

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, OCTOBER/NOVEMBER 2018

FIRST SEMESTER

Part II — Biotechnology

Paper I — MICROBIOLOGY AND CELL BIOLOGY

(Regular and Supplementary Common)2015, 2016, 2017 and 2018 Admitted Candidates)

Time : 3 Hours

Max. Marks : 75

PART - A

Answer any FIVE questions.

(Marks : 5 × 3 marks = 15 marks)

1. Dark field microscopy.
2. Flagella staining.
3. Cell wall of bacterial cell.
4. General characteristics of viruses.
5. Nutritional classification of bacteria.
6. Measurement of microbial growth
7. Autoclave.
8. Glyoxisomes.

PART - B

Answer ALL questions.

Answer ONE question from each unit.

(Marks : 5 × 12 marks = 60 marks)

UNIT - I

9. (a) Write about the contributions of Louis Pasteur, Edward Jenner and Robert Koch.

Or

- (b) Describe about Electron microscopy.

UNIT - II

10. (a) Explain about plasmids and Endospores.

Or

- (b) Discuss about Lytic and Lysogenic cycles of bacteriophage.

UNIT – III

11. (a) Give an account on nutritional requirements for microbial growth.

Or

(b) Describe about different types of media required for microbial growth.

UNIT – IV

12. (a) Explain about synchronous, continuous and batch cultures.

Or

(b) Write about chemical and gaseous sterilization.

UNIT – V

13. (a) Describe about the structure of Endoplasmic reticulum, chloroplast and vacuoles.

Or

(b) Explain the structure of mitochondria, nucleus and golgi complex.
