



0443

**Fourth Semester Five Year B.B.A., LL.B. (Hons.) Examination,  
June/July 2014  
BUSINESS STATISTICS (2010-11 Batch)**

Duration : 2½ Hours

Max. Marks : 70

- Instructions:** 1. Answer **all 5** questions.  
2. Non programmable calculators are **allowed**.

**UNIT – I**

- Q. No. 1. (a) i) Describe briefly the construction of histogram and frequency polygon of a frequency distribution and state their uses. Marks : 9  
ii) Prepare a Histogram and a frequency polygon from the following data :

<b>Class</b>	: 0 – 6	6 – 12	12 – 18	18 – 24	24 – 30
<b>f</b>	: 4	8	15	20	12

OR

Discuss the use of statistics in the fields of economics, trade and commerce. What are the limitations of statistics ?

- (b) Write a short note on : Marks : 5  
Tabulation

OR

Secondary data.

**UNIT – II**

- Q. No. 2. (a) Calculate the Arithmetic Mean, Median and Mode of the frequency distribution given below : Marks : 9

<b>Class</b>	<b>f</b>	<b>Class</b>	<b>f</b>
130 – 134	5	150 – 154	17
135 – 139	15	155 – 159	10
140 – 144	28	160 – 164	01
145 – 149	24		

OR

What are the various measures of central tendency ? Why are they called measures of central tendency ?

P.T.O.



- (b) Write a short note on :  
Cumulative frequency  
OR  
Quartiles.

Marks : 5

### UNIT – III

- Q. No. 3. (a) Lives of two models of refrigeraters in a recent survey are Marks : 9

Life (No. of Years)	No. of Refrigeraters	
	Model – A	Model – B
0 – 2	05	02
2 – 4	16	07
4 – 6	13	12
6 – 8	07	19
8 – 10	05	09
10 – 12	04	01

OR

Explain the different measures of variation and its uses.

- (b) Write a short note on :  
Skewness

Marks : 5

OR

Limitations of variation (Dispersion).

### UNIT – IV

- Q. No. 4. (a) Ranking of 10 trainers at the beginning (x) and at the end (y) of a certain course are given below :

Marks : 9

Trainers	A	B	C	D	E	F	G	H	I	J
x	1	6	3	9	5	2	7	10	8	4
y	6	8	3	7	2	1	5	9	4	10

Calculate Spearman's Rank correlation of coefficient.

OR



Obtain the equations of the two lines of regression for the data given below :

<b>x</b>	:	1	2	3	4	5	6	7	8	9
<b>y</b>	:	9	8	10	12	11	13	14	16	15

(b) Write short note on :

Marks : 5

Linear regression

OR

Rank correlation.

### UNIT – V

Q. No. 5. (a) From the data given below compute Laspeyer's and Paasche's Index numbers.

Marks : 9

<b>Commodities</b>	<b>Price</b>		<b>Quantity</b>	
	<b>1995</b>	<b>2001</b>	<b>1995</b>	<b>2001</b>
A	4	10	50	40
B	3	9	10	2
C	2	4	5	2

OR

Explain the different types of Index numbers.

(b) Write a short note on :

Marks : 5

Fisher's ideal numbers

OR

Cost of living index numbers.

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