

**OA-104**

December-2016

B.Sc., Sem.-I

**CC-3-101 : Biotechnology****(The Living World)****Time : 3 Hours]****[Max. Marks : 70**

1. Answer the following : (any two)

**14**

- (A) Explain the concept of cell theory.
- (B) Write down in detail Whittaker's five kingdom classification.
- (C) Explain structure and function of chloroplast with figure.
- (D) Explain cell differentiation with examples.

2. Answer the following : (any two)

**14**

- (A) Write a note on characteristics of vascular plants.
- (B) Write short note explaining morphogenesis.
- (C) Explain general characters of plants.
- (D) Write a brief note on primitive plants *Bryophytes*

3. Answer the following : (any two)

**14**

- (A) Discuss outline of kingdom *Animalia*.
- (B) Explain features of advanced marine animal with example.
- (C) Describe the organization of animal body.
- (D) Discuss the importance of organs in animals.

4. Answer the following : (any two)

**14**

- (A) Write a note on Prions.
- (B) Define and explain structure viroids with example.
- (C) Explain economic importance of fungi.
- (D) Write a note on characteristics and habitat of thermophiles.

5. Answer the following :

- (1) Give name of any fungi of two different class.
- (2) What is the function of mitochondria ?
- (3) What is a protozoan ?
- (4) Which thermophile produces *Taq* polymerase ?
- (5) Give full name of TMV.
- (6) What is Mycology ?
- (7) How do fungi take up nutrient ?
- (8) What is tissue ?
- (9) Give two name of product of algal origin.
- (10) What is the function of roots in plants ?
- (11) Who discovered penicillin ?
- (12) Give full name of RNA.
- (13) Give the name photosynthetic bacteria.
- (14) What is contribution of J.D. Watson ?