

**BACHELOR OF SCIENCE (CBCS-2018 COURSE)**  
**S. Y. B. Sc. Sem-III : WINTER :- 2021**  
**SUBJECT: ZOOLOGY : FUNCTIONAL ANATOMY OF NON-CHORDATES-II &**  
**BIODIVERSITY**

Day : Friday  
Date 4/2/2022

W-18356-2021

Time : 10:00 AM-01:00 PM  
Max. Marks: 60

**N.B.**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat labeled diagrams **WHEREVER** necessary.

**Q.1** Attempt any **TWO** of the following : **(12)**

- a) Describe water vascular system of starfish.
- b) Write an essay on animal diversity in phylum Arthropoda.
- c) Describe Bipinnaria larva of starfish.

**Q.2** Attempt any **TWO** of the following : **(12)**

- a) Write in brief shell modification in Mollusca.
- b) Describe metamorphosis in insects.
- c) Describe four nematode parasites of man with zoological name, common name, site of infection, mode of infection and pathogenic effect.

**Q.3** Attempt any **TWO** of the following : **(12)**

- a) Explain bioluminescence. Write types and significance of bioluminescence.
- b) Write in details animal diversity in phylum Echinodermata.
- c) Describe mimicry in insects.

**Q.4** Attempt any **THREE** of the following : **(12)**

- a) Sketch and label digestive system of starfish.
- b) Write general characters of class cephalopoda.
- c) With suitable diagram describe oral view of starfish.
- d) Write general characters of phylum hemichordata.

**Q.5** Attempt any **FOUR** of the following : **(12)**

- a) Write any three characters of phylum mollusca.
- b) Write a note on pyloric caeca of starfish.
- c) Write a note on foot in *Pila*.
- d) Give systematic position of starfish.
- e) Describe foot in *Mytilus*.
- f) Write a note on foot in *Aplysia*.

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