Exam.Code:0040 Sub. Code: 0996

## 2072

## B.Sc. (Hons.) Bio-Informatics Second Semester

BIN-2004: Statistics and Computer Fundamentals

Time allowed: 3 Hours

Max. Marks: 60

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

- Answer the following:-
  - Define Biostatistics.
  - ii) Define frequency distribution.
  - iii) Differentiate between Analogue and Digital computer.
  - iv) Define skewness and how can it be measured.
  - v) Define resolution of a printer.
  - vi) What do you mean by magnetic disks?

 $(6 \times 2)$ 

## Unit-I

- 2 Write short note on the following with example:
  - a) Histogram and Frequency polygon
  - b) Pie diagram and Bar diagram
  - c) Kurtosis and Box and Whisker plot

(3x4=12)

Find the mean, median, mode, quartile deviation and standard deviation for the following data:

Class:	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency:	15	17	21	26	19	14	11

Discuss the procedure for the construction of an Ogive or cumulative frequency curve.

(10, 2)

- 4 (a): What is meant by a random variable? Define the distribution function of a random variable. What are the properties of a distribution function?
- (b): Define down the probability mass function of Binomial distribution. Also find its mean and variance.

## Unit-II

5 (a) What is Computer? Explain the various components of computer with the help of block diagram.

(b) Discuss basic principles of operations of Magnetic tape.

(7, 5)

- 6. Write short note on:
  - a) Batch oriented applications
  - b) Real Time applications
  - c) Stored Program Concepts

(4, 4, 4)

7 (a) What do you mean by Memory? Explain primary memory and its various types.

(b) Explain various output devices used in computer system.

(6, 6)