

RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

B.A./B.Sc. SECOND SEMESTER EXAMINATION, AUGUST 2021

FIRST YEAR [BATCH 2020-23]

ZOOLOGY (HONOURS)

Paper : III [CC3]

Date : 10/08/2021

Time : 11 am – 1 pm

Full Marks : 50

Answer all the questions:

Group A

1. a) “In *Ascidia*, adopting sessile nature by adult is found advantageous leaving the life of a motile larva” – justify.
b) Mention two key features to distinguish between protostomes and deuterostomes. [3+2]
2. a) How can you determine the phylogenetic link between hemichordates and echinoderms? State the major differences between the ‘annuli’ of a worm lizard and an earthworm.
b) What are the identifying characters of the order Strigiformes? [1+2+2]

Group B

3. a) Mention two significant characters of elasmobranchs.
b) “Ruminant stomach may be considered as a microbial starter culture”- Justify.
c) What is ‘nose-leaf’? [2+2+1]
4. a) Differentiate between pro-nephric and meta-nephric kidney.
b) Define ‘belching’ and ‘echo-jamming’.
c) Name the geological time period of earth’s history known as ‘the golden age of fish’. [2+2+1]

Group C

5. a) Define pterylae.
b) What are filoplume and down feather?
c) Write down the reptilian characteristics of monotremes. [1+2+2]
6. a) What is carnassial teeth?
b) Illustrate the structure of a incisor with labelled Diagram [1+(2+2)]
7. a) Differentiate between horns and antlers.
b) What is ASVS?
c) Describe the role of different muscles associated with biting mechanism of a solenoglyphous snake. [2+1+2]
8. a) Compare between Urodela and Aneura.
b) What is paedomorphosis?
c) Mention the factors which control neoteny. [2+1+2]

Group D

9. a) Describe briefly the characteristic features of an Ammocoete larva.
b) What is physoclistous swim bladder?
c) What are Ampullae of Lorenzini? [3+1+1]
10. a) Comment on the aortic arches found in mammals.
b) What is ductus arteriosus?
c) What is the pacemaker of the heart?
d) Define cardiac looping. [2+1+1+1]

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