NAIPUNNYA BUSINESS SCHOOL
Experience • Explore • Excel

MBA / I / BUS1C07 / 02 /2024-25 F-73A Rev.01 Dated 01/12/2015

Name_____ Roll No_____

NAIPUNNYA BUSINESS SCHOOL (NBS)

FIRST SEMESTER MBA II INTERNAL EXAMINATION DECEMBER 2024

QUANTITATIVE TECHNIQUES(BUS1C07)

Time:1 hour 30 min Maximum:30 marks

Part A

Answer all questions.
Each question carries 2 marks

1. What is a degree of freedom? L1; CO2

2. Write a note on Type I and Type II error. L2; CO2

Part B

Answer any two questions.
Each question carries 4 marks

3. If n = 10, Σ x = 26, Σ y = – 27, Σ x2 = 226, Σ y2 = 267, Σ xy = 7, find correlation coefficient L3; CO3

4. A school claimed that the students who study that are more intelligent than the average school. On calculating the IQ scores of 50 students, the average turns out to be 110. The mean of the population IQ is 100 and the standard deviation is 15. State whether the claim of the principal is right or not at a 5% significance level. L4; CO2

5. Expain the applications and procedure of ANOVA L2; CO2

6. Explain the procedure in Hypothesis testing. L2; CO4

Part C

Answer any one question.
Each question carries 8 marks

7. A professor believes that a new online learning curriculum is increasing the median final exam score from the previous year, which was 75. A random sample of final exam scores were collected for students that went through the new curriculum. Test to see if the new curriculum is effective using α=0.05. L4; CO5

78 100 75 64 87 80 72 91 89 70 82 76"

8. The following data represents hemoglobin values in gm/dl for 10 patients: 10.5 9 6.5 8 11 7 7.5 8.5 9.5 12 Is the mean value for patients significantly differ from the mean value of general population (12 gm/dl). Evaluate the role of chance. (□ = 0.05)

L4; CO4

Part D

Compulsory question
10 Marks

9. In certain food experiment to compare two types of baby foods A and B, the following results of increase in weight (lbs) we observed in 8 children as follows.

Food A(x)	49	53	51	52	47	50	52	53
Food B(y)	52	55	52	53	50	54	54	53

Examine the significance of increase in weight of children due to food B. L4; CO5

****