

B.Sc. ZOOLOGY
SIXTH SEMESTER (SPECIAL REPEAT)
REPRODUCTIVE BIOLOGY

SET
A

BSZ-603

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

(Objective)

Choose the correct answer from the following:

1 × 20 = 20

- In GIFT, gametes are transferred to a woman's:
a. Cervix
b. Uterus
c. Fallopian tube
d. Any one
- The fertilization of an egg in a nutrient medium and subsequent transfer to a womb is called:
a. GIFT
b. IVF
c. ZIFT
d. ICSI
- An ultra rapid method of freezing eggs and embryos is called:
a. Rapid freezing
b. Vitrification
c. FRET
d. None
- Which structure in male reproductive system brings the sperm to maturity and stores the sperm cells?
a. Prostate gland
b. Testes
c. Epididymis
d. Seminal vesicles
- What is the procedure for sterilization in males?
a. Vasectomy
b. Tubectomy
c. Decapitation
d. Circumcision
- A condition in which functional endometrial tissue is present outside the uterus is called:
a. Endometriosis
b. Pelvic inflammatory disease
c. Cystic fibrosis
d. None of the above
- The structure which implants in the endometrium is termed as:
a. Embryo
b. Zygote
c. Morula
d. Blastocyst
- Prolactin causes:
a. Increased hCG excretion during the first month of pregnancy
b. Myometrial contractions and milk letdown
c. Uterine contractions only
d. Milk production by the breast tissue
- Portion of placenta contributed by the embryo is the:
a. Chorion
b. Yolk sac
c. Amnion
d. Allantois

10. What is the milk produced in the initial few days of lactation called?
 - a. Corpus luteum
 - b. Colostrum
 - c. Corpus albicans
 - d. Lactum
11. In male, which cells produce anti- Mullerian hormone?
 - a. Germ cells
 - b. Leydig cells
 - c. Sertoli cells
 - d. Myoid cells
12. Mullerian duct gives rise to:
 - a. Fallopian tube
 - b. Uterus
 - c. Part of vagina
 - d. All of the above
13. The mature spermatozoan are released in the lumen of seminiferous tubules, the process is known as which of the following?
 - a. Spermiation
 - b. Spermatogenesis
 - c. Gametogenesis
 - d. Spermiogenesis
14. The blood-testis barrier (BTB) is found between adjacent:
 - a. Leydig cells
 - b. Sertoli cells
 - c. Primordial germ cells
 - d. Primary spermatocytes
15. Wolffian duct do not give rise to:
 - a. Epididymis
 - b. Vas deference
 - c. Seminal vesicle
 - d. Fallopian tube
16. Testosterone, an androgen, is a steroid hormone produced by:
 - a. Sertoli cells
 - b. Leydig cells
 - c. Seminiferous tubules
 - d. Epididymis
17. Gonadotropin-releasing hormone (GnRH) released from:
 - a. Anterior pituitary gland
 - b. Posterior pituitary gland
 - c. Testis
 - d. Hypothalamus
18. The hormone that induces labor and controls labor via a positive feedback mechanism is:
 - a. HCG
 - b. Progesterone
 - c. Oxytocin
 - d. Relaxin
19. Which of the following are functions of progesterone?
 - a. Inhibition of estrogen production
 - b. Inhibition of LH and FSH production
 - c. Initiation of secretory phase of the endometrium
 - d. Increase in basal body temperature.
20. The ovarian hormones act during menstrual cycle are:
 - a. LH and FSH
 - b. Estrogen and Progesterone
 - c. LH and Progesterone
 - d. Estrogen, Progesterone, LH and FSH

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(Descriptive)

Time : 2 hr. 30 mins.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

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| 1. Explain the causes of male and female infertility in human beings. | 10 |
| 2. What is IVF technique? Describe the various types of modern IVF techniques. | 2+8=10 |
| 3. Write short notes on: (<i>any two</i>) | 5+5=10 |
| a) Hypothalamo-hypophyseal-gonadal axis | |
| b) Ovarian hormones | |
| c) Mechanism of steroid hormone action | |
| 4. Explain spermatogenesis and its significance. | 8+2=10 |
| 5. Explain development of gonad from different sources with suitable diagram. | 8+2=10 |
| 6. What is capacitation? How is ovum transported in the fallopian tube? Draw and show the site of fertilization in human. | 2+6+2=10 |
| 7. Discuss with diagram the structure and formation of placenta. What are the different hormones secreted by placenta? | 7+3=10 |
| 8. Write short notes on: | 5+5=10 |
| a) Sperm banking | |
| b) HCG and its role | |

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