

A1002

Name.....

Register No.....

**NAIPUNNYA INSTITUTE OF MANAGEMENT AND INFORMATION
TECHNOLOGY (AUTONOMOUS)**

FIRST SEMESTER END SEMESTER EXAMINATION NOVEMBER 2025

MASTER OF COMMERCE

MCM1C03 - QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS

Time:Three Hours

Maximum:30 Weightage

Section A

Answer any four questions not exceeding 100 words
Each question carries 2 weightage

- | | |
|---|-----|
| 1. What is hypothesis? | CO2 |
| 2. What is meant by non-parametric test? | CO3 |
| 3. Explain the role of quantitative techniques in managerial decision making | CO1 |
| 4. What are the limitations of tests of significance? | CO2 |
| 5. Summarize the key characteristics of a linear correlation between two variables. | CO4 |
| 6. State one assumption of ANOVA. | CO3 |
| 7. What is SPSS? | CO5 |

Section B

Answer any four questions not exceeding 300 words
Each question carries 3 weightage

- | | |
|--|-----|
| 8. Write a note on sampling distribution. | CO2 |
| 9. Explain the technique of analysis of variance for two way classifications? | CO3 |
| 10. What is F test? Mention 2 uses of F test. | CO3 |
| 11. What is the main advantage of using SPSS over Excel? | CO5 |
| 12. Describe any three major roles of quantitative techniques in managerial decision making. | CO1 |
| 13. From the following data, calculate Spearman's Rank Correlation:

X = 68,75,80,71,69 Y = 70,78,77,72,68 | CO4 |
| 14. What are the merits of non parametric test? | CO3 |

Turn Over

Section C

Answer any two questions not exceeding 800 words
Each question carries 5 weightage

15. Chi square is a test of homogeneity, goodness of fit and test of independence. Explain? CO3
16. What is Type I error and Type II error in test of hypothesis? CO2
17. A marketing research company conducted a survey regarding two types of credit cards. It selected a random sample of 100 card holders of each type and found that the average length of holding of type I was 89 months and that of type II 94 months. The population standard deviations are 9 months and 10 months respectively. Estimate a 95% interval for the difference between two population means. CO1
18. Obtain the rank correlation coefficient for the following data
X = 68, 64, 75, 50, 64, 80, 75, 40, 55, 64 Y = 62, 58, 68, 45, 81, 60, 68, 48, 50, 70 CO4
