

B.Sc. ZOOLOGY
SIXTH SEMESTER (SPECIAL REPEAT)
REPRODUCTIVE BIOLOGY
BSZ-603

(Use separate answer scripts for Objective & Descriptive)

Duration : 3 hrs.

Full Marks : 70

[PART-A : Objective]

Time : 20 min.

Marks : 20

Choose the correct answer from the following:

1X20=20

- In male, which cells produce anti- Mullerian hormone?
 - Germ cells
 - Leydig cells
 - Sertoli cells
 - Myoid cells
- Mullerian duct gives rise to-
 - Fallopian tube
 - Uterus
 - Part of vagina
 - All of the above
- The mature spermatozoan are released in the lumen of seminiferous tubules, the process is known as which of the following?
 - Spermiation
 - Spermatogenesis
 - Gametogenesis
 - Spermiogenesis
- The blood-testis barrier (BTB) is found between adjacent
 - Leydig cells
 - Sertoli cells
 - Primordial germ cells
 - Primary spermatocytes
- Wolffian duct do not give rise to -
 - Epididymis
 - Vas deference
 - Seminal vesicle
 - Fallopian tube
- Testosterone, an androgen, is a steroid hormone produced by
 - Sertoli cells
 - Leydig cells
 - Seminiferous tubules
 - Epididymis
- Gonadotropin-releasing hormone (GnRH) released from
 - Anterior pituitary gland
 - Posterior pituitary gland
 - Testis
 - Hypothalamus
- The hormone that induces labor and controls labor via a positive feedback mechanism is
 - HCG
 - Progesterone
 - Oxytocin
 - Relaxin
- Which of the following are functions of progesterone?
 - Inhibition of estrogen production
 - Inhibition of LH and FSH production
 - Initiation of secretory phase of the endometrium
 - Increase in basal body temperature

10. 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
11. In GIFT, gametes are transferred to a woman's
 - a. Cervix
 - b. Uterus
 - c. Fallopian tube
 - d. Any one
12. 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
13. An ultra rapid method of freezing eggs and embryos is called
 - a. Rapid freezing
 - b. Vitrification
 - c. FRET
 - d. None
14. 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
15. What is the procedure for sterilization in males?
 - a. Vasectomy
 - b. Tubectomy
 - c. Decapitation
 - d. Circumcision
16. 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
17. The structure which implants in the endometrium is termed as
 - a. Embryo
 - b. Zygote
 - c. Morula
 - d. Blastocyst
18. 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
19. Portion of placenta contributed by the embryo is the
 - a. Chorion
 - b. Yolk sac
 - c. Amnion
 - d. Allantois
20. What is the milk produced in the initial few days of lactation called?
 - a. Corpus luteum
 - b. Colostrum
 - c. Corpus albicans
 - d. Lactum

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[PART-B : Descriptive]

Time : 2 hrs. 40 min.

Marks : 50

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

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| 1. Write about both male and female gonadal hormones in human. | 5+5=10 |
| 2. Explain spermatogenesis and its significance. | 8+2=10 |
| 3. Describe the functions of ovarian hormones. | 10 |
| 4. Discuss with diagram the structure and formation of placenta.
What are the different hormones secreted by placenta? | 7+3=10 |
| 5. What is IVF technique? Describe the various types of modern IVF techniques. | 2+8=10 |
| 6. Explain the causes of male and female infertility in human beings. | 10 |
| 7. Describe the functions of Testosterone. | 10 |
| 8. Write short notes on:
a. Sperm banking
b. HCG and its role | 5+5=10 |

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