

ADMISSION NUMBER											

School of Business
Master of Business Administration MBA Dual Specialization
Mid Term Examination - Nov 2023

Duration : 90 Minutes
Max Marks : 50

Sem I - D1PK104T - Business Statistics for Decision Making

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

- 1) Compare and contrast arithmetic mean and median . K2 (2)
- 2) Define arithmetic mean and mention the merits of mean with example. K1 (3)
- 3) A survey was conducted to determine the age (in years) of 120 automobiles. The result of such a survey is as given in the table. Interpret the appropriate method of central tendency to calculate the mean age and median age of automobiles and interpret the results. K2 (4)

Age of Automobiles	0-4	4-8	8-12	12-16	16-20
Numbers	13	29	48	22	8

- 4) It is said that the use of a particular average depends upon the particular problem in hand. Explain and indicate at least one instance of the use of mean, median, mode in business? K2 (6)
- 5) For a group of 50 male workers, the mean and standard deviation of their monthly wages are Rs 6300 and Rs 900 respectively. For a group of 40 female workers, these are Rs 5400 and Rs 600 respectively. Identify the mean and standard deviation of monthly wages for the combined group of workers. K3 (6)
- 6) The weekly sales of two products A and B were recorded as given in the table. Identify, out which of these two products shows greater fluctuation in sales? K3 (9)

Product A	59	75	27	63	27	28	56
Product B	150	200	125	310	330	250	225

- 7) Tickets are numbered from 1 to 100. They are well shuffled and a ticket is drawn at random. Examine the probability that the drawn ticket has (a) an even number? (b) the number 5 or a multiple of 5? (c) a number which is greater than 75? (d) a number which is a square? K4 (8)

- 8) The following sample table shows the weekly number of road accidents in a city during a two-year period. Compare the following and conclude (i) interquartile range (ii) Coefficient of quartile deviation K4 (12)

<i>Number of Accidents</i>	<i>Frequency</i>	<i>Number of Accidents</i>	<i>Frequency</i>
0- 4	5	25-29	9
5- 9	12	30-34	4
10-14	32	35-39	3
15-19	27	40-44	1
20-24	11		

OR

In a factory manufacturing pens, machines X, Y, and Z manufacture 30, 30, and 40 per cent of the total production of pens, respectively. Of their output 4, 5, and 10 per cent of the pens are defective. If one pen is selected at random, and it is found to be defective. Examine the probability that it is manufactured by machine Z? K4 (12)