

FIRST YEAR T. D.C. SCIENCE,

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 : | 50 |

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 a word or so. 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.

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ZOOLOGY

PAPER-I: LIFE AND DIVERSITY OF ANIMALS-I (INVERTEBRATES)

Duration : 3 hours

M.M. 50

UNIT- I

- 1 General characters and classification of Protozoa and Porifera (up to classes) with examples.
- 2 Type study: Paramecium. Parasitic protozoans and their Pathogenesis ; entamoeba histolytica, Trypanosoma gambiense
- 3 Type study-Sycon.
- 4 Canal system in sponges.

UNIT-II

- 5 General characters and classification of Coelenterata and Ctenophora
- 6 Type study-Obelia.
- 7 Corals and coral reefs - their formation, kinds and importance. Polymorphism in Coelenterates, Metagenesis.
- 8 Affinities of Ctenophora

UNIT-III

- 9 General characters and classification of Platyhelminthes (upto classes) and Aschelminthes (upto phyla)
- 10 Type study –Fasciola
- 11 Concept of pseudocoelom
- 12 General characters and classification of Nematoda (upto classes)
- 13 Type study: Ascaris
- 14 Endoparasites in relation to human diseases, parasitic adaptations of trematodes, cestodes, and nematodes.

UNIT-IV

- 15 General characters and classification of Annelida and Arthropoda (up to classes) with examples.
- 16 Concept of metamerism and coelom
- 17 Type study-Nereis, Palaemon.

18 Economic importance of arthropods

UNIT-V

19 General characters and classification of Mollusca and Echinodermata (up to classes) with examples.

20 Type Study –*Pila* and *Asterias*

21 Concept of Torsion and its importance

22 Echinoderm larvae.