

PG CBCS
M.Sc. Semester-I Examination, 2021
ZOOLOGY
PAPER: ZOO 101
(NON-CHORDATE AND CHORDATES)

Full Marks: 40

Time: 2 Hours

Write the answer for each unit in separate sheet**UNIT- ZOO 101.1****Non-chordates****Answer any TWO questions of the following:****2X10=20**

1. Briefly discuss the role of symmetry in metazoan evolution. Explain any two ecological role of nematode. Write a short note on biogenic habitat. 4+3+3
2. Comment on the feeding mechanism of *C. elegans*. What are the challenges of invertebrate conservation? What is mastax? 3+6+1
3. State briefly the ecological role of foraminifera. Discuss the anatomical features of bryozoa. What is cyclomorphosis? 4+4+2
4. Distinguish between ophiopluteus and echinopluteus larvae of echinoderms. How creation of reserves can be considered an approach in invertebrate conservation? 6+4
5. Describe the reproductive features in bryozoa. Comment on the threats responsible for invertebrate population decline. 5+5

UNIT- ZOO 101.2**Chordates****Answer any TWO questions from the following:****2X10=20**

1. State the mechanism of iodine trapping in protochordates. What are the prospects of inland fisheries in India? 5+5
2. Discuss the process of respiration in shark. Comment on the osmoregulatory process in freshwater fishes. What is the function of nose-leaf in bats? 4+4+2
3. What is echolocation? Discuss the anatomical features of ear in bats. What is metanephric kidney? Comment on the characteristics of ultrasonic signal. 1+4+2+3
4. Write the role of Antidiuretic hormone in osmoregulation. Write the significance of accessory respiratory organs in lung fishes. Write a short note on harmonics in bats. 4+3+3
5. What is exaptation? Discuss its role in lung evolution in vertebrates. Comment on the significance of bipedalism in human evolution? 1+5+4