



CBSE NCERT Based Chapter wise Questions (2025-2026)

Class-XII

Subject: Biology

Chapter Name : *Reproduction & Reproductive Health* (Chapter : 2 & 3)

Total : 10 Marks (expected) [MCQ(1)-2 Mark, Assertion-Reason(1)-1 Mark, SA(1)-3 Marks, CBQ(1)-4 Marks]

Level - 2(Higher Order)

MCQ Type Questions:

- The hormone responsible for maintenance of corpus luteum during early pregnancy is
(A) LH (B) FSH (C) hCG (D) Progesterone
[Hint: Secreted by the developing embryo.]
- In humans, the first cleavage division of the zygote occurs
(A) In the uterus (B) In the ovary (C) In the fallopian tube (D) In the cervix
[Hint: Fertilization and early cleavage occur at the same site.]
- Which layer of the blastocyst gives rise to the embryo?
(A) Trophoblast (B) Amnion (C) Inner cell mass (D) Chorion
[Hint: Forms all three germ layers.]
- The correct sequence of events after ovulation is
(A) Fertilization → implantation → cleavage
(B) Cleavage → fertilization → implantation
(C) Ovulation → fertilization → cleavage → implantation
(D) Ovulation → cleavage → fertilization → implantation
[Hint: Implantation occurs last.]
- Which hormone is responsible for milk ejection during lactation?
(A) Prolactin (B) Oxytocin (C) Estrogen (D) Progesterone
[Hint: Causes contraction of myoepithelial cells.]
- Which structure prevents polyspermy in humans?
(A) Corona radiata (B) Zona pellucida (C) Acrosome (D) Vitelline membrane
[Hint: Undergoes chemical changes after fertilization.]
- Vasectomy prevents pregnancy by blocking
(A) Seminiferous tubules (B) Epididymis (C) Vas deferens (D) Urethra
[Hint: Surgical male contraception.]
- The fertile phase in a 28-day menstrual cycle is around
(A) Day 1-5 (B) Day 6-10 (C) Day 10-17 (D) Day 20-28
[Hint: Ovulation occurs mid-cycle.]
- Which of the following STDs is caused by a virus?
(A) Syphilis (B) Gonorrhoea (C) Genital herpes (D) Trichomoniasis
[Hint: Also causes painful blisters.]

10. The placenta acts as a barrier for
 Ⓐ Oxygen Ⓑ Glucose Ⓒ Maternal antibodies Ⓓ Most pathogens
 [Hint: Passive immunity is transferred.]
11. Which hormone triggers ovulation?
 Ⓐ FSH Ⓑ Estrogen Ⓒ LH Ⓓ Progesterone
 [Hint: Sudden surge is important.]
12. In IVF, fertilization is carried out in
 Ⓐ Uterus Ⓑ Ovary Ⓒ Fallopian tube Ⓓ Laboratory
 [Hint: "In vitro" means outside the body.]
13. Copper-T acts as a contraceptive by
 Ⓐ Preventing ovulation Ⓑ Killing sperms
 Ⓒ Inhibiting implantation Ⓓ Both B and C
 [Hint: Alters uterine environment.]
14. Which hormone maintains pregnancy after the first trimester?
 Ⓐ hCG Ⓑ LH Ⓒ Progesterone Ⓓ Estrogen
 [Hint: Secreted by placenta later.]
15. During human embryonic development, the heart in the embryo is formed after :
 Ⓐ 15 days of pregnancy Ⓑ 30 days of pregnancy Ⓒ 45 days of pregnancy Ⓓ 60 days of pregnancy
16. Which part of the sperm contains enzymes for penetrating ovum?
 Ⓐ Middle piece Ⓑ Tail Ⓒ Acrosome Ⓓ Nucleus
 [Hint: Cap-like structure.]
17. The nature of meiotic division during oogenesis in a human female is:
 Ⓐ Equal cell division Ⓑ Suspended cell division
 Ⓒ Continuous cell division Ⓓ Rapid cell division
 [Hint: Time of meiosis]
18. The permissible use of the technique of amniocentesis is for:
 Ⓐ Detecting sex of the unborn foetus
 Ⓑ Artificial insemination
 Ⓒ Transfer of embryo into uterus of a surrogate mother
 Ⓓ Detecting any genetic abnormality
19. Which one of the following antibodies present in breast milk of humans protect the new born baby from infections?
 Ⓐ IgD Ⓑ IgE Ⓒ IgM Ⓓ IgA
 [Hint : Colostrum]
20. Which one of the following STDs is completely curable when detected early and treated properly?
 Ⓐ Genital herpes Ⓑ Gonorrhoea Ⓒ Hepatitis B Ⓓ AIDS

