

BA BSC BCOM DEGREE END SEMESTER EXAMINATION - NOVEMBER 2025**UGP (HONS.) SEMESTER - 1: DISCIPLINE SPECIFIC COURSE****COURSE: 24UCOMDSC102: QUANTITATIVE TECHNIQUES FOR BUSINESS***(For Regular 2025 & Improvement/Supplementary 2024 Admission)*

Time : 1.5 Hours

Max. Marks : 50

SECTION – A***Answer any 5 questions. Each question carries 2 marks***

1. Write a note on the importance of statistics in business and commerce? (U)
2. What is meant by stub? (U)
3. What are statistical methods? (U)
4. State the use of Harmonic mean. (U)
5. State any two merits and two limitations of correlation graph. (U)
6. What is a Regression Line? (U)
7. What is Bibliography? (U)
8. What are oral reports? (U)

(2 × 5 = 10)**SECTION – B*****Answer any 4 questions. Each question carries 5 marks***

9. State the limitations of statistics. (U)
10. What is editing of data? What are the factors to be considered while editing data? (U)
11. In a retail company, the sales performance of employees is recorded in terms of sales in thousands of dollars (less than) and the number of employees as follows:

Sales in Thousands of Dollars (Less Than)	Number of Employees
30	12
70	35
110	60
150	95
190	130

230	165
270	190
310	205

The company wants to recognize employees who rank in the top 15% of sales performance. Calculate the sales cutoff value to identify employees eligible for the recognition award

(An)

12. The mean annual salary paid to all employees in a factory was Rs. 600. The mean annual salary paid to male and female workers were Rs. 620 and Rs. 520 respectively. Obtain the percentage of male and female workers in the factory. (A)

13. Calculate the percentage of illiterate population from the data and find out the correlation between age and illiteracy. (A)

Age	Total population ('000)	Illiterate Population ('00)
15	120	100
25	100	75
35	80	60
45	50	30
55	25	20
65	15	10
75	5	5

14. From the following data of price and demand of a product:

	Price	Demand
Arithmetic Mean	10	35
Variance	4	25

The Correlation coefficient is 0.8. Obtain the regression equation of demand on price and estimate the likely demand when the price is Rs. 12 (An)

(5 × 4 = 20)

SECTION – C

Answer any 2 questions. Each question carries 10 marks

15. Explain the content of a research report.

(U)

16. Lives of two models of LED Bulbs in a recent survey are:

Life(Months)	0-2	2-4	4-6	6-8	8-10	10-12
Model A	5	16	13	7	5	4
Model B	2	7	12	19	9	1

1) What is the average life of each model?

2) Which model has more uniformity?

(An)

17. The following data shows the age of car of a certain make and annual maintenance cost.

Age of car (Years)	2	4	6	7	8	10	12
Maintenance cost	1600	1500	1800	1900	1700	2100	2000

a) Determine the two regression equations.

b) Estimate the annual maintenance cost of a 5-year-old car.

c) Mr. Ashwin says he spend Rs. 2300 for maintaining his car. How old do you think is his car?

d) Calculate the correlation coefficient between Age and maintenance cost.

(An)

(10 x 2 = 20)
