



**Fourth Semester 5 Year B.B.A.,LL.B. Examination, January 2012**  
**BUSINESS STATISTICS**

Duration : 3 Hours

Max. Marks : 100

**Instructions:** 1. Answer **all** the **5** questions.

2. **One** essay type and **one** short note question or problem from each Unit have to be attempted.

**UNIT – I**

Q. No. I. (a) What are the methods used for graphical representation of data and

explain the rules of diagrammatic representation ?

Marks : 15

OR

Describe the different methods of collecting data stating briefly their merits and demerits.

(b) Write a short note on

Marks : 5

a) Statistical table

b) Classification

OR

Write a short note on Ogive curves.

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## UNIT – II

Q. No. 2. (a) Calculate A.M. mode and median for the following data.

Marks : 15

Marks	No. of students
More than 30	100
More than 35	92
More than 40	80
More than 45	62
More than 50	40
More than 55	24
More than 60	14
More than 65	06
More than 70	00

OR

What is an average ? Mention different types of averages and state why the arithmetic mean is most commonly used among them.

(b) State the merits and demerits of mode :

OR

Find the G.M. and H.M.

Marks : 5

<b>x</b> :	124	129	134	139	144
<b>f</b> :	7	17	16	7	3

## UNIT – III

Q. No. 3. (a) The following table gives the scores made by two batsman A and B in a series of 10 innings.

Marks : 15

<b>Batsman A</b> :	32	28	47	63	71	39	10	60	96	14
<b>Batsman B</b> :	19	31	48	53	67	90	10	62	40	80

Find which of the batsman more consistent.

OR



Explain the following :

- i) Quartile deviation
- ii) Standard deviation.

(b) What are the merits and demerits of range ?

OR

Find mean and standard deviation for the following data :

Marks : 5

5, 15, 30, 10, 25, 40, 35, 25, 15, 20, 25.

#### UNIT – IV

Q. No. 4. (a) Obtain the lines of regression for the following data.

Marks : 15

$x$  : 1 2 3 4 5 6 7

$y$  : 9 8 10 12 11 13 14

Obtain an estimate of  $y$  which should correspond on the average to  $x = 6.2$ .

OR

What is correlation ? Give the properties of Karl Pearson's coefficient of correlation.

(b) If  $\sum (x - \bar{x})^2 = 88$   $\sum (y - \bar{y})^2 = 120$  and  $\sum (x - \bar{x}) (y - \bar{y}) = 93$  find  $r$ .

Marks : 5

OR

Write a short note on Regression.



## UNIT – V

Q. No. 5. (a) Compute Fisher's index number. Show that it satisfies both Time Reversal Test (TRT) and Factor Reversal Test (FRT).

Marks : 15

Item	2002		2004	
	Price	Quantity	Price	Quantity
P	5	6	6	7
Q	7	12	6	13
R	6	15	8	15
S	8	10	8	12

OR

Explain the types of index numbers.

(b) What is cost of living index number ?

Marks : 5

OR

Write a short note on :

- 1) Time reversal test
- 2) Factor reversal test.