

Roll No. ....

**91548**

**B. Sc. 2nd Sem. (Bio-Technology) (New  
Scheme) Examination – May, 2016**

**MICROBIOLOGY**

**Paper : BT 202**

***Time : Three Hours ]***

***[ Maximum Marks : 40***

*Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt *five* questions in all, selecting *one* question from each Unit. Question No. 1 is *compulsory*.

1. Write short note on the following : 1 × 10 = 10
- (a) Microbial Growth Curve
  - (b) Prokaryotic Cell
  - (c) Metabolic pathways.
  - (d) Chemotherapeutic agents
  - (e) Factor affecting bacterial growth.

- (f) Conjugation
- (g) Microbial Cultivation.
- (h) Algae
- (i) Eukaryotic cell structure.
- (j) Inolation Methods.

### UNIT - I

2. Explain the following :

- (a) Classification of micro-organisms along with various approaches. 4
- (b) Briefly explain the history and evolution of micro-organisms. 3

3. (a) Differentiate between Prokaryotic and eukaryotic cells. 4
- (b) Give the morphology and cell structure of protozoa. 3

### UNIT - II

4. Explain in detail the nutritional categories of micro-organism. 7

5. Explain various methods of isolation along with preservation methods. 7

UNIT - III

6. (a) What are the various factors effecting bacterial growth? 4

- (b) What are the different metabolic pathways involved in microbial metabolism? 4

7. Explain the process of bacterial transformation in detail. 8

UNIT - IV

8. Write a note on the following :  $2 \times 4 = 8$

- (a) Important micro-organism in food.  
(b) Bio-engineering of micro-organisms.  
(c) Physical methods of controlling micro-organisms.  
(d) Various methods of food preservation.

9. What are food born infections ? What are their consative agents ? How will you prevent the food born infections ?

8

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