



21
II Semester B.Com. Examination, May/June 2014
(Repeaters) (2011-2012 Only)
COMMERCE
Business Statistics

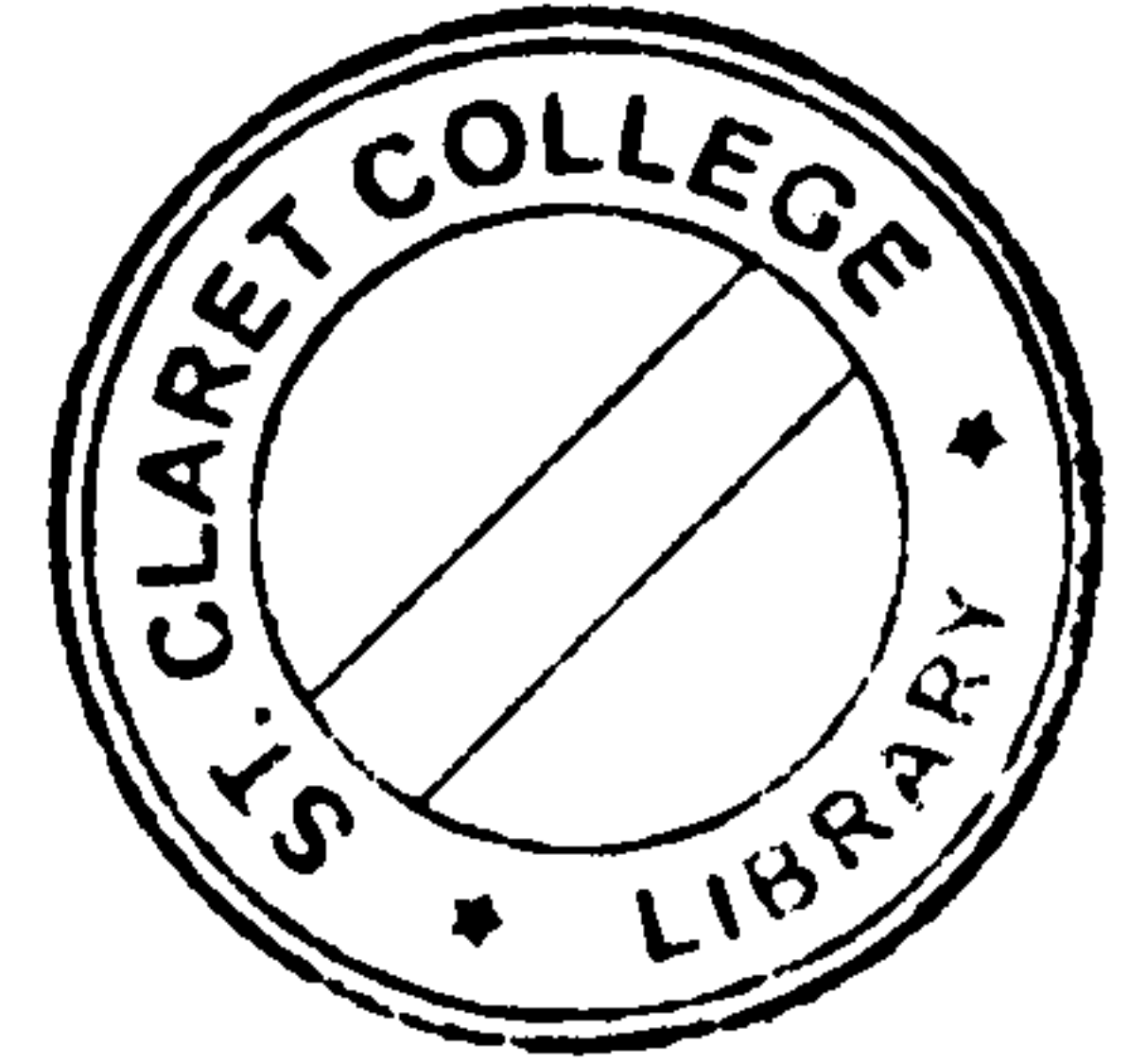
Time : 3 Hours

Max. Marks : 100

Instruction : Answer should be written fully in **English** or in **Kannada**.

SECTION – A

1. Answer **any eight** sub-questions from the following. **Each** question carries **2** marks. (2×8=16)
- a) Define statistics.
 - b) State the various measures of central tendency.
 - c) Find mean if Median = 27 and Mode = 31.
 - d) State limitations of Arithmetic Mean.
 - e) Define dispersion.
 - f) Write the merits and demerits of range.
 - g) Find 'r' If $b_{xy} = 0.9$ and $b_{yx} = 0.6$.
 - h) If average wages paid = 65 and number of worker = 500.find total wages paid.
 - i) What is current year ?
 - j) What are the types of correlation ?
 - k) Write two regression equations.
 - l) What do you mean by TRT ?





SECTION – B

Answer **any 3** questions. **Each** carries **8** marks.

(8×3=24)

2. From the following data compute Mean and Median.

Income in ₹	No. of workers
More than 0	100
More than 100	95
More than 200	82
More than 300	60
More than 400	45
More than 500	36
More than 600	20
More than 700	10

3. Calculate quartile deviation and its coefficient from the following data :

Class interval :	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Frequency :	3	5	15	10	3	4

4. Calculate rank correlation coefficient from the following data :

X :	58	60	60	61	62	63	64	65	66
Y :	100	58	85	92	90	90	88	90	94

5. Calculate S.D. from the following data.

Mid point :	10	20	30	40	50	60	70	80	90
Frequency :	6	12	10	8	14	10	15	15	10



6. Construct the consumer price index number using family budget method.

Items	:	A	B	C	D	E	F
Units	:	120	80	40	10	5	1
Price in 2005	:	30	20	70	40	30	5,000
Price in 2010	:	50	30	100	60	30	8,000

SECTION – C

Answer **any 4** questions. **Each** carries **15** marks. **(15×4=60)**

7. Calculate Mean, Median and Mode from the following data :

Marks above	:	10	20	30	40	50	60	70	80	90
No. of Students	:	100	96	87	75	50	38	26	18	4

8. From the data given below, state which of the two series is more variable and find C.V.

Variable	:	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Frequency	:						
X		10	8	12	20	5	5
Y		5	5	20	12	8	10

9. Find out if there is any relation between X & Y

X	:	45	48	52	56	60	64	68	72	76	80
Y	:	120	116	118	100	96	96	96	84	72	62

10. Obtain two regression equation from following data :

X	:	75	88	95	70	60	80	81	50
Y	:	120	134	150	115	110	140	142	100

And cal. most probable value of X when Y = 130 and value of Y when X = 85.



11. Construct Fisher's ideal index from the following and show how it satisfies TRT and FRT.

Commodity	Base year		Current year	
	Price	Qty.	Price	Qty.
A	20	10	24	12
B	8	20	15	24
C	4	12	14	15
D	12	6	20	8
E	15	15	30	15