2025

(FYUGP)

(2nd Semester)

ZOOLOGY

(MINOR)

Paper : ZOO/M2

(Non-Chordates II : Coelomates)

Full Marks : 75 *Pass Marks* : 40%

Time : 3 hours

(PART : B—DESCRIPTIVE)

(*Marks* : 50)

The figures in the margin indicate full marks for the questions

1. How did metamerism evolve over time? Add a note on the functional significance of metamerism. 6+4=10

Or

Write a detailed account on the evolutionary significance of onychophora. 10

2. Classify phylum Annelida up to classes with examples. 10

Or

Provide a comprehensive explanation of the excretory mechanism in Annelida. 10

3. Give the general characteristics of phylum Arthropoda. 10

Or

Explain the different types of respiratory organs in Arthropods. 10

4. Outline the classification of Mollusca up to classes with suitable examples. 10

Or

Define pearls. Describe their formation process in bivalves. 2+8=10

5. Write the key characteristics of phylum Echinodermata. 10

Or

Categorize phylum Echinodermata up to class level with relevant examples. 10

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Subject Code : Bs/ZOO/M2

Booklet No. A 125

Date Stamp .....

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To be filled in by the Candidate

BA / BSc / BCom / BBA / BCA 2nd Semester End Term Examination, **2025 (FYUGP)**

Subject .....

Paper .....

INSTRUCTIONS TO CANDIDATES

1. **The Booklet No. of this script should be quoted in the answer script meant for descriptive type questions and vice versa.**
2. **This paper should be ANSWERED FIRST and submitted within 1 (one) Hour of the commencement of the Examination.**
3. **While answering the questions of this booklet, any cutting, erasing, over-writing or furnishing more than one answer is prohibited. Any rough work, if required, should be done only on the main Answer Book. Instructions given in each question should be followed for answering that question only.**

To be filled in by the Candidate

BA / BSc / BCom / BBA / BCA 2nd Semester End Term Examination, **2025 (FYUGP)**

Roll No. .....

Regn. No. .....

Subject .....

Paper .....

DESCRIPTIVE TYPE

Booklet No. B .....

Signature of Scrutiniser(s)

Signature of Examiner(s)

Signature of Invigilator(s)

2025

(FYUGP)

(2nd Semester)

ZOOLOGY

(MINOR)

Paper : ZOO/M2

(Non-Chordates II : Coelomates)

(PART : A—OBJECTIVE)

(*Marks* : 25)

The figures in the margin indicate full marks for the questions

Put a Tick (✓) mark against the correct answer in the brackets provided : 1×15=15

1. The evolutionary significance(s) of metamerism is/are

(a) it improves locomotion efficiency ( )

(b) it leads to the evolution of specialised body regions ( )

(c) Both *(a)* and *(b)* ( )

(d) Only *(b)* ( )

2. Onychophorans were considered a connecting link between

   (a) Annelida and Mollusca ( )

   (b) Annelida and Echinodermata ( )

   (c) Arthropoda and Mollusca ( )

   (d) Arthropoda and Annelida ( )

3. Reproduction in Onychophorans is

   (a) Oviparous ( )

   (b) Viviparous ( )

   (c) Both oviparous and viviparous ( )

   (d) asexual reproduction ( )

4. The nervous system of annelids consists of

   (a) a ventral nerve cord with paired ganglia ( )

   (b) a single nerve ring ( )

   (c) a dorsal nerve cord ( )

   (d) a single ganglia ( )

5. Which of the following is false for annelids?

(a) Body is bilaterally symmetrical ( )

(b) Blood vascular system closed ( )

(c) Excretory organ is nephridia ( )

(d) Coelom is enterocoelous ( )

6. The main function of setae in earthworm is

(a) respiration ( )

(b) locomotion ( )

(c) excretion ( )

(d) digestion ( )

7. The exoskeleton in arthropods is composed of

(a) chitin ( )

(b) keratin ( )

(c) cellulose ( )

(d) All of the above ( )

8. The respiratory organs in most terrestrial arthropods are

   (a) book gills ( )

   (b) lungs ( )

   (c) tracheal system ( )

   (d) nephridia ( )

9. The study of insect is called

   (a) entomology ( )

   (b) epidemiology ( )

   (c) malacology ( )

   (d) arthropodology ( )

10. Effect of torsion is

   (a) displacement of mantle cavity ( )

   (b) looping in alimentary canal ( )

   (c) endogastric coil ( )

   (d) All of the above ( )

11. How many ventricles does the molluscan heart have?

(a) One ( )

(b) Two ( )

(c) Three ( )

(d) Four ( )

12. Excretion in Mollusca is by paired

(a) protonephridia ( )

(b) mesonephridia ( )

(c) metanephridia ( )

(d) None of the above ( )

13. Asterias belongs to class

(a) echinoidea ( )

(b) asteroidea ( )

(c) ophiuroidea ( )

(d) holothuroidea ( )

14. Coelom in echinodermata is

(a) enterocoelous ( )

(b) schizocoelous ( )

(c) Both *(a)* and *(b)* ( )

(d) None of the above ( )

15. Water-vascular system contains

(a) madreporite ( )

(b) stone canal ( )

(c) ring canal ( )

(d) All of the above ( )

Write short notes on any *five* of the following : 2×5=10

1. Significance of coelom

2. Parthenogenesis

3. Setae and parapodia

4. Vision in insects

5. Metamorphosis

6. Torsion in gastropoda

7. Water-vascular system

8. Bipinnaria larva

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