

[4]

X-Series	Y-Series
65	67
66	68
67	64
67	68
68	72
69	70
71	69
73	70

14. Box 1 contains three defective and seven non-defective items and Box 2 contains one defective and nine non-defective items. We select a box at random and then draw one item at random from the box :

- (a) What is the probability of drawing a defective item ?
- (b) What is the probability that box 1 was chosen, given a defective item is drawn ?

15. Define the following terms :

- (i) Binomial distribution
- (ii) Addition and Multiplication theorems of probability.

Roll No.

BBA-206(N)

B. B. A. (Second Semester)
EXAMINATION, May, 2013

(New Course)

Paper Sixth

BUSINESS STATISTICS

Time : Three Hours]

[Maximum Marks : 70

Note : Attempt any ten questions from Section A and any two questions from Section B.

Section - A

50

1. Define 'Classification'. Explain the purpose and method of classification of data giving suitable examples.
2. Define scope of statistics and point out its limitations.
3. Mean of distribution is 28. Find out the missing frequency of class interval 30-40 :

Profit/Shop (₹)	No. of Shops
0-10	12
10-20	18
20-30	27
30-40	(a)
40-50	17
50-60	6

BBA - 206(N)

2300

H-28

P. T. O.

4. Calculate the mean and standard deviation of the following series :

Marks (more than)	No. of Students
0	100
10	90
20	75
30	50
40	25
50	15
60	5
70	0

5. Calculate the quartile deviation and its coefficient from the following data :

Size (X)	Frequency (f)
2	2
4	9
6	11
8	14
10	20
12	24
14	20
16	16
18	5
20	2

6. What is meant by Skewness ? How does it differ from Dispersion ?
7. Explain the coefficient of skewness of Karl Pearson.

8. Find Karl Pearson's correlation coefficient from the following data :

X	Y
78	125
89	137
96	156
69	112
59	107
79	136
68	123
61	108

9. What are the different types of correlation ?

10. Distinguish between 'correlation' and 'regression' as the concepts used in statistical analysis and discuss their utility.

11. Find regression equations, when we know :

$$X = 68.2, \bar{Y} = 0.9, \frac{\sigma_y}{\sigma_x} = 0.44 \text{ and } r = 0.76.$$

12. Write short notes on the following :

- (i) Role of Sampling theory
(ii) Sampling of variables

Section - B

20

13. Calculate coefficient of correlation and regression equation from the data ahead and taking deviation from 67 in X-series and 70 in Y-series :

P. T. O.