

THREE YEAR B.Sc., (CBCS) DEGREE EXAMINATION, NOVEMBER 2017

FIRST SEMESTER

Part II – Biotechnology — I

MICROBIOLOGY AND CELLBIOLOGY

(2015, 2016 and 2017 Admitted Students)

Time : 3 Hours

Max. Marks : 75

PART – A

Answer any FIVE questions.

(Marks : 5 × 3 marks = 15 marks)

1. Robert Koch.
2. Capsule.
3. Endospore.
4. Selective media.
5. Enriched media.
6. Microbistasis.
7. Batch culture.
8. Peroxisomes.

PART – B

Answer ALL questions.

Answer ONE question from each Unit.

(Marks : 5 × 12 marks = 60 marks)

UNIT – I

9. (a) Explain fluorescent microscopy.

Or

- (b) Write about electron microscopy.

UNIT – II

10. (a) Describe different plasmids and their significance.

Or

- (b) Give an account on lytic and lysogenic cycles of bacteriophage.

UNIT - III

11. (a) Write about nutritional classification of bacteria.

Or

(b) Discuss nutritional requirements of bacteria.

UNIT - IV

12. (a) Describe chemical controlling methods of microorganism.

Or

(b) Explain pure culture and culture characteristics.

UNIT - V

13. (a) Describe the structure and functions of nucleus.

Or

(b) Describe the structure and functions of mitochondria and chloroplast.
