

RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

FIRST YEAR [2017-20]

B.A./B.Sc. FIRST SEMESTER (July – December) 2017

Mid-Semester Examination, September 2017

Date : 14/09/2017

ZOOLOGY (General)

Time : 12 noon – 1 pm

Paper : I

Full Marks : 25

1. Answer **any five** questions : [5×2]
 - a) How many types of nuclei are found in the phylum Ciliophora? *Labyrinthula* & *Plasmodium* belong to the phyla _____ & _____ respectively. [1+1]
 - b) Mention four major characteristic features of the phylum Ciliophora. [2]
 - c) Write the scientific name of a pathogenic protozoon? What are Paramylon granules? [1+1]
 - d) What are microfilament and trichocysts? [2]
 - e) Define Euglenoid movement. [2]
 - f) What is cnidocil? State its function? [1+1]
 - g) What is colloblast cell? Mention its function. [1+1]
 - h) What is the difference between coelom and pseudocoelom? Give an example of each. [1+1]
2. Answer **any three** questions : [3×5]
 - a) Illustrate the role of actin and myosin in amoeboid movement. [5]
 - b) Distinguish between Spongin & Spongoecol. What are Choanocytes? Mention three major characteristic features of the class Demospongiae. [2+1+2]
 - c) Briefly describe the process of conjugation in *Paramoecium*? What are the advantages of this process? [4+1]
 - d) What is GERL Complex? Write its function. Mention the types of vesicles found in a cellular lysosomal system. [1+2+2]
 - e) What is the difference between chromosome and chromatin? What is nucleosome? Give its structure. [1+1+3]
 - f) What is haemophilia? If a normal male marries a colorblind female, what is the probability of their male child to be color blind? Justify this with reasons. [1+3+1]
 - g) Give the structure of a eukaryotic ribosome. Describe the elongation process in protein synthesis. [2+3]

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