Assertion-Reason based questions

Directions: The questions 21 to 30 have two statements—Assertion (A) and Reason (R). Of the two statements, mark the correct answer from the options given below :

- A. Both Assertion and Reason are true and Reason is the correct explanation of the Assertion
 B. Both Assertion and Reason are true but Reason is not the correct explanation of the Assertion
 C. Assertion is true, but Reason is false
 D. Assertion is false, but Reason is true

21. **Assertion (A):** Fertilisation in humans normally occurs in the ampullary–isthmic junction of the oviduct.
Reason (R): This region provides optimal conditions for sperm capacitation and fusion with the ovum.
(A) A (B) B (C) C (D) D
[Hint: Site of fertilisation and sperm activation]
22. **Assertion (A):** The corpus luteum degenerates if fertilisation does not occur.
Reason (R): Absence of hCG leads to decreased progesterone secretion.
(A) A (B) B (C) C (D) D
[Hint: Role of hCG in pregnancy.]
23. **Assertion (A):** Lactational amenorrhoea is an effective contraceptive method only up to six months after childbirth.
Reason (R): High progesterone levels suppress ovulation during this period.
(A) A (B) B (C) C (D) D
[Hint: Hormonal control of ovulation.]
24. **Assertion (A):** Vasectomy does not affect testosterone production in males.
Reason (R): Testosterone is secreted by Leydig cells which is affected by vasectomy.
(A) A (B) B (C) C (D) D
[Hint: Structure removed/blocked in vasectomy.]
25. **Assertion (A):** Intrauterine devices (IUDs) increase phagocytosis of sperms inside the uterus.
Reason (R): Copper ions released by IUDs enhance the spermicidal action of uterine fluids.
(A) A (B) B (C) C (D) D
[Hint: Mechanism of copper-T action]
26. **Assertion (A):** Human chorionic gonadotropin (hCG) is detected in urine during early pregnancy.
Reason (R): hCG maintains the corpus luteum during early pregnancy.
(A) A (B) B (C) C (D) D
[Hint: Pregnancy test hormone.]
27. **Assertion (A):** Placenta acts as an endocrine gland during pregnancy.
Reason (R): Placenta secretes hCG, hPL, estrogen and progesterone.
(A) A (B) B (C) C (D) D
[Hint: Hormones secreted by placenta.]
28. **Assertion (A):** Spermatogenesis continues throughout life in human males.
Reason (R): Primary spermatocytes continuously undergo mitosis after puberty.
(A) A (B) B (C) C (D) D
[Hint: Duration of sperm formation.]
29. **Assertion (A):** Amniotic fluid protects the foetus from mechanical shocks.
Reason (R): It acts as a shock absorber and maintains constant temperature.
(A) A (B) B (C) C (D) D
[Hint: Functions of amniotic fluid]
30. **Assertion (A):** Medical termination of pregnancy (MTP) is legal in India under certain conditions.
Reason (R): MTP helps in preventing population explosion and unsafe abortions.
(A) A (B) B (C) C (D) D
[Hint: Objectives of MTP Act.]

Short Answer Type Questions (1 mark)

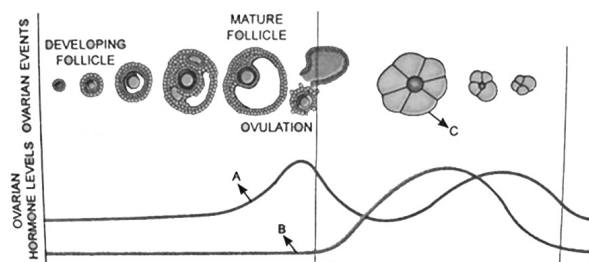
31. Where is the acrosome situated? Why is the acrosomal reaction essential for fertilisation in humans?
[Hint: Role of enzymes released from acrosome.]
32. Name the hormone responsible for ovulation and explain how its secretion is regulated.
[Hint: Positive feedback mechanism involving estrogen.]
33. Differentiate between spermiogenesis and spermiation.
[Hint: Focus on structural change vs release of sperm.]
34. Why does implantation normally occur only in the uterus and not in the oviduct?
[Hint: Endometrial thickness and hormonal environment.]
35. Mention any two advantages of lactational amenorrhea as a contraceptive method.
[Hint: Hormonal control and natural method.]
36. State two reasons why sexually transmitted diseases spread faster among adolescents.
[Hint: Behavioural and biological factors.]

