

RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

FIRST YEAR [2016-19]

B.A./B.Sc. FIRST SEMESTER (July – December) 2016

Mid-Semester Examination, September 2016

Date : 17/09/2016

Time : 12 noon – 1 pm

ZOOLOGY (General)

Paper : I

Full Marks : 25

[Use a separate answer book for each group]

Group – A

1. What are colloblasts and choanocytes? State their functions. What are blepharoplasts? Mention the role of nexin links in a microtubule. [2+1+1+1]

Or,

Write the systematic position of *Fasciola sp.* What is cysticercosis? In which phylum does *Trypanosoma* belong? [2+2+1]

2. Define Axostyle. Where it is usually found? Mention three diagnostic features of the class Calcarea. [2+1+2]

Or,

What is cnidocil? Mention two major differences between Hexacorallia and Octocorallia with suitable examples. What is metachronal wave? How is it produced? [1+2+1+1]

Group – B

3. What is meant by η (nu) bodies? Write its composition. What is endoreduplication? Where does it occur & what is the fate of this process? What do you mean by chromosomal aberration? Define Trisomy with an example. [1+1+1+2+2+(2+1)]

Or,

Illustrate the importance of recombination. *Crossing over is always less than 50%* -justify. Write the difference between tandem duplication and reverse tandem duplication. What would be the structure a chromosome in anaphase of cell division if it contains a diffused centromere? Mention the structural differences between a metaphase and a telophase chromosome. [2+2+2+2+2]

4. Mention the difference between complete linkage and incomplete linkage. How does a proto-oncogene is converted into an oncogene? Define *tumor suppressor gene* with an example. [2+2+1]

Or,

What is cyclin? State its role in driving cell cycle. How can you differentiate a centromeric region from that of a nucleolar organizer region if a mitotic chromosome contains the both? [1+2+2]

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