

Seat No. : _____

ML-108

April-2018

B.Sc., Sem.-I

CC-3-101 : Biotechnology (The Living World)

Time : 3 Hours]

[Max. Marks : 70

1. Answer any **two** of the following :

14

- (A) Enlist the various theories of origin of life. Explain any one in detail.
- (B) Differentiate between the Prokaryotes and Eukaryotes.
- (C) "All living organisms are composed of one or more cells". Explain.
- (D) Discuss Whittaker's five kingdom classification with its merits and demerits.

2. Answer any **two** of the following :

14

- (A) Discuss the general characters of plants.
- (B) Write a note on vascular tissues of the plant.
- (C) Discuss the characteristics features of *Gymnosperm*.
- (D) Describe the body organization in plants.

3. Answer any **two** of the following :

14

- (A) Give an outline of animal kingdom.
- (B) Describe the types of adaptations to land by animals.
- (C) Discuss the Energy requirements of animals.
- (D) Explain how various activities are co-ordinated in the organisms.

4. Answer any **two** of the following :

14

- (A) Discuss the economic importance of Fungi.
- (B) Explain the morphological characteristics of Algae.
- (C) Describe the reproduction in Viruses with suitable diagram.
- (D) Write a note on life in the extreme environment.

5. Answer the following :

14

- (1) What is implied by spontaneous generation of life theory ?
 - (2) Give two primary functions of stem in plants.
 - (3) What are Protozoa ?
 - (4) Draw the labelled diagram of Chlorenchyma tissue.
 - (5) Define Morphogenesis.
 - (6) Name a fungi producing an antibiotic Penicillin.
 - (7) What are Virusoid ?
 - (8) Give the full form of t-RNA.
 - (9) Name the organelle known as "Powerhouse of the cell".
 - (10) Define Diploblastic organization.
 - (11) Define spores.
 - (12) Give full form of TMV.
 - (13) What is Y-M Shift ?
 - (14) All viruses have only RNA as their genetic material. True or false ?
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