

1058

B.A./B.Sc. (General) Sixth Semester

Industrial Microbiology

IMB-601: Biostatistics, Tools and Techniques

Time allowed: 3 Hours

Max. Marks: 33

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Answer briefly

- a) Mean
- b) Logarithmic functions
- c) Principle of Thin layer chromatography
- d) Distillation
- e) Computer control of fermentation
- f) Isoelectric focusing
- g) Applications of affinity Chromatography
- h) DOS
- i) Eye piece

(9x1)

UNIT - I

- II. a) Explain the basic idea of probability.
- b) Differentiate between mode and median.

(3,3)

- III. a) Discuss the analysis of variance transformation.
- b) Describe the different sampling methods.

(3,3)

UNIT - II

IV. Explain the working and applications of Fluorescence Microscope.

- V. a) Discuss the principle of gel filtration.
- b) Describe the procedure used for paper chromatography.

(3,3)

UNIT - III

- VI. a) Discuss the working of a TEM.
- b) How is a flow cytometer used to measure cell size?

(3,3)

P.T.O.

(2)

- VII. Write a note on the principle and applications of Spectrophotometer. (6)

UNIT - IV

- VIII. a) Write a short note on Harvard Graphics
b) Discuss the working of a stirred tank Fermenter. (3,3)
- IX. Explain the principle operating characteristics of Fermenters. (6)

x-x-x