

AE-791

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

MICROBIOLOGY

Paper - I

Bacteriology

Time : Three Hours] [Maximum Marks : 100
[Minimum Pass Marks : 36

Note : Answer **all** questions. All questions carry equal marks.

Unit - I

1. Describe morphological types and cell wall structure of Archaeobacteria.

OR

Write short notes on the following :

- (a) Types and composition of bacterial capsule
- (b) Structure, composition and properties of cell membrane

(2)

Unit - II

2. Discuss cell division in bacteria.

OR

Write short notes on the following :

- (a) Structure and functions of bacterial spores
- (b) Structure and functions of Phycobilisomes

Unit - III

3. Write an essay on bacterial reserve food materials.

OR

Write short notes on the following :

- (a) Cyanophycin granules
- (b) Sulphur inclusions

Unit - IV

4. Describe bacterial growth curve in detail and discuss generation time and growth kinetics.

OR

Write short notes on the following :

- (a) Measurement of bacterial growth
- (b) Physical methods of bacterial control

(3)

Unit - V

5. How are microorganisms classified ? Discuss Haeckel's three kingdom concept for bacterial classification.

OR

Write short notes on the following :

- (a) Classification of Cyanobacteria
 - (b) Classification of Prochlorons and Cyanelles
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