

Reproductive System MCQs

Fertilization, Pregnancy, Infertility & Preceding Topics

1. Fertilization in humans normally occurs in the:

- A. Uterus
- B. Cervix
- C. Ampulla of the uterine tube
- D. Isthmus of the uterine tube

2. Completion of meiosis II in the secondary oocyte occurs after:

- A. Ovulation
- B. Implantation
- C. Penetration by sperm
- D. Formation of blastocyst

3. The acrosomal reaction allows sperm to:

- A. Bind to the endometrium
- B. Digest the zona pellucida
- C. Prevent polyspermy
- D. Complete meiosis

4. Which mechanism directly prevents polyspermy?

- A. Acrosomal enzymes
- B. Corona radiata removal
- C. Cortical granule reaction
- D. Zona pellucida thinning

5. Implantation normally begins about:

- A. 24 hours after fertilization
- B. 3 days after fertilization
- C. 6–7 days after fertilization
- D. 14 days after fertilization

6. The trophoblastic layer responsible for invasion of the endometrium is:

- A. Cytotrophoblast
- B. Syncytiotrophoblast
- C. Inner cell mass
- D. Amnioblast

7. Human chorionic gonadotropin (hCG) functions primarily to:

- A. Stimulate ovulation
- B. Maintain the corpus luteum
- C. Initiate labor
- D. Inhibit estrogen secretion

8. The corpus luteum during early pregnancy mainly secretes:

- A. Estrogen only
- B. Progesterone only
- C. Progesterone and estrogen
- D. hCG

9. Which hormone becomes mainly placental in origin as pregnancy progresses?

- A. FSH
- B. LH
- C. Progesterone
- D. Oxytocin

10. Progesterone during pregnancy is essential for:

- A. Initiating uterine contractions
- B. Maintaining endometrial lining
- C. Stimulating milk ejection
- D. Cervical dilation

11. Relaxin plays an important role in pregnancy by:

- A. Increasing uterine tone
- B. Stimulating lactation
- C. Relaxing pelvic ligaments
- D. Suppressing estrogen

12. The placenta acts as an endocrine organ EXCEPT in secretion of:

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

13. Increased maternal blood volume during pregnancy mainly serves to:

- A. Lower maternal cardiac output
- B. Improve fetal nutrient and oxygen supply
- C. Reduce uterine blood flow
- D. Prevent hypertension

14. Infertility is defined as failure to achieve a live birth after:

- A. 6 months of unprotected intercourse
- B. 9 months of unprotected intercourse
- C. 12 months of unprotected intercourse
- D. 24 months of unprotected intercourse

15. Primary infertility refers to couples who:

- A. Have hormonal imbalance
- B. Never achieved a live birth
- C. Failed after previous pregnancy
- D. Have preventable causes only

16. Secondary infertility is defined as:

- A. Failure to conceive for the first time
- B. Failure to achieve live birth after a previous one
- C. Infertility due to infections
- D. Infertility caused by aging

17. Which of the following is a NON-preventable cause of infertility?

- A. Sexually transmitted infections
- B. Septic abortion
- C. Genetic abnormalities
- D. Environmental toxins

18. A preventable cause of infertility includes:

- A. Chromosomal disorders
- B. Immunological factors
- C. Tobacco and alcohol use

D. Congenital anomalies

19. Tubal scarring causing infertility is most often due to:

- A. Hormonal imbalance
- B. Ovulatory failure
- C. Pelvic infections
- D. Genetic factors

20. The most effective long-term strategy for infertility management is:

- A. IVF treatment
- B. Surgical intervention
- C. Preventive public health measures
- D. Hormonal stimulation

21. Normal spermatogenesis requires the testes to be maintained at a temperature:

- A. Equal to core body temperature
- B. 1°C above core body temperature
- C. 2–3°C below core body temperature
- D. Independent of body temperature

22. Luteinizing hormone (LH) in males primarily stimulates:

- A. Sertoli cells to secrete inhibin
- B. Spermatogonia to divide
- C. Interstitial cells to secrete testosterone
- D. Conversion of testosterone to DHT

23. Androgen-binding protein (ABP) is secreted by:

- A. Interstitial cells
- B. Spermatogonia
- C. Sustentacular (Sertoli) cells
- D. Epididymal cells

24. The main role of inhibin in males is to:

- A. Suppress LH secretion
- B. Suppress FSH secretion
- C. Stimulate testosterone synthesis
- D. Enhance GnRH release

25. Oogenesis differs from spermatogenesis in that oogenesis:

- A. Begins at puberty
- B. Produces four functional gametes
- C. Begins before birth
- D. Is completed before fertilization

26. The structure that remains arrested in prophase I until puberty is the:

- A. Secondary oocyte
- B. Oogonium
- C. Primary oocyte
- D. Ovum

27. The zona pellucida is first formed during the:

- A. Primordial follicle stage
- B. Primary follicle stage
- C. Secondary follicle stage
- D. Mature follicle stage

28. Estrogens in the ovarian follicle are primarily secreted by the:

- A. Theca externa
- B. Theca interna
- C. Granulosa cells
- D. Corpus luteum

29. Ovulation occurs when the primary oocyte has just completed:

- A. Meiosis I
- B. Meiosis II
- C. Prophase I
- D. Metaphase II

30. The hormone mainly responsible for the secretory phase of the uterine cycle is:

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

Answer Key

1. C
2. C
3. B
4. C
5. C
6. B
7. B
8. C
9. C
10. B
11. C
12. D
13. B
14. C
15. B
16. B
17. C
18. C
19. C
20. C
21. C
22. C
23. C
24. B
25. C
26. C
27. B
28. C
29. A
30. D