

Zoology (Theory) Paper-II

Attempt FIVE Questions in all. Section-A is Compulsory. Select FOUR Questions from Section-B.

SECTION-A

1- Define Short Answer the following terms/ statements.

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- i) What is Peptide Bond?
- ii) What is Tonicity?
- iii) What is Anabolism and Catabolism?
- iv) Differentiate between Centromere and Kinetochore.
- v) What is Incomplete Dominance?
- vi) What is Transcription?
- vii) What are Keystone Species?

SECTION-B

- 2- a) Write a short note on Altruism. 3.5
 b) Differentiate between Nucleotide and Nucleic Acid. How many types of Nucleic Acids are found in a living cell? 4
- 3- a) What is Microscopy? What types of Microscopes are presently used by the Biologists? 3.5
 b) Briefly explain the Northern Coniferous and Tropical Rain Forest Ecosystems. 4
- 4- a) Explain Coexistence and Coevolution with examples. 4
 b) What is the first and second law of Thermodynamics? 3.5
- 5- a) Give an account of Chromosomal Abnormalities in human. 4.5
 b) What is meant by Cytosol, Lysosome and Ribosome. 3
- 6- Explain the replication of DNA in Eukaryotes. 7.5
- 7- a) What is Law of Independent Assortment? Explain it with the example of a Cross of Wild Type flies with those having Vestigial Wings and Sepia Eyes. 4
 b) What do you understand by Maturation and Instinct / Learning Interactions regarding the animal behavior? 3.5
- 8- What is Meiosis? Discuss the various events of Meiosis and its significance. 7.5
- 9- a) What is meant by Biodiversity, Biological Magnification and Lotic and Lentic Ecosystem? 4
 b) Write a short note on Mutations. 3.5