

B A, B SC, B COM DEGREE END SEMESTER EXAMINATION - NOVEMBER 2024
UGP (HONS.) SEMESTER - 1: MULTI DISCIPLINARY COURSE (STATISTICS)
COURSE: 24USTAMDC101 - INTRODUCTION TO ELEMENTARY STATISTICS

(For Regular 2024 Admission)

Time: 1.5 Hours

Max. Marks - 50

PART A

(Each question carries 2 marks. Maximum marks from this part is 10)

1. Define statistics in Plural sense.
2. Differentiate between Census and sampling.
3. Differentiate between primary and secondary data.
4. Give the empirical relationship between mean, median and mode
5. Give a situation where coefficient of variation is used as a measure of dispersion.
6. Define Mean deviation.
7. Differentiate between direct and indirect correlation.
8. Briefly explain the uses of scatter diagram.

PART B

(Each question carries 5 marks. Maximum marks from this part is 20)

9. Briefly explain the uses of diagrams.

10. Prepare a questionnaire to study “Prevalence of life style diseases in your locality “

11. A survey was conducted to study the family size of employees in a factory. The following are the size of 25 families. Prepare a suitable bar diagram to visualize the data.
 3, 4, 5, 3, 4, 4, 5, 3, 3, 4, 4, 4 6
 2, 5, 2, 3, 4, 4, 4, 5, 3, 6, 2, 4

12. Calculate the mean deviation from the Median for the following data.
 21, 27, 31, 33, 35, 42, 46, 52

13. Calculate the Median from the following data.

Age in years	15	17	20	22	30	35	40
No. Of students	24	32	46	50	41	35	25

14. The following table gives the Price of sugar and the Quantity purchased by customers in a town. Create a scatter diagram and give your comments.

Price(Rs)	45	48	42	46	40	38	40	42	45	50
Quantity(Kgs)	12	10	12	8	15	16	14	11	10	9

PART C

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

15. Explain the advantages and disadvantages of statistics.

16. Calculate the value of Median and Mode from the following data.

Mark of students	32	40	47	50	60	65	68	70
No. Of students	10	15	20	27	22	15	12	8

17. Calculate Standard deviation from the following data.

class	0-20	20-40	40-60	60-80	80-100
frequency	8	12	17	13	10

18. Draw the ogives and locate median from the following data.

Age(Years)	0-10	10-20	20-30	30-40	40-50	50-60
frequency	7	15	27	30	21	12
