ED-978

BBA 2nd Semester
Examination, May-June 2021

BUSINESS STATISTICS

(108)

Time : Three Hours] [*Maximum Marks* : 90
[*Minimum Pass Marks* : 32

Note : Answer **all** questions. All questions carry equal marks.

Unit-I

1. Explain the scope, utility and limitations of statistics.

OR

Define and distinguish between primary and secondary data. What precautions should be taken in using secondary data ?

Unit-II

2. Calculate median and mode from the following series :

Marks	No. of Students
0-10	15
10-20	25
20-30	32
30-40	56
40-50	78
50-60	80
60-70	70

OR

Find all average rate of increase in the population of a city which in the first decade has increased 20%, in the next 30% and in the third 45%.

Unit-III

3. Calculate standard deviation and coefficient of variation from the following data :

Value more than	Frequency
70	7
60	18
50	40
40	40
30	63
20	65

OR

What do you understand by skewness ? How does it differ from dispersion ? Discuss the various methods of measuring skewness.

Unit-IV

4. What is correlation ? Write merits and limitations of Karl Pearson's coefficient of correlation.

OR

Calculate the coefficient of correlation between ages of wives in the following bivariate frequency distribution :

Age of Husband	Age of Wives					Total
	10-20	20-30	30-40	40-50	50-60	
15-25	6	3	—	—	—	9
25-35	3	16	10	—	—	29
35-45	—	10	15	7	—	32
45-55	—	—	7	10	4	21
55-65	—	—	—	4	5	9
Total	9	29	32	21	9	100

Unit-V

5. From the chain base Index numbers given below, prepare fixed base index numbers with 1988 as base :

Year	Chain base Index
1988	120
1989	125
1990	135
1991	120
1992	130

OR

Fit a straight line trend by the method of least squares in the following series. Show also the original data and trend line on the graph paper :

Year	Production (In crore of Quintal)
1954	7
1955	10
1956	12
1957	14
1958	17
1959	24

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