

B.Tech I Year II Semester (R15) Regular Examinations May/June 2019

BASIC MICROBIOLOGY

(Food Technology)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Mention the applied areas of microbiology.
 - (b) Distinguish bright vs. dark field microscope.
 - (c) How flagella help the bacterial movement?
 - (d) Define bacterial conjugation.
 - (e) What is meant by mutation rate?
 - (f) Mention the mutation repair process.
 - (g) Give the structure of DNA in a virus.
 - (h) Define replication of virus.
 - (i) Give certain chemo-therapeutic agents to control microbes.
 - (j) Mention on plate count method.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Explain theory, instrument design and working of transmission electron microscope.

OR

- 3 Explain the morphology, characteristics and reproduction of fungi and molds.

UNIT – II

- 4 Elaborate the bacterial identification, reproduction and growth with neat diagram.

OR

- 5 Explain in detail on the bacterial conjugation, transduction and transformation.

UNIT – III

- 6 Explain the phenotypes of bacterial mutants and its characteristics.

OR

- 7 Classify and explain the various designations of bacterial mutants.

UNIT – IV

- 8 Classify the structures and explain the structure function relationships in virus.

OR

- 9 Elaborate the various food borne viruses and its consequences.

UNIT – V

- 10 Illustrate and explain the various methods of bacterial straining.

OR

- 11 Give a detailed account on the methods of control of microorganisms.
