



II Semester B.Com. Examination, April/May 2015 (Prior to 2012-13) (Repeaters) COMMERCE

Business Statistics (100 marks – 2011-12 only/90 marks – Prior to 2011-12)

Time: 3 Hours

Max. Marks: 100/90

Instructions: 1) Answer should be written fully in English or in Kannada.

2) Section **D** is **compulsory** for 2011-12 Batch only.

SECTION - A

Answer any ten sub questions. Each sub question carries 2 marks.

 $(10 \times 2 = 20)$

- 1. a) Define Statistics.
 - b) What is Median?
 - c) Define dispersion.
 - d) State any two uses of Range.
 - e) If Mean is 28.2, Mode is 25. Find Median.
 - f) Define Index Number.
 - g) Give the meaning of Standard Deviation.
 - h) What are the uses of Index Numbers?
 - i) What is meant by Correlation?
 - j) C.V is 30% and Standard Deviation is 16. Find arithmetic mean.
 - k) State any two merits of Mode.
 - I) If Q1 is 20, Q3 is 45. Find co-efficient of Quartile Deviation.



SECTION - B

Answer any five of the following. Each question carries 5 marks.

 $(5 \times 5 = 25)$

2. Compute the Mean from the following data.

Х	28	30	32	34	36	38	40	42	44
f	10	12	16	14	10	8	17	5	4

3. Find out the co-efficient of Quartile Deviation from the following data.

Age	18	20	22	24	26	28	30
No. of Persons	12	15	20	25	18	10	9

4. From the following compute Mean Deviation and its co-efficient from Median.

Weekly wages	4 – 8	8 –12	12 –16	16 – 20	20 – 24	24 – 28	28 – 32	32 – 36	36 – 40
No. of workers	6	10	18	30	15	12	10	6	2

5. Compute Rank Correlation co-efficient from the following:

Χ	70	65	71	62	58	69	76	64
Υ	91	76	65	83	90	64	55	48

6. Find mode by using grouping and analysing table from the data given below:

Marks	20	30	40	50	60	70	80	90
No. of Students	40	50	70	90	85	91	89	65



12. The following data relates to the Ages of Husbands and Wives.

Age of Husbands	25	27	28	30	35	38	36	42	46
Age of wives	20	25	24	26	32	36	30	35	44

Find the Karl Pearson's co-efficient of correlation.

13. Compute Fisher's ideal index number.

Commodities	Α	В	С	D	Ε
Price 2010	10	12	18	20	22
Price 2014	12	15	20	25	30
Quantity 2010	30	25	20	30	30
Quantity 2014	26	30	25	32	45

14. Find the missing frequencies if the median is 30.5 and N = 120.

Group	20–25	25–30	30–35	35–40	. 40–45	45–50	50-55	55–60
Frequency	8	15	28	?	22	?	4	2

SECTION - D

Answer the following question.

 $(1\times10=10)$

15. Find the value of Mean, Median and Mode from the following:

Mid value	115	125	135	145	155	165	175	185	195
f	6	25	48	72	116	69	38	22	3