

Seat No. : _____

JE-109

January-2016

B.Sc., Sem.-I

**CC-3 – Paper-101 : Bio-Technology
(The Living World)**

Time : 3 Hours]

[Max. Marks : 70

1. Answer the following questions : (Any two) **14**
 - (a) Explain the concept of Spontaneous Generation and Evidences of its disproval.
 - (b) Write a brief note on Mitochondria.
 - (c) Explain the concept of Whittaker's five-kingdoms with diagram.
 - (d) Discuss the theory of cell differentiation.

2. Answer the following questions : (Any two) **14**
 - (a) Discuss the features of *Bryophytes*.
 - (b) Describe Morphogenesis in plants.
 - (c) Explain outline of kingdom *Plantae*.
 - (d) Explain the Vascular plants in detail.

3. Answer the following questions : (Any two) **14**
 - (a) Summarize the importance of Organs in animals.
 - (b) Discuss the General Characteristics of animal.
 - (c) Explain primitive and advanced Marine animals.
 - (d) Describe organization of animal body.

4. Answer the following questions : (Any two) **14**
 - (a) Write a short note on Chemistry of Viruses.
 - (b) Describe General Characteristics of Algae.
 - (c) Discuss Asexual reproduction in Fungi.
 - (d) Write a short note on Halophiles.

5. Write any **seven** :

14

- (1) Who proposed the cell theory ?
- (2) Give the example of red-algae.
- (3) Give the function of Phloem tissue of plants.
- (4) Give the full form of ICTV and CMV.
- (5) Name the causative agent of Kala-azar.
- (6) What are hyphae ?
- (7) Define the term Mycology.
- (8) Give any two characteristics of fungi.
- (9) Why bryophytes are known as primitive class ?
- (10) Rearrange the order as cell theory :

Organism → tissues → organs → organ systems → cells
