4. (a) What are the primary causes of infertility in males? Add a note on their diagnosis and management. 7

   (b) What are the different stages of labor? Describe the hormonal regulation of parturition. 8

5. (a) Give an account on cancers of human reproductive system. 7

   (b) Write a note on abnormalities during sex differentiation and development. 8

6. (a) Describe labor abnormalities. 7

   (b) Elaborate on the role of hormones in maintenance of pregnancy. 8

7. Write short notes on any **three** of the following. 5+5+5=15

   (a) Hyperprolactinemia

   (b) Blood-testis barrier

   (c) Endocrine disruptors

   (d) Pregnancy tests

***

[This question paper contains 4 printed pages]

Your Roll No. : .....

Sl. No. of Q. Paper : **8150** **I**

Unique Paper Code : 223352004

Name of the Paper : DSE-23 Reproductive Endocrinology

Name of the Course : **B.Sc.(H) Zoology/B.Sc. (P) Life Sciences**

Semester : VIII (NEP-UGCF)

Time : 3 Hours ***Maximum Marks : 90***

Instructions for Candidates :

(a) Write your Roll No. on the top immediately on receipt of this question paper.

(b) Attempt any **five** questions in **all,** including Question No. **1** which is compulsory.

(c) Draw well labelled diagram wherever necessary.

1. (a) Define 6

   (i) Pampiniform plexus

   (ii) Pre-eclampsia

   (iii) Ovulation

(iv) Precocious puberty

(v) Cryptorchidism

(vi) Spermiation

(b) Write the location and one function of the following : 4

(i) Sustentacular cells

(ii) Thecal cell

(iii) Seminal vesicles

(iv) Corpus luteum

(c) Expand the following : 5

(i) EDCs

(ii) NO

(iii) FSH

(iv) ZP

(v) PSA

(d) Fill in the blanks : 5

(i) The hypothalamic hormone ..... causes the release of gonadotropins from the pituitary.

(ii) The yellowish milk rich in antibodies secreted during the first few days after parturition is termed as .....

(iii) When implantation occurs, the corpus luteum is maintained by the .....

(iv) The testicular cell that produces androgen is .....

(v) ..... is the hormone causing the production of milk during lactation.

(e) Differentiate between : 2×5=10

(i) Primary spermatocyte and Secondary spermatocyte

(ii) Oocyte maturation and Sperm maturation

(iii) Primary amenorrhea and Secondary amenorrhea

(iv) Corpus luteum and Corpus albicans

(v) Azoospermia and Asthenozoospermia

2. (a) With the help of suitable diagram(s), explain the mammary gland development. 7

(b) Give an account of different methods of contraception. 8

3. (a) Define menopause and discuss the various post-menopausal changes. 7

(b) Elaborate on the neuroendocrine control of ovarian functions. 8