## **AE-792**

M.Sc. (Previous)
Term End Examination, 2016-17

## **MICROBIOLOGY**

Paper - II

## Biochemistry

Time: Three Hours] [Maximum Marks: 100

[Minimum Pass Marks: 36

**Note**: Answer any **five** questions. All questions carry equal marks.

- 1. Distinguish between Prokaryotic and Eukaryotic micro organisms on the basis of the specialised components of their cell.
- 2. How will you distinguish among a bacterial, animal and plant cell? Explain with well labelled diagram.
- **3.** Describe in detail the enezyme kinetics with special emphasis on Michaelis-Menton equation.

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- **4.** What are Allosteric enzymes? Describe in detail the principle of allosteric regulation.
- **5.** Describe in detail the structure, functions and classification of carbohydrates.
- **6.** What is the role of accessory pigments during photosynthesis? Describe in detail the mode of action of various antibiotics.
- 7. Describe in detail along with equations and formulas, the various laws of thermodynamics. Distinguish between spontaneous and non-spontaneous reactions.
- **8.** Describe in detail the structural features of biomembranes with well labelled diagram.
- 9. Describe in detail the glycolysis pathway.
- 10. Write notes on the following:
  - (a) Roles of Co-enzymes
  - (b) Nucleotides