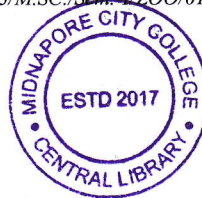


**PG CBCS**  
**M.Sc. Semester-I Examination, 2023**  
**ZOOLOGY**  
**PAPER: ZOO 101**



**(NON-CHORDATE BIOLOGY AND CHORDATE BIOLOGY)**

**Full Marks: 40**

**Time: 2 Hours**

The figures in the right-hand margin indicate full marks.  
 Candidates are required to give their answers in their own words as far as practicable.

**Write the answer for each unit in separate sheet**

**UNIT: ZOO 101.1**

**NON-CHORDATE BIOLOGY**

**GROUP-A**

**1. Answer any TWO from the following questions: 2×2=4**

- a) What do you mean by Ecdysozoan phyla?
- b) What is maxtax? What is its function?
- c) Define coelom. Write its position in non-chordate body.
- d) What do you mean by Umbrella species? Give an example.

**GROUP-B**

**2. Answer any TWO from the following questions: 2×4=8**

- a) Discuss about evolution of cephalization in Metazoa.
- b) Write a note on any two important roles of *C. elegans* in ecosystem.
- c) State the ecological importance of Foraminifera.
- d) Write a note on auricularia larvae in Echinoderms with diagram.

**GROUP-C**

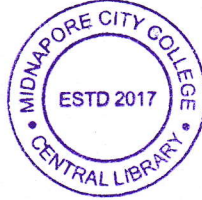
**3. Answer any ONE from the following questions: 1×8=8**

- a) Elaborate the feeding mechanism in Bryozoans. Comment on cyclomorphosis in Rotiferans. 6+2
- b) Write in depth about importance of
  - i) Conservation of invertebrates and their conservation strategies in India.
  - ii) Add a note on different causes behind the decline of invertebrates' population. 4+4

(P.T.O)

(2)

**UNIT: ZOO 101.2**  
**CHORDATE BIOLOGY**



**GROUP-A**

**4. Answer any TWO from the following questions: 2×2=4**

- a) What is the significance of jaws in human evolution?
- b) What is mesonephric kidney? Give example.
- c) What is endostyle?
- d) State any two functions of swim bladder in fishes.

**GROUP-B**

**5. Answer any TWO from the following questions: 2×4=8**

- a) Enumerate the point of differences between the respiration in elasmobranchs and teleosts.
- b) Differentiate between old world and new world monkeys.
- c) Describe the process of osmoregulation in fresh water fish.
- d) Describe the role of antidiuretic hormone in excretion in vertebrates.

**GROUP-C**

**6. Answer any ONE from the following questions: 1×8=8**

- a) Describe the morphological adaptations of echolocation in bats.
- b) Describe the process of iodine binding mechanism in protochordates.

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