

[Time: 2½ Hours]

[Marks:60]

Please check whether you have got the right question paper.

- N.B:**
1. All questions are **compulsory**.
 2. **Figures** to the **right** indicate **full marks**.
 3. **Draw neat and labeled diagrams wherever necessary**.

- Q.1 Attempt **any two** questions from the following:
- a) Describe the phylogeny of Nematelminthes. 6
 - b) Briefly explain the salient features of Arthropoda. 6
 - c) Enlist characteristic features of Acanthocephala 6
 - d) "*Peripatus* is referred to as the connecting link between annelid worms and arthropods. Discuss. 6
- Q.2 Attempt **any two** questions from the following
- a) Discuss the affinities of Urochordata. 6
 - b) Enumerate and explain the general and primitive characters of Cephalochordata. 6
 - c) Enlist the evolutionary changes that led to the origin of first vertebrates. 6
 - d) Explain the affinities of Cyclostomes with reference to resemblances with Cephalochordata and Vertebrate characters. 6
- Q.3 Attempt **any two** questions from the following: 6
- a) "*Archaeopteryx* is considered to be a connecting link between reptiles and birds". Discuss 6
 - b) Write an essay on birds as glorified reptiles. 6
 - c) Enumerate and comment on the characters with examples of any six orders of Eutherians. 6
 - d) Enlist and describe types of cheek teeth with reference to cusps. 6
- Q.4 Attempt **any two** questions from the following:
- a) Submit a detailed account of pectoral girdle of shark and bony fish. 6
 - b) Write a comparative note on pelvic girdle of *Varanus* and pigeon. 6
 - c) Enumerate the similarities and dissimilarities between humerus of frog and rabbit. 6
 - d) Describe and compare femur of frog and *Varanus*. 6
- Q.5 Attempt **any four** short notes from the following:
- a) Parasitic adaptations of physiological nature in Platyhelminths. 3
 - b) Centipede. 3
 - c) *Herdmania* 3
 - d) Important features of Ostracoderms 3
 - e) Characteristic features of Neornithes. 3
 - f) Duck billed platypus 3
 - g) Humerus of pigeon 3
 - h) Tibiofibula of frog 3