

Roll No. ....

Total Pages : 3

**13012/N****K-17/2111****GENERAL MICROBIOLOGY**

Paper-1102T

Semester-I

Time Allowed : 3 Hours] [Maximum Marks : 54

**Note :** The candidates are required to attempt **two** questions each from Sections A and B carrying 8 marks each and the entire Section C consisting of 11 short answer type questions carrying 2 marks each.

**SECTION—A**

1. Explain the Compound Microscope with well labelled diagram. 8

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2. What are Bacteria? Draw well labelled diagram of Bacteria and explain its Morphology. 8
3. What is Metabolism? Explain the Energy production by Aerobic processes. 8
4. Explain the Growth curve of Bacteria. 8

**SECTION—B**

5. Give detailed account of Food borne diseases with examples. 8
6. What are Food contaminants? How are they dangerous to our Health? 8
7. Expand HACCP. Give its benefits and Principles. 8
8. What are Biosensors? Give their applications. 8

**SECTION—C**

9. Write short notes on the following : 11×2=22  
(i) Simple Microscope.

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- (ii) Pure Culture.
- (iii) Plasma membrane.
- (iv) Anaerobic digestion.
- (v) Lag phase.
- (vi) Culture Media.
- (vii) Mycotoxins.
- (viii) Anti-nutrition factors.
- (ix) Heavy metal detecting Biosensors.
- (x) Submerged Culture.
- (xi) Nutrient Agar.