

CSM : 22

ZOOLOGY

PAPER - I

Time Allowed : 3 hours

Full Marks : 100

Marks for each question is indicated against it.

Attempt any 5 (five) questions taking not more than 3 (three) questions from each Part.

PART - A

1. What are corals and coral reefs? Describe the types of coral reefs and their formation based on theories. **(4+16=20)**
2. Describe the nephridial mode of excretion with the help of suitable diagram. Describe the types of nephridia found in earthworm. **(12+8=20)**
3. Discuss the principle and modes of flight in birds. Add a note on migration of birds. **(12+8=20)**
4. Describe the evolution of heart in vertebrates with suitable diagrams. **(20)**

PART - B

5. Define biodiversity hotspot and mention the criteria of its selection. Describe biodiversity hotspots of the Indian sub-region giving their salient features. **(8+12=20)**
6. "Palaentology provides direct evidence of evolution." Justify the statement. Reconstruct the stage of evolution of *Homo sapiens* in chronological order based on fossil records. **(20)**
7. What is meant by vermiculture? Mention the species used in vermiculture. Explain the techniques and importance of vermicomposting. **(4+16=20)**
8. What is bioinformatics? Describe the concepts and impacts of bioinformatics. **(4+16=20)**

* * * * *