

S.Y.B.SC. SEM – III (CBCS - 2016 Course) : WINTER - 2018

**SUBJECT: ZOOLOGY: FUNCTIONAL ANATOMY OF NON-CHORDATES-II
& BIODIVERSITY**

Day: Monday
Date: 29/10/2018

W-2018-0720

Time: 11.00 A.M. To 02.00 P.M.
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.
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Q.1 Attempt **ANY TWO** of the following: **(12)**

- a) Describe water vascular system of starfish.
- b) Give the general characters of phylum Echinodermata.
- c) Describe sense organs in seastar.

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

- a) Describe shell modification in Mollusca.
- b) Describe metamorphosis in insects.
- c) Give zoological name, mode of infection and pathogenic effects of any four nematode parasites in man.

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

- a) Describe mimicry in insects.
- b) How the light is produced by the animals? Write the significance of bioluminescence.
- c) Give general characters of phylum Arthropoda. Mention the classes with suitable examples.

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

- a) Sketch and label digestive system of starfish.
- b) Write general characters of phylum Hemichordata.
- c) Write general characters of Mollusca.
- d) Describe bipinnaria larva of seastar.

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

- a) Describe foot in gastropoda.
- b) Write note on autotomy and regeneration in starfish.
- c) Explain foot in cephalopoda.
- d) Write habits and habitat of *Asterias rubens*.
- e) Write any three characters of class pelecypoda.
- f) Write short note on types of bioluminescence.