Roll No. ..... Total Pages : 3

GSE/M-21 **1490**

ZOOLOGY

(Life and Diversity from Mollusca to Hemichordata and Genetics–II')

Paper–II

Time : Three Hours] [Maximum Marks : 40

Note : Attempt *five* question in all. Question No. 1 is Compulsory. Select *two* questions from each Section A and B.

Compulsory Question

1. Define the following :

(a) Evolution.

(b) Madreporite.

(c) Epitaenia.

(d) Anticodon.

(e) Stone Canal.

(f) Klinefelter's Syndrome.

(g) Collarette.

(h) Multiple Allelism.

(i) Osphradium.

(j) Central Dogma (10×1 = 10)

SECTION–A

2. Describe briefly the various larvae of Echinoderms. 7½

3. (a) Describe the circulatory system of Balanoglossus.

(b) Write a short note on Gill lamella of Pila. (5+2½)

4. (a) Write down about the general characters and classification of phylum Echinodermata upto order level.

(b) Make a neat and labeled diagram of nervous system of Pila. (5+2½)

5. (a) Write down about the biodiversity and economic importance of Echinoderms.

(b) Write a note on Aristotle's Lantern. (5+2½)

SECTION–B

6. What is Karyotype? Give an account of human karyotype.

7. Describe the following :

(a) Sickle cell anaemia.

(b) Phenylketonuria.

(c) Alkaptonuria. (2½×3=7½)

8. Describe the complete process of protein synthesis. 7½

9. Write notes on :

(a) Transgenic animals.

(b) Amniocentesis.

(c) Erythroblastoma foetalis. (2½×3=7½)