

Reg. No.....

Name.....

**B A, B SC, B COM DEGREE END SEMESTER EXAMINATION - APRIL 2025****UGP (HONS.) SEMESTER - 2: MULTIDISCIPLINARY COURSE****COURSE: 24USTAMDC101– INTRODUCTION TO ELEMENTARY STATISTICS***(For Regular 2024 Admission)*

Time: 1.5 Hours

Max. Marks - 50

(Use of ordinary calculator is permitted)

**PART A****Maximum marks from this part is 10. Each question carries 2 marks**

1. State any two advantages of Statistics. (U, CO1)
2. What is meant by a questionnaire? (U, CO2)
3. List out the various types of bar diagrams. (R, CO3)
4. Write any two advantages of pictorial representation of data. (U, CO 4)
5. Calculate the mean of a data having median = 15 and mode = 20. (A, CO 5)
6. Define Coefficient of variation. (U, CO5)
7. Which are the different types of correlation? (R, CO6)
8. Comment on the relationship between two variables, if the correlation coefficient between them is -0.24. (An, CO6)

**PART B****Maximum marks from this part is 20. Each question carries 5 marks**

9. What is primary data? Indicate the methods of collecting primary data. (R, CO3)
10. Distinguish between population and sample with help of suitable examples. (U, CO3)
11. What are the desirable properties of a statistical average? (U, CO5)
12. Calculate the mean deviation from the mean for the following data  
18, 30, 21, 28, 25, 22, 26, 19, 32, 28 (E, CO5)
13. Find the median for the following frequency distribution. (A, CO5)

Class	15-25	25-35	35-45	45-55	55-65	65-75
Frequency	4	11	19	14	0	2

14. Create a multiple bar graph to show imports and exports of India from 1991 to 1995. (A, CO4)

Years	Imports	Exports
1991	7930	4260
1992	8850	5225
1993	9780	6150
1994	11720	7340
1995	12150	8145

### PART C

Maximum marks from this part is 20. Each question carries 10 marks

15. Describe the different stages of a Statistical enquiry.

(R, CO3)

16. The weekly sales of a product in two regions A and B were recorded as follows.

Region A	4	8	4	15	10	11	9
Region B	12	8	3	15	6	4	10

Find out which of the two regions shows greater consistency in sales.

(An, CO5)

17. Using the following data conduct a correlation analysis to examine if there is any

relationship between life satisfaction and stress level.

(An, CO6)

Participant	1	2	3	4	5	6	7	8	9	10
Stress score (x)	11	25	19	7	23	6	11	22	25	10
Life satisfaction (y)	7	1	4	9	2	8	8	3	3	6

18. The monthly profits in rupees of 100 shops are distributed as follows

(A, CO4)

Profits per shop	0-100	100-200	200-300	300-400	400-500	500-600
Number of shops	12	18	27	20	17	6

Plot a histogram for the data to locate the mode.