



**AF-3057**

B.Sc. (Part - II)  
Term End Examination, 2017-18

**MICROBIOLOGY**

Paper - II

*Time* : Three Hours]      [*Maximum Marks* : 50

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

**Unit-I**

1. Discuss the principle and application of spectrophotometry.

**OR**

Write short notes on the following :

- (a) Applications of spectrofluorometry
- (b) pH Meter

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**Unit-II**

2. What do you mean by Chromatography ?  
Briefly discuss the principle, types and application of partition chromatography.

**OR**

Write short notes on the following :

- (a) Application of FPLC
- (b) Paper Chromatography

**Unit-III**

3. Discuss the working principle and applications of phase contrast microscope.

**OR**

Write very short notes on the following :

- (a) Principle of centrifugation
- (b) LASER
- (c) Cofocal
- (d) Ocular lens

**Unit-IV**

4. What do you mean by In vitro technology ?  
Discuss the principle and requirements of animal tissue culture.

**OR**

( 3 )

Briefly comment on the following :

- (a) Disinfectant
- (b) Aseptic condition
- (c) Totipotent
- (d) Explant

**Unit-V**

5. Discuss the enzyme purification methods and point out its significance.

***OR***

Write short notes on the following :

- (a) Protein sequencing
  - (b) Radioisotope techniques
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