

**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 enzyme 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

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