

Roll No.

Total Pages : 02

BT-2/M-19

32042

BIOLOGY

BS-141A

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. Draw the diagram of Mitochondria and Chloroplast and explain the structure and function of these organelles. 15
2. (a) Classify the organisms on basis of cellularity. 15
(b) Differentiate between plant and animal cell.

Unit II

3. (a) Classify different categories of protein and write their functions.
(b) Differentiate between DNA and RNA. 15
4. (a) Explain the effect of substrate concentration and temperature on enzyme activity. 15

- (b) Write about different classes of carbohydrates and their functions. 15

Unit III

5. (a) Differentiate between mitosis and meiosis.
(b) Write about the symptoms and treatment of Diabetes I and II. 10,5
6. (a) What are the morphological features for characterization of bacteria ? How are they beneficial for human beings.
(b) Give an experiment to prove that DNA is a genetic material. 10,5

Unit IV

7. Explain the role of biology in forensic sciences and agriculture. 15
8. Write notes on the following : 15
(i) Bioinformatics (ii) Photosynthesis.