Long Answer Type Questions (5 marks)

37. Describe the process of spermatogenesis with the help of a neat, labelled flow chart.
[Hint: Multiplication, growth, maturation and differentiation phases.]
38. Explain the hormonal control of the menstrual cycle in humans.
[Hint: Role of GnRH, FSH, LH, estrogen and progesterone.]
39. What is in vitro fertilisation (IVF)? Describe the major steps involved and mention one limitation.
[Hint: Collection of gametes → fertilisation → embryo transfer.]
40. Describe the structure of a human sperm with suitable diagrammatic explanation.
[Hint: Head, neck, middle piece and tail with their functions.]
41. Explain how barrier methods help in preventing both pregnancy and sexually transmitted diseases.
[Hint: Physical blockage and disease prevention.]
42. Discuss the causes, symptoms and preventive measures of AIDS.
[Hint: HIV transmission routes and awareness programmes.]

Case Based Questions

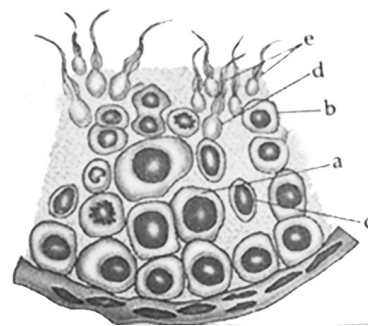
43. Observe the diagrammatic representation of various events of a menstrual cycle



- (a) Identify 'A' and 'B' in graph.
- (b) Identify the structure 'C' and write its function.
- (c) Which pituitary hormone is secreted in its maximum level during the time of ovulation?

44. Given below is a diagrammatic sectional view of a seminiferous tubule.

- (a) Identify a, b and c.
- (b) State the development process of
 - i. b from a
 - ii. e from d
 - iii. d from b
- (c) What is the function of c?



45. Read the given passage and answer the following questions:

A district health survey revealed that despite availability of family planning methods, the population growth rate remains high. Many couples rely on traditional methods, while some avoid contraception due to myths and lack of awareness. Government hospitals provide both temporary and permanent contraceptive measures free of cost.

- (a) Identify two major reasons responsible for continued population growth despite availability of contraceptives.
[Hint: Think about social and educational factors.]
- (b) Name one barrier method and explain how it prevents pregnancy.
[Hint: Prevents sperm entry into female tract.]
- (c) Why are oral contraceptive pills advised to be taken regularly?
[Hint: Hormonal regulation.]
- (d) State one advantage and one limitation of permanent methods of contraception.
[Hint: Consider reversibility.]

46. Read the given passage and answer the following questions:

A 24-year-old patient showed symptoms like genital sores and burning sensation during urination. Medical tests confirmed a sexually transmitted infection. The doctor emphasized early diagnosis and complete treatment to prevent complications.

- (a) Name any two bacterial STIs mentioned in the NCERT syllabus.
[Hint: Caused by bacteria.]
- (b) Why are STIs more dangerous in females than males if left untreated?
[Hint: Effect on reproductive organs.]
- (c) Mention one method to prevent transmission of STIs during sexual contact.
[Hint: Barrier protection.]
- (d) State two possible long-term complications of untreated STIs.
[Hint: Fertility related.]

47. Read the given passage and answer the following questions:

Medical Termination of Pregnancy (MTP) is legally permitted in India under specific conditions. A woman seeks medical advice for termination of pregnancy within the first trimester due to health risks.

- (a) What is MTP and up to which period is it considered relatively safe?
[Hint: Time duration in weeks.]
- (b) Mention one reason why unsafe abortions are dangerous.
[Hint: Health consequences.]
- (c) Why is MTP not encouraged for use as a regular contraceptive method?
[Hint: Ethical and health aspects.]
- (d) State the role of government in ensuring safe MTP practices.
[Hint: Legal and medical facilities.]

ANSWER

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