

Roll No.

Total Pages : 03

GSE/D-21

800

ZOOLOGY

Paper II

Life and Diversity From Coelenterata to
Helminthes and Cell Biology-II

Time : Three Hours]

[Maximum Marks : 40

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory.
Select *two* questions each from Sections A and B. Draw
well labelled diagrams wherever necessary.

(Compulsory Question)

1. Short answer type questions (in about **20-30** words each) : **10×1=10**
- (i) Zooids
 - (ii) Loral's Canal
 - (iii) Proglottids
 - (iv) Digenetic life-cycle
 - (v) Kinetochore
 - (vi) Nuclear pore complex
 - (vii) Barr body
 - (viii) Karyotype

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- (ix) Differentiate between Proto-oncogenes and Oncogenes
- (x) Antibody.

Section A

- 2. (a) Enumerate the structure and functions of medusa of obelia. 5½
- (b) What are Atolls and Lagoons ? 2
- 3. (a) Describe the excretory system of Liver Fluke. 5
- (b) Draw a well labelled diagram of V.S. of body wall of *Fasciola hepatica*. 2½
- 4. (a) Write a note on poisonous coelenterates. 2½
- (b) Describe the phenomenon of Delayed Polymbryony of *Fasciola hepatica*. 5
- 5. Describe the life history, mode of infection and pathogenicity of *Trichinella* and *Wuchereria*. 7½

Section B

- 6. (a) What are histone and non-histone proteins ? Name the major histones found in the nucleus and enumerate their functions. 4
- (b) Write a short note Salivary gland chromosome. 3½

7. (a) Write a short note on cell cycle. **4½**
(b) Differentiate between Mitosis and Meiosis. **3**
8. (a) Explain various causes of Cancer. **3½**
(b) What is Chemotherapy ? Discuss Chemotherapy of Cancer. **4**
9. (a) Describe mechanism of antigen-antibody interactions. **4½**
(b) Differentiate between B Cells and T Cells. **3**