

**2024/TDC (CBCS)/EVEN/SEM/
ZOODSE-601T/024**

TDC (CBCS) Even Semester Exam., 2024

ZOOLOGY

(6th Semester)

Course No. : ZOODSE-601T

(Reproductive Biology)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

UNIT—I

1. Answer any three questions from the following : 1×3=3
 - (a) Define reproduction.
 - (b) Name the gonadal hormones secreted by human female.
 - (c) What is hypothalamus?
 - (d) Write two important functions of prostaglandins.

2. Answer any one question from the following : 2
 - (a) Mention the accessory reproductive glands of human male.
 - (b) What is hypothalamo-hypophyseal-gonadal axis?

(2)

3. Answer any *one* question from the following : 5

- (a) Describe the reproductive system of male rat with suitable diagram.
- (b) Describe the mechanism of steroid hormone action with suitable illustration.

UNIT—II

4. Answer any *three* questions from the following : $1 \times 3 = 3$

- (a) - What is spermiogenesis?
- (b) Mention the functions of sertoli cells.
- (c) Name the major hormone secreted by testis?
- (d) What is the function of epididymis?

5. Answer any *one* question from the following : 2

- (a) Write a short note on the cellular functions of testis.
- (b) Mention the role of hormone in spermatogenesis.

6. Answer any *one* question from the following : 5

- (a) Describe the histological structure of male reproductive system in rat.
- (b) Describe the process of spermatogenesis with proper illustration.

(3)

UNIT—III

7. Answer any *three* questions from the following : $1 \times 3 = 3$

- (a) What is oogenesis?
- (b) Name two ovarian hormones.
- (c) What are corpus luteum and corpus albicans?
- (d) What is Graafian follicle?

8. Answer any *one* question from the following : 2

- (a) Write a short note on steroidogenesis.
- (b) Mention the functions of estrogen and progesterone.

9. Answer any *one* question from the following : 5

- (a) Discuss the histology of ovary in detail with diagram.
- (b) Describe the process of ovulation with suitable illustration.

UNIT—IV

10. Answer any *three* questions from the following : $1 \times 3 = 3$

- (a) What is fertilization?
- (b) What is parturition?
- (c) Name the hormone responsible for inducing lactation.
- (d) What is implantation?

11. Answer any *one* question from the following : 2
- (a) How is pregnancy diagnosed?
 - (b) Write a short note on estrous cycle.
12. Answer any *one* question from the following : 5
- (a) Describe the hormonal regulation of menstrual cycle in human.
 - (b) Describe the mechanism of parturition and its hormonal regulation.

UNIT—V

13. Answer any *three* questions from the following : 1×3=3
- (a) What is ART?
 - (b) What is secondary infertility?
 - (c) What are contraceptives?
 - (d) What are sperm banks?
14. Answer any *one* question from the following : 2
- (a) Write a short note on frozen embryo.
 - (b) What is in-vitro fertilization?
15. Answer any *one* question from the following : 5
- (a) Mention the causes, diagnosis and management of infertility in male.
 - (b) Describe different kinds of assisted reproductive technologies in detail.

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