

## PERIODIC TEST-I

NAME:

CLASS: XII

SUBJECT: BIOLOGY

M. MARKS: 20

### General Instructions:

Read the following instructions carefully.

- a) All questions are compulsory.
- b) Draw diagram with pencil.

### SECTION A

[6]

**Q1. Which hormone is responsible for the development of secondary sexual characteristics? in males?**

- a) Estrogen   b) Progesterone   c) Testosterone   d) FSH

**Q2. During which phase of the menstrual cycle does ovulation occur?**

- a) Menstrual phase   b) Follicular phase   c) Luteal phase   d) Proliferative phase

**Q3. Which structure carries sperm from the epididymis to the urethra?**

- a) Vas deferens   b) Seminal vesicle   c) Prostate gland   d) Bulbourethral gland

**Q4. What is the function of the corpus luteum?**

- a) Production of progesterone   b) Production of estrogen
- c) Release of LH   d) Formation of ova

**Q5. Where does fertilization usually occur in the female reproductive system?**

- a) Uterus   b) Fallopian tube   c) Cervix   d) Vagina

**Q6. Which of the following is NOT a method of contraception?**

- a) Tubectomy   b) Vasectomy   c) IUD   d) Dilation and curettage (D&C)

### SECTION B

[8]

**Q 7. Explain the process of spermatogenesis.**

**Q 8. Describe the structure and function of corpus luteum.**

**Q 9. What is the role of testosterone in male reproductive system?**

**Q 10. Explain the process of fertilization in humans.**

### SECTION C

[6]

**Q11. Discuss the hormonal control of menstrual cycle in females.**

**OR**

**Explain the process of implantation and its significance.**

**Q12. CASE STUDY**

A couple has been trying to conceive for over a year without success. They have undergone medical Tests, and it was discovered that the husband has low sperm count. Discuss the possible reasons for Low sperm count and suggest treatment options.

i). **What could be a possible cause of the husband's low sperm count?**

- a) Genetic factors
- b) Stress
- c) High testosterone levels
- d) Age-related decline

ii). **Which of the following treatment options could be recommended?**

- a) In vitro fertilization (IVF)
- b) Adoption
- c) Ovulation induction
- d) Oral contraceptives

iii). **What role might lifestyle changes play in improving sperm count?**

- a) No impact
- b) Significant improvement
- c) Temporary improvement
- d) Worsening of condition

**OR**

iv). **Which hormone could be administered to stimulate sperm production?**

- a) Estrogen
- b) Progesterone
- c) Follicle-stimulating hormone (FSH)
- d) Thyroid hormone