

BUSINESS STATISTICS : 2012

(Old and New Course - 108)

UNIT - 1

1. (a) Distinguish between "Statistics as data" and Statistics as tool". Illustrate your answer with examples.
- (b) What are the different parts of statistical table ?

OR

Draw a Pie chart to represent the following data relating to the Production cost of manufacture :

Cost of Materials	Rs. 38,400
Cost of Labour	Rs. 30,720
Direct Expenses	Rs. 11,520
Factory Overhead	Rs. 15,360

UNIT - 2

2. (a) Prove that for any two positive real quantities :
 $A. M. \geq G. M.$
- (b) Enumerate the characteristics of a good statistical average.

OR

Following is the distribution of marks in Accounting obtained by 50 students :

Marks more than	0	10	20	30	40	50
No. of Students	50	46	40	20	10	3

Calculate the median marks. If 60% of the students pass this test, find the minimum marks obtained by a pass candidate.

UNIT - 3

3. Find out the Standard Deviation from the following data by using step deviation method :
Variable 5 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 35
Frequency 2 9 29 54 11 6

OR

- (a) For a group of 10 items, $\Sigma x = 452$, $\Sigma x^2 = 24,270$ and mode = 43.7. Find the Pearson's coefficient of skewness.
- (b) What do you understand by 'Dispersion' ? Discuss its importance in Statistics and state also how to measure it.

UNIT - 4

4. Calculate Pearson's coefficient of correlation between advertisement and sales as per the data give below :

Advertisement Cost	39	65	62	90	82	75	25	98	36	78
Sales (in lakhs)	47	53	58	86	62	68	60	91	51	84

OR

- (a) Find the coefficient of correlation from the following data:

X	1	2	3	4	5
Y	3	2	5	4	6

- (b) Define positive and negative correlation. Explain them with examples.

UNIT - 5

5. Compute Index Number from following Data by using Fisher's Ideal method :

Commodity	Base Year		Current Year	
	Quantity	Price	Quantity	Price
A	12	10	15	12
B	15	7	20	5
C	24	5	20	9
D	5	16	5	14

OR

What are the components of Time Series ? With which component of a time series would you mainly associate each of the following :

- (i) a fire in a factory delaying production by four weeks
- (ii) an after-Puja sales in a departmental store.
- (iii) the increased food production due to constant increase in population
- (iv) a recession
- (v) a general increase in the sales of TV sets.