

Business Statistics-I

Time Allowed : 3 Hours

Maximum Marks :

Regular : 80

Re-appear : 90

Note : **Question No. 1 is compulsory.** Attempt five questions in all, All questions carry equal marks.

Compulsory Question

1. Explain/answer the following upto **one** page length :
 - (a) Limitations of Statistics
 - (b) Types of Statistics method.
 - (c) Median
 - (d) Moving average
 - (e) Difference between Skewness and Dispersion.
 - (f) Sampling errors.
2. Explain with examples various Frequency distribution graphs.
3. Calculate Mean, Median and Mode from the following Data :

Value :	1-10	11-20	21-30	31-40	41-50
Frequency :	4	12	20	9	5

4. Calculate the Mean deviation and its coefficient from Mean and Median from the following Data :

Marks :	0-10	10-20	20-30	30-40	40-50
No. of : Students	6	26	51	11	4

5. (a) Define Moments. How are they useful ?
(b) Describe measures of Skewness and Kurtosis.
6. Explain the following by giving their merits and demerits :
(a) Simple Random sampling method.
(b) Cluster sampling method
(c) Sales force opinion method of Forecasting
(d) Statistical methods of Forecasting.
7. Calculate Laspeyre's, Paasche's and Fisher's ideal index for the following data :

Commodity	1970		1980	
	Price Rs.	Expenditure	Price Rs.	Expenditure
A	8	100	10	90
B	10	60	11	66
C	5	100	5	100
D	3	30	2	24
E	2	8	4	20

Also State whether the above data satisfy Time reversal test.

8. For a group of 100 observations, the Mean and Standard deviation were found to be 60 and 5

respectively. Later on it was discovered that a correct item 50 was wrongly copied as 30. Find the correct Mean and Standard deviation.