

Roll No.

(12/19-II)

5167

B. Sc. EXAMINATION

(First Semester)

ZOOLOGY

Second Paper

**Life and Diversity from Coelentrata to
Helminths and Cell Biology-II**

Time : Three Hours

Maximum Marks : 40

Note : Q. No. 1 is compulsory. *Four* more questions are to be attempted, selecting *two* from each Section. All questions carry equal marks.

1. Define the following terms :

- (a) Blastostyle
- (b) Pneumatophore
- (c) Interstitial Cells
- (d) Prostate Gland

- (e) Schistosomiasis
- (f) Synaptonimal Complex
- (g) Oncogenes
- (h) Non-Histone Proteins
- (i) Plasmocytes
- (j) Corals.

1×10=10

Section A

2. What are coelenterates ? Give general character of phylum coeleontrata and classify this phylum upto order level. 7½
3. Write notes on the following :
 - (a) Myoepithelia cell of Obelia 3½
 - (b) Medusa of Obelia. 4
4. Describe the life-history of *Fasciola hepatica*. 7½
5. Write notes on the following :
 - (a) Vitellaria of *Fasciola hepatica* 2½
 - (b) Polymorpism in siphonophora 2½
 - (c) Barrier reef. 2½

Section B

6. What are giant chromosomes ? Explain the structure and their significances with reference to Lampbrush chromosomes. $7\frac{1}{2}$
7. Write short notes on the following :
- (a) Nuclear Pore Complex $3\frac{1}{2}$
 - (b) Nucleosomes. 4
8. Write short notes on the following :
- (a) Structure of IgG. $3\frac{1}{2}$
 - (b) Prophase of meiosis. 4
9. Write short notes on the following :
- (a) Mode of action of B cells $2\frac{1}{2}$
 - (b) Second Line of Defense $2\frac{1}{2}$
 - (c) Antigens. $2\frac{1}{2}$