(Batch 2023-24)

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LOGISTICS AND SUPPLY CHAIN MANAGEMENT/ AVIATION MANAGEMENT
EXAMINATION : JUNE - 2024
SEMESTER - II
Sub.: Business Statistics (BBA23-AVLS 216)

Date : 10/06/2024 **Total Marks : 60** **Time: 10.00 am to 12.30 pm**

Instructions: 1) All questions are compulsory.
2) Figures to the right indicate full marks.

Q. 1. Choose the most appropriate option. **(05)**

1. Mode of data : 20 , 25, 20 , 20, 29 , 32
   a) 32 b) 20
   c) 29 d) 25
2. Mean of data : 20 , 24,28,32,36,40,44
   a) 32 b) 40
   c) 36 d) 44
3. Range of Value 20.22,24,26,28,30,32
   a) 14 b) 21
   c) 16 d) 12
4. Mode of data : 20 , 25, 27 , 28,30,32,34,36
   a) 30 b) 23
   c)29 d) 31
5. What will be standard deviation if variance = 576
   a) 28 b) 32
   c) 25 d) 24

Q. 2. State True / False **(05)**

1. In normal distribution , mean=mode=median
   a) True b) False
2. In binomial distribution, p + q =1
   a) True b) False
3. Newspaper is a source of primary data for reporters
   a) True b) False
4. Secondary data is most reliable source of data
   a) True b) False
5. Z test is nonparametric method
   a) True b) False

Q. 3. Write Short notes on (Any Three) **(15)**

1. Write a note on Binomial distribution
2. Write a note on Moving Average
3. Write a note on probability
4. Write a note on Exponential distribution
5. Write a note on Survey

Q. 4. Answer in detail (Any Two) **(20)**

1. Explain Correlation in Statistics
2. Explain different types of data in Statistics
3. Explain Regression Analysis
4. Explain Normal distribution

Q. 5. Case study **(15)**

1) Find Correlation between Supply of Products and Demand of Products.
Data is given below:

Supply (in thousands)	20	25	30	45	30
Demand (in thousands)	40	45	50	55	60

2) Find Spearman Rank Correlation co-efficient for the following data:
Following data is rank obtained by students in English and Maths subject:

Rank (English)	9	3	10	4	6	5	8	1	2	7
Rank (maths)	4	2	10	7	5	9	8	1	3	6

3) Fit a linear regression model for following data:

Sr.No.	Aircraft landing Frequency (X)	Main Tire consumption (Y)
1	2	14
2	4	16
3	7	18
4	9	20
5	10	22