, hypomenorrhoea, recurrent loss and infertility; hysteroscopy confirms and treats it.



Why the other options are wrong:

- B, failure of ovarian development: describes gonadal dysgenesis.
- C, absent uterus and upper vagina: Mayer-Rokitansky-Kuster-Hauser syndrome.
- D, high prolactin: a pituitary cause of amenorrhoea, not adhesions.

Final Answer: Intrauterine adhesions $\Rightarrow$ **A**

Answer: (A) [Go Back to Q10](#)

Q11.

Solution

Concept – grading hirsutism: Objective scoring standardises assessment.

Step 1 – name the tool: The **Ferriman-Gallwey score** rates terminal hair over nine androgen-sensitive areas, each 0 to 4; a total at or above 8 (in many populations) indicates hirsutism.

Step 2 – use: It quantifies severity and helps monitor response to treatment.

Why the other options are wrong:

- A, Bishop score: assesses cervical favourability for induction of labour.
- C, Apgar score: assesses the newborn at birth.
- D, Tanner staging: describes pubertal development, not hirsutism.

Final Answer: Ferriman-Gallwey score $\Rightarrow$ **B**

Answer: (B) [Go Back to Q11](#)

Q12.

Solution

Concept – HPV and cervical cancer: Persistent high-risk HPV infection drives nearly all cervical cancers.

Step 1 – name the key genotypes: **HPV 16 and 18** together cause about 70% of cervical cancers and are covered by all HPV vaccines.

Step 2 – mechanism: Viral E6 and E7 proteins inactivate p53 and Rb, driving malignant transformation.

Why the other options are wrong:



- A, HPV 6 and 11: low-risk types causing genital warts, not cancer.
- B, HPV 1 and 2: cause common skin (plantar) warts.
- C, HPV 40 and 42: low-risk mucosal types, not oncogenic.

Final Answer: HPV 16 and 18 ⇒ D

Answer: (D) [Go Back to Q12](#)

Q13.

Solution

Concept – cervical cancer screening: Detecting precancer allows treatment before invasion.

Step 1 – name the test: The **Papanicolaou (Pap) smear** samples cervical cells to detect dysplasia and has dramatically cut cervical cancer mortality where used widely.

Step 2 – modern practice: It is now combined with high-risk HPV DNA testing (co-testing) to improve detection.

Why the other options are wrong:

- A, mammography: screens for breast cancer.
- B, CA-125: a marker used mainly in ovarian cancer follow-up, not screening.
- D, alpha-fetoprotein: a marker for hepatocellular and germ cell tumours.

Final Answer: Papanicolaou (Pap) smear cytology ⇒ C

Answer: (C) [Go Back to Q13](#)

Q14.

Solution

Concept – adolescent contraceptive counselling: Effectiveness depends heavily on how forgiving a method is of user error.

Step 1 – pick the most effective class: **Long-acting reversible contraception** (subdermal implant and intrauterine devices) has the lowest typical-use failure rate (under 1%) and needs no daily action, so it is recommended first-line for adolescents.

Step 2 – add dual protection: Because LARC does not prevent sexually transmitted infections, condoms are advised in addition.



Why the other options are wrong:

- A, combined pills: effective but higher typical-use failure from missed doses.
- B, condom alone: useful for STI protection but a higher failure rate for pregnancy.
- D, withdrawal: one of the least reliable methods.

Final Answer: Long-acting reversible contraception ⇒

Answer: (C) [Go Back to Q14](#)

Q15.

Solution

Concept – pelvic inflammatory disease (PID): Ascending genital infection damages the fallopian tubes.

Step 1 – name the organisms: PID is most often caused by the sexually transmitted **Chlamydia trachomatis** and **Neisseria gonorrhoeae**.

Step 2 – consequence: Tubal scarring causes tubal-factor infertility and raises the risk of ectopic pregnancy and chronic pelvic pain.

Why the other options are wrong:

- A, *Candida albicans*: causes vulvovaginal thrush, not tubal PID.
- B, *Gardnerella*: associated with bacterial vaginosis.
- C, *Trichomonas*: causes vaginitis, not the classic PID picture.

Final Answer: Chlamydia and Neisseria gonorrhoeae ⇒

Answer: (D) [Go Back to Q15](#)



Answer Key

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

