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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(BT) (2011 Onwards) (Sem.-4)

BIOSTATISTICS

Subject Code : BTBT-401

M.Code : 55084

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Q1. Answer briefly :

- a. What are the types of biological data?
- b. Find the range from the following data of daily wages of workers:
Rs. 22, 35, 32, 45, 42, 48, 39
- c. What do you mean by Permutations in probability?
- d. Calculate the cumulative frequency of the data.
Daily expenditure (Rs.): 20, 30, 40, 50, 60.
- e. What is chi-square test?
- f. Write a note on Non-parametric test.
- g. Calculate Quartile :
Marks in Statistics paper: 15, 21, 26, 30, 40, 45, 50, 54, 60, 65, 70.
- h. Define Regression.
- i. State the properties of mean.
- j. What do you mean by conditional probability?

SECTION-B

Q2. The frequency distribution of blood pressure of a number of persons is given :

B. P.	10-20	20-30	30-40	40-50	50-60
No. of persons	5	10	25	40	55

Graphically represent this data using bar diagram and also draw a frequency polygon. (3,2)

Q3. Write a note on Analysis of Variance (ANOVA). (5)

Q4. What is Skewness? Diagrammatically represent positively and negatively skewed data. (2,3)

Q5. Find the Harmonic mean from the following data :

Values	35	45	89	76	87	66	110	135
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Q6. Explain the two important theorems of probability. (5)

SECTION-C

Q7. Calculate the Karl Pearsons co-efficient of correlation from the following data : (10)

X	9	8	7	6	5	4	3	2	1
Y	15	16	14	13	11	12	10	8	9

Q8. Compute the median from the following series : (10)

X	0-5	5-10	10-15	15-20	20-25
Frequency	44	60	36	44	8

Q9. What do you mean by Hypothesis testing? Give the steps of formulation of a hypothesis testing. (4, 6)

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student..