

B.Sc. Semester - 4 (NEP-2020) Examination**March/April-2025****ZOO: Non-Chordates -2, Cytology and Wildlife Management (Minor-3)****Time: 2:00 Hours****Marks: 50****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

- Que-1 Answer the following questions (10)
1. Describe the general characters of Phylum Platyhelminthes, classify it up to class with its characters and examples for each.
 2. Describe the life cycle and pathogenicity of *Ascaris lumbricoides*.
- OR
- Que-1 Answer the following questions
1. Describe the general characters of Phylum Nematoda, classify it up to class with its characters and examples for each.
 2. Describe the parasitic adaptations of flatworms.
- Que-2 Answer the following questions (10)
1. Describe the general characters of Phylum Annelida, classify it up to class with its characters and examples for each.
 2. Describe the life cycle of *Culex* mosquito.
- OR
- Que-2 Answer the following questions
1. Describe the general characters of Phylum Arthropoda, classify it up to class with its characters and examples for each.
 2. Write a detailed note on *Peripatus* as the connecting link between the phyla Annelida and Arthropoda.
- Que-3 Answer the following questions (10)
1. Write a detailed note on Ribosome.
 2. Describe meiosis in detail.
- OR
- Que-3 Answer the following questions
1. Describe cell cycle and its regulation.
 2. Write a detailed note on the transport of nutrients, ions and macromolecules across cell membrane.
- Que-4 Answer the following questions (10)
1. Describe the different any four biogeographic zones of India.
 2. Write a note on Biosphere reserves in India and describe any two of them.
- OR
- Que-4 Answer the following questions
1. Describe elephant Reserves in detail.
 2. Describe the differences between conservation and community reserves with suitable examples.
- Que-5 Answer the following questions (10)
1. Describe the life cycle and pathogenicity of *Wuchereria bancrofti*.
 2. Describe the mouth parts of *Anopheles* male mosquito.
- OR
- Que-5 Answer the following questions
1. Write detailed note on Endoplasmic Reticulum.
 2. Explain the concept and functioning of Tiger Reserves in India and describe any two of them.
