(20113)

Roll No. ....

B. B. A. I Sem.

O3041

B. B. A. Examination, Dec. 2012

Business Statistics

(BBA-104)

(Old Course-II)

Time : Three Hours]   *[Maximum Marks : 75*

Note :   Answer any *five* questions. All questions carry equal marks.

1.   Define statistics. Explain its functions clearly.   15

2.   What do you understand by statistical errors ? What are their various kinds ?   15

3.   (a)   What are the essential requisites a good average ?   5

    (b)   Calculate geometric mean from the following data :   10

Size of item	Frequency
10	2
11	4
12	5
13	3
14	3
15	2
16	1

4.   Calculate the standard deviation and its coefficient of the following series :   15

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

5.   Calculate Karl Pearson's coefficient of skewness and coefficient of skewness based on quartiles for the following frequency distribution :   15

Measurement	3.5	4.5	5.5	6.5	7.5	8.5	9.5
Frequency	3	7	22	60	85	32	8

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6. Below given are the figures of production (in thousand tons) of coal mine :

Year	Production (in thousand tons)
1979	70
1981	85
1982	94
1983	83
1984	90
1985	100
1988	98

(i) Fit a straight line by the method of Least-squares and calculate the trend values.

(ii) What is the monthly increase in the production of coal ?   15

7. Calculate the Karl Pearson's coefficient of correlation :

A	44	46	46	48	52	54	54	56	60	60
B	36	40	42	40	?	44	46	48	50	52

Take deviations from actual mean 52 and 44 respectively.   15

8. Construct Fisher's ideal index number from the following data and show that it satisfies the time reversal and factor reversal tests :   15

Commodity	Base Year		Current Year	
	Price	Quantity	Price	Quantity
A	8	50	12	40
B	4	30	8	20
C	10	25	12	40
D	5	50	4	100

9. Explain the concept of regression. How does it differ from correlation ?   15

10. Write short notes on any three of the following :   5×3

(i) Primary and secondary data

(ii) Statistical regularity

(iii) Harmonic mean

(iv) Cost of living index numbers

(v) Rank correlation.