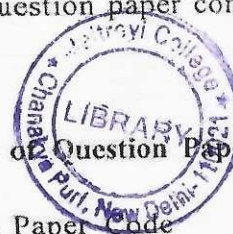


2. Describe the hypothalamic-hypophyseal-testicular axis in the regulation of spermatogenesis. Draw a well-labeled diagram of T.S. of the testis. (8+4)
3. What are the primary causes of infertility in females? Add a note on their diagnosis and management. (8+4)
4. Explain feto-placental unit with the help of well-labelled diagram. Explain its importance during gestation. (12)
5. Describe various methods of contraception in males and females. (12)
6. Write short notes on **any three** of the following : (3×4)
 - (a) Ectopic pregnancy
 - (b) Spermiogenesis
 - (c) Role of prostaglandin in parturition
 - (d) Estrogen biosynthesis

[This question paper contains 4 printed pages.]



08.01.2024(M)
Your Roll No.....

Sr. No. of Question Paper : 4621

G

Unique Paper Code : 32237910

Name of the Paper : Reproductive Biology

Name of the Course : B.Sc. (Prog) Life Sciences
(LOCF) : DSE

Semester : V

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt **five** questions in all, including question No. 1 which is compulsory.

1. (a) Define the following terms : (5)

(i) Hysterectomy

(ii) Zona pellucida

- (iii) Amenorrhea
- (iv) Azoospermia
- (v) Blood-testis barrier
- (b) Differentiate between the following pairs of terms
(any three): (6)
- (i) Primary follicle and tertiary follicle
- (ii) Sperm maturation and sperm capacitation
- (iii) Corpus albicans and corpus luteum
- (iv) Menarche and Menopause
- (c) Fill in the blanks : (6)
- (i) When implantation occurs, the corpus luteum is maintained by the _____.
- (ii) The hypothalamic hormone _____ causes the release of gonadotropins from the pituitary.
- (iii) The process by which the spermatozoa becomes functional is known as _____.

- (iv) The testicular cell that produces androgen is _____.
- (v) _____ acts on granulosa cells leading to the synthesis of estrogens.
- (vi) Based on the histology, the type of placenta found in humans is _____.
- (d) Name the source of the following hormones. (5)
- (i) GnRH
- (ii) Progesterone
- (iii) Oxytocin
- (iv) hPL
- (v) Testosterone
- (e) Expand the following terms : (5)
- (i) ABP
- (ii) LH
- (iii) HRE
- (iv) 17 β -HSD
- (v) GIFT