



0443

**Fourth Semester Five Year B.B.A. LL.B. (Hons.) Examination, June 2013
BUSINESS STATISTICS**

Duration :2½ Hours

Max. Marks : 70

- Instructions:** 1) Answer **all** the **5** questions.
2) **Non programmable** calculators are **allowed**.
3) **Stepwise** working **expected**.

UNIT – I

- Q. No. 1. (a) Distinguish between classification and tabulation. Mention the requisites of a good statistical table. Marks : 9

OR

Define the term “Statistics” and discuss its functions and limitations.

- (b) What are the sources of secondary data ? Marks : 5

OR

Write the advantages of graphic presentation of data.

UNIT – II

- Q. No. 2. (a) What is an average ? Give atleast 3 merits and demerits of any two averages. Marks : 9

OR

Showing the calculations find the class-limits of all classes of the continuous data given below and find the values of mean, Median and mode.

Mid points of classes	Frequency
7.5	28
17.5	42
27.5	60
37.5	37
47.5	33

P.T.O.



(b) Calculate harmonic mean

Marks : 5

x : 12 16 20 24 28 32 36 40 44 48

f : 10 13 15 20 25 32 28 22 21 14

OR

The average marks of A and B in an examination is 45, that of B and C is 50 that of C and A is 34. Find individual marks.

UNIT – III

Q. No. 3. (a) Calculate mean and its coefficient from the following information mean and median :

Marks : 9

Marks	No. of Students
10 – 20	1
10 – 30	4
10 – 40	9
10 – 50	29
10 – 60	39
10 – 70	44

OR

The time taken (in seconds) by two workers A and B to assemble a particular machine part, observed on 10 occasions are given below :

A : 78 73 75 74 72 74 71 79 81 79

B : 85 80 90 83 86 87 80 86 82 79

Using the means, standard deviations and the coefficient of variations to compare the performance of A and B and give your comments.

(b) Define range. Give its merits and demerits.

Marks : 5

OR

Find mean and standard deviation

2, 4, -3, 0, -7, -1, 3, 5, 0, -5



UNIT – IV

Q. No. 4. (a) Define “regression” why there are two regression lines ? Under which condition there can be only one regression line ?

Marks : 9

OR

Calculate Karl Pearson’s coefficient of correlation from the following bivariate data :

X : 36 41 46 59 46 65 31 68 41 70

Y : 48 60 53 36 50 42 66 44 58 65

(b) Calculate rank coefficient of correlation with the help of following data :

Marks : 5

X : 48 33 40 9 10 16 65 16

Y : 13 24 13 15 6 20 6 4

OR

Write a short note on Linear Regression.

UNIT – V

Q. No. 5. (a) From the following, prove that the Fisher’s Ideal Index satisfies both the TRT and FRT

Marks : 9

Commodities	Base Year		Current Year	
	Price	Quantity	Price	Quantity
A	6	50	10	60
B	2	100	2	120
C	4	60	6	60

OR

What is an Index Number ? Discuss the conditions which an ideal index number should satisfy.



- (b) Construct the cost of living index number from the following data by family budget method.

Marks : 5

Group	Percentage of expenditure	Price	
		1980	1985
Food	40	150	200
Clothing	20	50	80
Rent	15	100	200
Others	25	40	90

OR

What are the uses of cost of living index number ?
