Roll No.

57516

B.B.A. 2nd Semester
(N.S.) 2014-17
Examination–May, 2015
Business Statistics
Paper-BBAN-206

Time : 3 hours *Max. Marks : 80*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Section-A is **compulsory**. From Section-B, attempt **four** questions (**one** question from each unit). All questions carry equal marks.

Section-A

1. (a) Discuss the objectives of classification.

(b) Taking a hypothetical example, construct a histogram.

(c) Find the harmonic mean of 11 and 19.

(d) What are the merits, demerits and applications of range ?

(e) What is partial correlation ?

(f) Discuss the characteristics of rank correlation.

(g) If $r_{xy} = 0.5$ and $b_{xy} = 0.40$, find the value of b_{yx}.

(h) Explain and illustrate irregular movements.

Section-B

Unit-I

2. Discuss the characteristics and scope of statistics.

3. In 1995, out of total 1,950 workers in a factory, 1200 were members of trade union. Number of women workers were 300 out of which 175 were not members of the trade union. In 2000, number of union members

increased to 2100 of which 1490 were men while the number of non-union members was reduced to 308 of which 180 were men. Present the above information in tabular form with suitable captions.

Unit-II

4. Discuss the merits, demerits and applications of arithmetic mean, median and mode.

5. Find Karl Pearson's co-efficient of skewness for the following distribution :

X	0-50	50-100	100-150	150-200	200-250
F	20	26	44	60	101
X	250-300	300-350	350-400	400-450	
F	109	84	66	10	

Unit-III

6. Explain the meaning, significance and types of correlation. Does correlation always show cause and effect relationship ?

7. Obtain the two regression lines for the following series :

X	91	97	108	121	67	124	51	73	111	57
Y	71	75	69	97	70	91	39	61	80	47

Also estimate the value of:

(i) X if Y = 80

(ii) Y if X = 110

Unit-IV

8. Find the trend values, by taking 3-years moving average period for the following time series :

Year	1977	1978	1979	1980	1981	1982
Output (000' units)	40	33	52	61	76	68
Year	1983	1984	1985	1986	1987	1988
Output (000' units)	91	87	98	94	102	110

9. Explain the meaning and utility of index numbers. Which problems are faced in constructing them ?