



0433

Fourth Semester Five Year B.B.A. LL.B. Examination, June 2013
BUSINESS STATISTICS

Duration : 3 Hours

Max. Marks : 100

- Instructions :**
1. Answer **all 5** questions.
 2. One essay type and **one** short note question or problem from **each Unit** have to be attempted.
 3. Figures to the **right** indicate marks.
 4. Non-programmable **calculator** are **allowed**.
 5. Step-wise working is **expected**.

UNIT – 1

Q. No. 1. (a) Define statistics. Explain its scope and importance. Marks : 15

OR

What is primary data ? Mention and explain the methods of collecting primary data.

(b) Write short notes on classification. Marks : 5

OR

Represent the following data by percentage bar diagram :

Items of Expenditure	Expenditure (in Rs.)	
	Family A	Family B
Food	160	100
Clothing	80	30
Rent	60	40
Fuel	20	10
Others	<u>80</u>	<u>20</u>
Total	Rs. 400	200

P.T.O.



UNIT – 2

Q. No. 2. (a) Explain briefly the various measures of central tendency. Marks : 15

OR

Compute mean, median and mode for the following data :

Age	No. of Persons
20 – 25	100
25 – 30	140
30 – 35	200
35 – 40	360
40 – 45	300
45 – 50	240
50 – 55	140
55 – 60	120

(b) From the following data find the missing frequency. If the median is 50 :

Marks : 5

Class interval :	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Frequency :	2	8	6	–	15	10

OR

Write the merits and demerits of mean.

UNIT – 3

Q. No. 3. (a) From the following prices of shares X and Y. State which share price are more stable :

Marks : 15

(Coefficient of Variation)

X-Rs. : 55 54 53 53 56 68 52 50 51 49

Y-Rs. : 108 107 105 105 106 107 104 103 104 101

OR

Define dispersion. Mention its characteristics and write the merits and demerits of range and quartile deviation.



(b) Write short notes on standard deviation and its mathematical properties.

Marks : 5

OR

Calculate quartile deviation for the following data :

Income	No. of Persons
Less than 50	54
50 – 70	100
70 – 90	140
90 – 110	300
110 – 130	230
130 – 150	125
above 150	51

UNIT – 4

Q. No. 4. (a) Compute Karl, Pearson's coefficient variation from the following data :

Marks : 15

National income (X)	Per capita income (Y)
249	237
251	238
248	236
252	240
258	245
269	255
271	254
272	252
280	258
275	251

OR

Define regression. Explain linear and non-linear regression.



(b) Calculate coefficient of rank correlation for the data :

Marks : 5

X : 48 33 40 9 16 16 65 24 16 57

Y : 13 13 24 6 15 4 20 9 6 19

OR

Write a note on rank-correlation.

UNIT – 5

Q. No. 5. (a) 'Index numbers are economic barometers' critically evaluate the statement.

Marks : 15

OR

Calculate Fisher's index number and show that it satisfies TRT and FRT :

Items	Base Year 1990		Current Year 1992	
	Price	Quantity	Price	Quantity
A	5	20	10	15
B	6	25	8	24
C	8	15	10	14
D	10	13	20	6

(b) Explain the steps in constructing of index numbers.

Marks : 5

OR

Write short notes on cost of living index numbers.
