

RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

SECOND YEAR [2016-19]

B.A. /B.Sc. FOURTH SEMESTER (January – June) 2018

Mid-Semester Examination, March 2018

Date : 17/03/2018

Time : 1pm – 2pm

ZOOLOGY (General)

Paper: IV

Full Marks: 25

1. Answer **any five** questions of the following: (5 × 2)
 - a) Write the chemical composition of Pearl.
 - b) What is ovaprim?
 - c) Write the scientific name of a brackish water fish and a cat fish?
 - d) Name the different isotopes of I_gG.
 - e) Mention the characteristic features of a Miracidium larva. What is fascioliasis? [1 + 1]
 - f) State the functions of I_gA and I_gE.
 - g) What is F_c fragment?
 - h) Distinguish between Systematics and Taxonomy.
 - i) Mention the advantages of Beta Taxonomy.
2. Answer **any three** questions of the following: (3 × 5)
 - a) 'Macrotaxonomy is not possible without knowing Microtaxonomy' – justify. What are Phenon and Deme? [3 + 2]
 - b) What are the basic principles of a downward classification? Mention the important rules for a Binomial Nomenclature. [2 + 3]
 - c) Briefly explain the process of pearl nucleus insertion operation. What is MTGX? [4 + 1]
 - d) State the differences between exo-erythrocytic and pre- erythrocytic schizogonies? What are Schüffner's dots? [3 + 2]
 - e) Describe the sexual phase of life cycle in *Plasmodium vivax* with a neat diagram. [5]
 - f) Distinguish between precipitation and agglutination reactions. Which techniques are commonly adopted in an agglutination reaction? [3 + 2]
 - g) What are Antibody affinity and avidity? Describe the clinical treatment and control of *Fasciola* infection. [2.5 + 2.5]

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