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Exam.Code:0040
Sub. Code: 0996

1058

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.*

x-x-x

I. Briefly explain the following terms:

a) What is Biostatistics?

b) Classification and Tabulation of data

c) Construction of Histogram

d) Conditional probability, with examples

e) What are flow charts, give examples?

f) Miles stones in hard ware and software

g) What is a stored program?

h) Light pen mouse and Joystick. (8x1½)

UNIT – I

II. a) Discuss Median as a measure of Central Tendency along with its merits and Demerits.

b) Discuss various steps involved in the construction of Box and whisker plot. Is it possible to determine outliers and Skewness from this graph? If yes, explain how? (6,6)

III. a) State and Prove B aye's Theorem

b) Define the following:-
i) Random variable
ii) Probability mass function
iii) Probability density function. (6,6)

IV. a) Define the following:-
i) Mathematical Expectation and how one may write mean and variance in terms of expectation.

ii) Binomial distribution, its moment generating function and other properties.

P.T.O.

b) Define the following:-

i) Probability generating function

ii) Normal distribution and its properties. (6,6)

UNIT – II

V. a) What is the difference between digital and analogue computers? Is there any difference in their organizations?

b) Explain batch oriented/online/real time applications. (6,6)

VI. a) Explain functional units and their interrelation communication with computers

b) Explain source data automations. (6,6)

VII. a) Explain CD ROM, RAM, FROM and EPROM.

b) Explain printed outputs

i) Serial

ii) Line

iii) Page

iv) Plotters (6,6)

x-x-x