

Set-4
(Questions 1-30)

1. Which hormone prevents degeneration of corpus luteum during early pregnancy?

- A. LH
- B. hCG
- C. FSH
- D. Estrogen

2. Which of the following is *not* secreted by placenta?

- A. hCG
- B. Progesterone
- C. Estrogen
- D. FSH

3. Which of the following is diploid?

- A. Spermatid
- B. Secondary spermatocyte
- C. Primary oocyte
- D. Spermatozoa

4. Which hormone is responsible for milk ejection reflex?

- A. Prolactin
- B. Oxytocin
- C. Estrogen
- D. Progesterone

5. Which of the following occurs during follicular phase?

- A. Corpus luteum formation
- B. Estrogen secretion by growing follicles
- C. Progesterone peak
- D. Menstruation

6. Which of the following is true about Graafian follicle?

- A. Secretes estrogen
- B. Ruptures during ovulation
- C. Converts into corpus luteum
- D. All of the above

7. Which of the following prevents polyspermy?

- A. Acrosomal reaction
- B. Cortical reaction
- C. Capacitation
- D. LH surge

8. Which of the following is true about spermatogenesis?

- A. Spermatogonia are diploid
- B. Secondary spermatocytes are haploid
- C. Spermatids are haploid
- D. All of the above

9.

Assertion (A): Fertilization usually occurs in ampullary-isthmic junction.

Reason (R): This region provides optimal environment for sperm-egg interaction.

- A. Both A and R true, R explains A
- B. Both A and R true, R does not explain A

- C. A true, R false
- D. A false, R true

10.

Assertion (A): LH surge is essential for ovulation.

Reason (R): LH stimulates rupture of Graafian follicle.

- A. Both A and R true, R explains A
- B. Both A and R true, R does not explain A
- C. A true, R false
- D. A false, R true

11.

Assertion (A): Progesterone maintains endometrium during luteal phase.

Reason (R): Progesterone is secreted by corpus luteum.

- A. Both A and R true, R explains A
- B. Both A and R true, R does not explain A
- C. A true, R false
- D. A false, R true

12.

Assertion (A): Spermatogenesis requires lower temperature.

Reason (R): Testes are located in scrotum outside abdominal cavity.

- A. Both A and R true, R explains A
- B. Both A and R true, R does not explain A
- C. A true, R false
- D. A false, R true

13.

Assertion (A): Estrogen causes proliferation of endometrium.

Reason (R): Estrogen is secreted by Graafian follicle.

- A. Both A and R true, R explains A
- B. Both A and R true, R does not explain A
- C. A true, R false
- D. A false, R true

14.

Assertion (A): Fertilization triggers completion of meiosis II in oocyte.

Reason (R): Entry of sperm stimulates oocyte division.

- A. Both A and R true, R explains A
- B. Both A and R true, R does not explain A
- C. A true, R false
- D. A false, R true

15. Which of the following are correct about oogenesis?

- 1.Primary oocyte arrested in prophase I
- 2.Secondary oocyte arrested in metaphase II
- 3.Meiosis II completes only after fertilization
- 4.Oogonia are diploid

A. 1, 2, 3, 4

B. 1, 2, 3

C. 2, 3, 4

D. 1, 3, 4

16. Arrange the following in correct sequence:

- 1.Follicular phase
- 2.Ovulation

3. Luteal phase

4. Menstruation

A. 1 → 2 → 3 → 4

B. 2 → 1 → 3 → 4

C. 1 → 3 → 2 → 4

D. 4 → 1 → 2 → 3

17. Which of the following hormones inhibit FSH secretion?

A. Estrogen

B. Progesterone

C. Inhibin

D. All of the above

18. Which of the following is true about Leydig cells?

A. Secrete testosterone

B. Located in interstitial tissue

C. Stimulated by LH

D. All of the above

19. Which of the following is true about Sertoli cells?

A. Provide nourishment to sperms

B. Secrete inhibin

C. Form blood-testis barrier

D. All of the above

20. Which of the following is true about menstrual cycle regulation?

A. Controlled by hypothalamus-pituitary-ovarian axis

B. Involves feedback loops

- C. Estrogen and progesterone regulate FSH/LH
- D. All of the above

21. Which of the following is incorrect about menstrual cycle?

- A. Follicular phase is estrogen-dominant
- B. Luteal phase is progesterone-dominant
- C. Ovulation occurs due to FSH surge
- D. Menstruation occurs due to fall in hormones

22. Which of the following is true about corpus luteum?

- A. Forms after ovulation
- B. Secretes progesterone
- C. Degenerates if fertilization fails
- D. All of the above

23. Which of the following is true about fertilization?

- A. Acrosomal reaction helps sperm penetrate zona pellucida
- B. Cortical reaction prevents polyspermy
- C. Fusion of nuclei forms zygote
- D. All of the above

24. Which of the following is absent during pregnancy?

- A. Menstrual cycle
- B. Ovulation
- C. LH surge
- D. All of the above

25. Which of the following is true about menopause?

- A. Permanent cessation of menstrual cycle

- B. Decline in estrogen and progesterone
- C. Occurs due to depletion of ovarian follicles
- D. All of the above

26. Which of the following is true about spermatogenesis?

- A. Spermatogonia are diploid
- B. Secondary spermatocytes are haploid
- C. Spermatids are haploid
- D. All of the above

27. Which of the following is true about hormones during pregnancy?

- A. hCG maintains corpus luteum initially
- B. Placenta secretes estrogen and progesterone later
- C. Progesterone maintains endometrium
- D. All of the above

28. Which of the following is true about ovulation?

- A. Triggered by LH surge
- B. Occurs around day 14 of cycle
- C. Marks end of follicular phase
- D. All of the above

29. Which of the following is true about menstrual phase?

- A. Occurs due to fall in estrogen and progesterone
- B. Endometrium is shed
- C. Lasts 3–5 days
- D. All of the above

30. Which of the following is true about fertilization events?

- A. Capacitation enhances sperm motility
- B. Acrosomal reaction releases enzymes
- C. Cortical reaction blocks polyspermy
- D. All of the above

Answers 1–30

- 1. B. hCG
- 2. D. FSH
- 3. C. Primary oocyte
- 4. B. Oxytocin
- 5. B. Estrogen secretion by growing follicles
- 6. D. All of the above
- 7. B. Cortical reaction
- 8. D. All of the above
- 9. A. Both A and R true, R explains A
- 10. A. Both A and R true, R explains A
- 11. A. Both A and R true, R explains A
- 12. A. Both A and R true, R explains A
- 13. A. Both A and R true, R explains A
- 14. A. Both A and R true, R explains A
- 15. A. 1, 2, 3, 4
- 16. A. 1 → 2 → 3 → 4
- 17. D. All of the above
- 18. D. All of the above
- 19. D. All of the above

- 20. D. All of the above**
- 21. C. Ovulation occurs due to FSH surge**
- 22. D. All of the above**
- 23. D. All of the above**
- 24. D. All of the above**
- 25. D. All of the above**
- 26. D. All of the above**
- 27. D. All of the above**
- 28. D. All of the above**
- 29. D. All of the above**
- 30. D. All of the above**