

ZOOLOGY

The first year TDC examination shall consist of three theory papers, each of three hours duration and a practical examination of five hours duration.

| | <u>Marks</u> |
|--|--------------|
| Paper-I : Life and Diversity of Animals-I (Invertebrates) | 50 |
| Paper-II : Cell Biology | 50 |
| Paper-III : Developmental Biology | 50 |
| Practical : | 75 |

Pattern of question paper in the annual examination and distribution of marks:

Each theory paper in the annual examination shall have three sections i.e. A, B, and C. **In section A**, total 10 questions will be set in the paper, selecting at least two from each unit. These questions are to be answered in about 20 words. All questions are compulsory. Each question carries 0.5 mark, total 05 marks.

In section B, there shall be total 10 questions, selecting two questions from each unit, five questions to be answered by the student selecting at least one from each unit. Answer should be given in approximately 250 words. Each question carries 05 marks, total 25 marks.

In section C, 04 descriptive type questions will be set in the examination paper from five units of the syllabus of the paper, selecting not more than one question from a unit. Each question may have two sub divisions. Students are required to answer any two questions approximately in 500 words. Each question is of 10 marks, total 20 marks.

ZOOLOGY

PAPER-I

LIFE AND DIVERSITY OF ANIMALS-I
(INVERTEBRATES)

Duration : 3 hours

M.M. 50

UNIT- I

- 1 General characters and classification of phylum Protozoa upto orders with examples and their economic importance.
- 2 Type study-*Paramecium*, *Plasmodium*, Pathogenicity of *Plasmodium*.
- 3 Parasitic protozoans: Pathogenesis and morphology of *Entamoeba histolytica*, *Trichomonas vaginalis*, *Leishmania tropica*, *Trypanosoma gambiense*.

UNIT-II

- 4 General characters and classification of phylum Porifera upto orders with examples and their economic importance.
- 5 Type study-*Sycon*
- 6 Canal system in sponges.
- 7 General characters and classification of phylum Coelenterata upto orders with examples.

8 Type study-*Metridium*.

9 Corals and coral reefs - their formation, kinds and importance. Polymorphism in Coelenterates, Metagenesis.

UNIT-III

10 General characters and classification of phylum Platyhelminthes and Aschelminthes upto orders with examples.

11 Type study -*Fasciola hepatica*, *Ascaris lumbricoides*.

12 Helminth parasites in relation to human diseases, parasitic adaptations of trematodes, cestodes and nematodes.

UNIT-IV

13 General characters and classification of phylum Annelida and Arthropoda upto orders with examples.

14 Type study-*Nereis*, *Palaemon*, *Schistocerca*.

15 Metamerism, pseudocoelom, trochophore larva.

16 Mouth parts of insects.

UNIT-V

17 General characters and classification of phylum Mollusca, Echinodermata and Hemichordata upto orders with examples.

18 Type Study -*Pila*, *Asterias*, *Balanoglossus*

19 Echinoderm larvae ; Affinities of Hemichordata