

2015

Time : 2 hours

Full Marks : 40

The questions are of equal value.

*Answer **all** questions.*

Give labelled diagrams wherever necessary.

(MICROBIOLOGY)

1. Give an illustrated account of the ultrastructure of bacterial flagella. Add a note on role of flagella in bacterial motility.

OR

Write notes on the following :

- (a) Endospores
- (b) Golden age of Microbiology

2. What is Culture Medium ? Discuss the composition and construction of various culture media for the microbes.

OR

Write notes on the following :

- (a) Enrichment Culture Technique
 - (b) Extreme habitat for microbes
3. Give a detailed account of the microbial culture collection and methods for maintenance of cultures.

OR

Write notes on the following :

- (a) Synchronous Growth
 - (b) Measurement of microbial growth
4. What are the broad spectrum antibiotics ? Discuss the different mode of action of antibiotics with examples.

OR

Write notes on the following :

- (a) HIV
- (b) Sulfa Drugs

5. With suitable examples, explain the biochemical basis of mutation due to mutagenesis.

OR

Write notes on the following :

- (a) Production of Vaccines
- (b) Plasmid DNA and its transfer

