K26FY1538 Pages: 2 Reg No:................

Name:................

Second Semester FYUGP Degree (Reg/Sup/Imp) Examination April 2026

KU2DSCCOM110 - QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS

2024 Admission onwards

Time : 2 hours Maximum Marks : 70

Section A

Answer any 6 questions. Each carry 3 marks.

1. Write a note on Multiple Regression
2. What is Non-linear Regression?
3. Define Cyclical Variation.
4. Calculate 3 year Moving Average for the following data.

Year	2017	2018	2019	2020	2021
Sales	250	270	300	320	350

5. Write straight line trend equation
6. What is perfect positive correlation?
7. Explain linear & non-linear correlation
8. Write a note on Scatter diagram.

Section B

Answer any 4 questions. Each carry 6 marks.

9. Explain the utilities of time series analysis.
10. Explain the factors affecting Seasonal Variation in Time Series.
11. Fit a linear trend line using the least square method for the following data and forecast the value for 2024

Year	2019	2020	2021	2022	2023
Profit	50	55	60	65	70

12. Explain limitations of Quantitative Techniques?
13. How will you interpret correlation coefficient?

14. Mr. A and Mr. B were asked to rank 7 different types of perfumes. The ranks given by them are as follows. Calculate Spearman's Rank Correlation coefficient.

Perfumes	A	B	C	D	E	F	G
Mr. A	2	1	4	3	5	7	6
Mr. B	1	3	2	4	5	6	7

Section C

Answer any 2 questions. Each carry 14 marks.

15. It is believed that sales of a firm will rise with a probability of 0.8 if it advertised for its product. However, sales will still rise with a probability of 0.15 if it did not advertise for its product. The probability that it will advertise for its product is 0.9. If sales have gone up, what is the probability that firm has not advertised for its product?
16. Explain the concept of Probability with a detailed discussion on its important terms. Illustrate your answer with suitable examples.
17. Calculate two regression equation and estimate X, when Y= 26

X	10	12	13	17	18	20	24	30
Y	5	6	7	9	13	15	20	21