

Exam. Code : 103202

Subject Code : 1269

B.A./B.Sc. 2<sup>nd</sup> Semester

## ZOOLOGY

Zoo-II-B : Biodiversity—II (Arthropoda to Hemichordata)

Time Allowed—Three Hours] [Maximum Marks—35

**Note** :— (1) Candidates are required to attempt *five* questions in total, selecting at least *one* question from each Section.

(2) The **fifth** question may be attempted from any Section.

(3) Each question carries 7 marks.

## SECTION—A

1. (a) Write a note on double mode of locomotion in cockroach. 2
- (b) Describe the female reproductive system of *Periplaneta Americana* along with well labeled diagram. 5
2. (a) Write briefly about nuptial flight in honey bees. 2
- (b) Explain the phenomenon of polymorphism and social life in termites. 5

## SECTION—B

3. (a) Write a short note on Ctenidium in *Pila*. 2
- (b) Discuss different types of sensory organs found in apple snail. 5
4. What do you understand from the term torsion ? Discuss its process, effect and advantages. Also write on the process of detorsion in gastropods. 7

## SECTION—C

5. (a) Star fish has the ability to undergo autotomy and regeneration. Comment. 2
- (b) Discuss the ambulacral system in star fish along with diagrammatic representation. 5
6. Write notes on the following with respect to echinoderms :
- (a) Auricularia larva 2
- (b) Ophiopluteus larva 2
- (c) Evolutionary significance of larval forms. 3

## SECTION—D

7. (a) Give the complete systematic position of the Acron worms. 2
- (b) Describe the external characters of Tongue worms. 5
8. Discuss the affinities of hemichordates with non-chordates and chordates by highlighting the differences and similarities among these. 7