

(i) Printed Pages: 2

Roll No. ....

(ii) Questions : 9

Sub. Code :

0	5	7	7
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Exam. Code :

0	0	0	6
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B.A./B.Sc. (General) 6<sup>th</sup> Semester  
(2054)

**INDUSTRIAL MICROBIOLOGY (Elective)**

**Paper : IMB-601 : Biostatistics, Tools and Techniques**

**Time Allowed : Three Hours]**

**[Maximum Marks : 33**

**Note :—**Attempt **FIVE** questions in all. Q. No. 1 is compulsory.  
Select **ONE** question from each unit.

1. Answer briefly :

- (a) Resolving power
- (b) R<sub>f</sub>
- (c) Mode
- (d) Sampling methods
- (e) Distillation system
- (f) Computer hardware
- (g) DOS
- (h) Gel filtration
- (i) Membrane filters.

9×1=9

## UNIT—I

2. Discuss the analysis of variance transformation. 6
3. (a) Differentiate between exponential and logarithmic functions. 3
- (b) Explain the significance of chi-square statistics. 3

## UNIT—II

4. Discuss the isoelectric focusing. 6
5. (a) Explain the principle of phase contrast microscopy. 3
- (b) Elaborate on the applications of affinity chromatography. 3

## UNIT—III

6. Discuss the basic principle and usage of fermenter. 6
7. (a) Explain the principle of electron microscope. 3
- (b) What are the applications of a flow cytometer ? 3

## UNIT—IV

8. Discuss two types of fermenters and their applications. 6
9. Write notes on :
  - (a) Harvard Graphics
  - (b) LOTUS. 6