

# RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

FIRST YEAR [2018 - 21]

B.A./B.Sc. FIRST SEMESTER (July – December) 2018

Mid-Semester Examination, September 2018

Date : 26/09/2018

ZOOLOGY (General)

Time : 12 noon - 1 pm

Paper: I

Full Marks: 25

1. Answer **any five** questions of the following: (5 × 2)
- a) Write down the functions of rRNA and Z-DNA . [1 + 1]
  - b) What is glycosylation?
  - c) What are integral proteins?
  - d) Compare between micronucleus and macronucleus.
  - e) Enumerate four important attributes of X-linked recessive inheritance.
  - f) What is proteronopia and deuteronopia? [1 + 1]
  - g) Name the essential components of an 'Apical Complex'.
  - h) Mention three major characteristic features of the phylum Ciliophora.
2. Answer **any three** questions of the following: (3 × 5)
- a) Describe the clover leaf model of tRNA. Mention different clinical findings of a down syndrome affected patient. What is point mutation? [2 + 2 + 1]
  - b) Describe receptor mediated endocytosis with the help of a neat diagram. Briefly explain the ultrastructure of flagellar axoneme. [3 + 2]
  - c) "DNA replication is semi conservative"- prove the proposition by means of Experiments, Observations and Inferences. [5]
  - d) Explain the process of excretion in *Taenia* with a flow diagram. What do you mean by gynandromorphs? [3 + 2]
  - e) State the types of spicules which are commonly found in sponges with examples. Name the modes of asexual reproduction in poriferans. [4 + 1]

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