



MS – 425

24

II Semester B.B.M. Examination, May/June 2014
(Semester (Repeaters) Scheme) (2011-12 Only)

BUSINESS STATISTICS

Paper 2.3 : Business Management

Time : 3 Hours

Max. Marks : 100

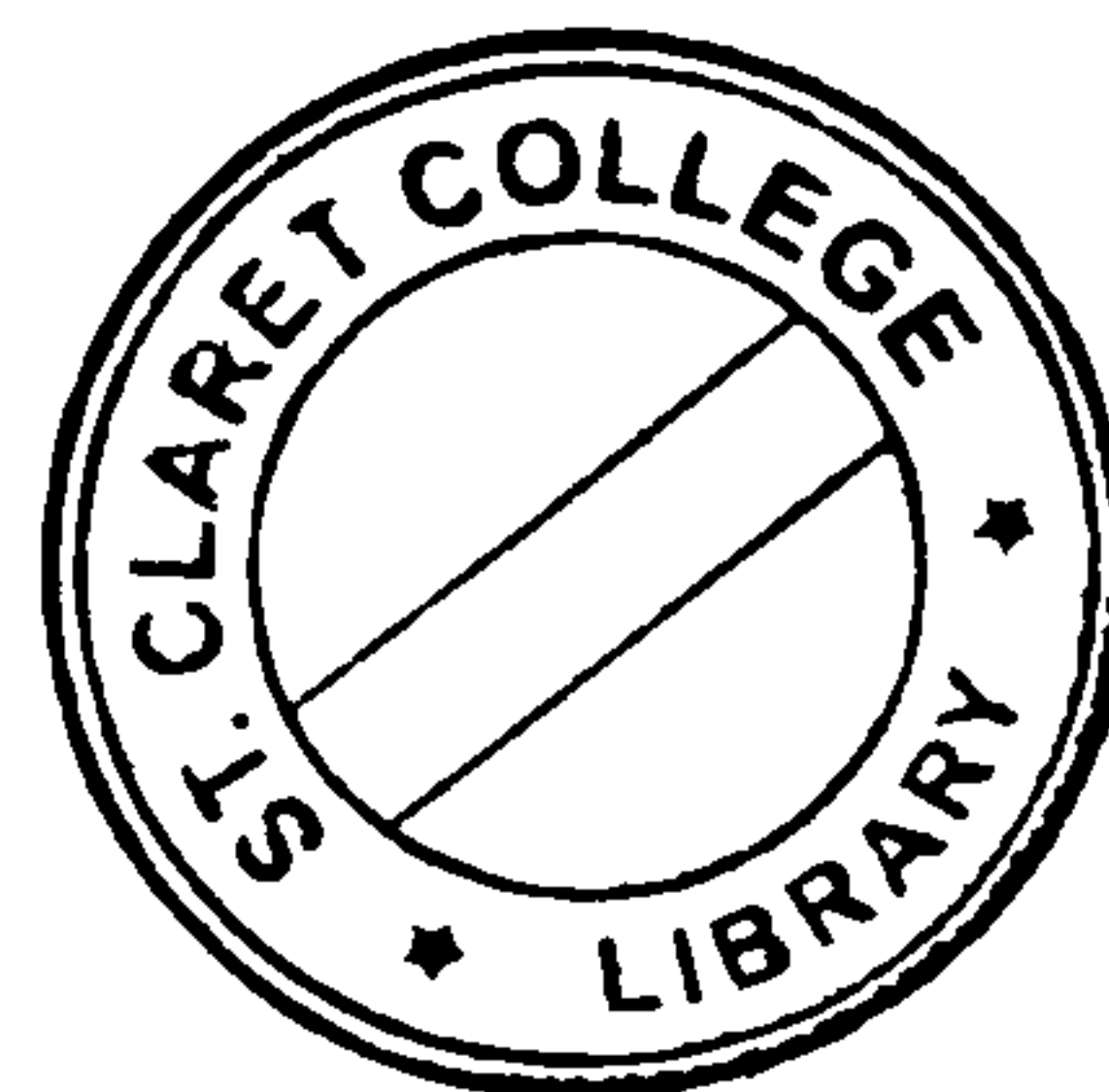
Instruction : All answers should be in **English** only.

SECTION – A

Answer **any eight** sub-question. Each question carries **two** marks.

(8×2=16)

1. a) What is Regression ?
- b) What are Index numbers ?
- c) What are quartiles ?
- d) If $Z = 50$, $M_e = 45$, $\bar{x} = ?$
- e) What is range ?
- f) What is dispersion ?
- g) What is a secular trend ?
- h) What is correlation ?
- i) What are ogives ?
- j) What is base year ?



SECTION – B

Answer **any three**. Each carries **eight** marks.

(3×8=24)

2. Briefly explain the components of time series.
3. Draw a bar diagram from the following data.

Age	19	21	23	25	27	29
No. of Married women	19	31	52	63	72	74

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4. From the following data calculate median.

Marks less than	5	10	15	20	25	30	35	40
No. of students	3	12	18	30	55	78	92	100

5. From the following data calculate standard deviation.

C.I	50 – 60	60 – 70	70 – 80	80 – 90	90 – 100
f	15	30	45	20	10

6. The mean wages paid to 1000 workers in a factory was found to be Rs. 180.40. Later on it was discovered that the wages of two employees were taken wrongly as 297 and 165 instead of 197 and 185. Find the correct mean wages.

SECTION – C

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

7. Calculate the trend values by the method of least squares and prove that $\Sigma(y - y_c) = 0$.

Year	2009	2010	2011	2012	2013
Sales (Rs. in 000's)	10	13	15	12	17

8. Bring out the differences between correlation and regression.

9. Find out the two regression equations

x	6	2	10	4	8
y	8	11	5	8	7

10. Calculate Fisher's Index from the following data and show that it satisfies both the reversal tests.

Piece Commodities	A	B	C	D	E
2012 (Piece)	10	8	20	18	35
2012 (Value)	200	108	160	144	280
2013 (Value)	300	220	250	140	300
2013 (quantity)	25	22	10	7	10

11. Compute quartile deviation and its co-efficient from the following data :

Size	5 – 10	10 – 15	15 – 20	20 – 25	25 – 30
Frequency	14	24	38	20	4
