

M.Sc. (Zoology) Semester - 3 (CBCS) Examination**Nov/Dec-2023 (NEW COURSE)****Structure And Functions In Invertebrates And Vertebrates, Phylogeny (Core (New))****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

SECTION-1**Que. 1 Answer the Following.**

- (A) Write classification and general characters of reptiles. (07)
(B) Describe biodiversity indices. (07)

OR**Que. 1** Write about significance of larval forms and larva of crustacea. (14)**Que. 2 Answer the Following.**

- (A) Describe excretion in Arthropoda and Annelida. (07)
(B) Explain parasites and pathogens. (07)

OR**Que. 2** What is the significance of reproduction? Draw and explain reproductive system in any three phyla. (14)**Que. 3 Answer any seven out of eight.** (07)

- (1) Application of Shannon-Weinner index.
- (2) Compare larva and adult in any echinodermata.
- (3) Draw life cycle of *Tenia solium*.
- (4) Write about parasite adaptations.
- (5) Write about seminal receptacle.
- (6) Draw ootype.
- (7) What is cysticercus stage?
- (8) Draw mouth parts of a house cricket.

SECTION-2**Que. 4 Answer the Following.** (07)

- (A) Explain speciation with examples. (07)
(B) Describe geological time scale.

OR**Que. 4** Explain Zoogeographical realms with examples of fauna. (14)**Que. 5 Answer the Following.** (07)

- (A) Write a note on Sericulture. (07)
(B) Which species are better for Apiculture? Describe an apiary.

OR**Que. 5** Explain cultural and biological control. (14)**Que. 6 Answer any seven out of eight.** (07)

- (1) What is Augmentation?
- (2) Explain Absconding.
- (3) What challenges did tetrapods face with terrestrial life?
- (4) Write a few environmental control methods.
- (5) What is biomagnification?
- (6) Why chemical control is superior over other?
- (7) Explain supersedure bees.
- (8) Describe insect damage caused to stored grains.
