

- (b) From the following class frequencies, find the frequencies of remaining classes and total number of observations  
 $(AB) = 100, (A\bar{B}) = 50, (\bar{\alpha}B) = 80, (\alpha\bar{\beta}) = 40$

**Unit-IV**

8. Explain the uses, construction and limitations of index numbers.
9. Find the trend values, by taking 4-years moving average period, for the following time series :

<b>Year</b>	1972	1973	1974	1975	1976	1977	1978
<b>Profit (000'₹)</b>	41	61	55	48	53	67	62
<b>Year</b>	1979	1980	1981	1982	1983	1984	
<b>Profit (000'₹)</b>	60	67	73	76	78	84	

Roll No. ....

**57516**

**B.B.A. 2nd Semester  
(N.S.) 2014-2017**

**Examination-May, 2016**

**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 :** Attempt **compulsory** question No. 1 from section-A and **four** questions from section-B (**one** question from each unit). All questions carry equal marks.

**Section-A**

- (a) Discuss the scope of statistics.
- (b) Highlight the objectives of tabulation.

- (c) What are the merits and demerits of mode ?
- (d) Find the harmonic mean of 10 and 40.
- (e) Differentiate between positive and negative correlation.
- (f) What are the advantages of rank correlation ?
- (g) Price of commodity increased from ₹25 per unit in 2010 to ₹27 per unit in 2011. What is the price index in 2011?
- (h) Explain and illustrate seasonal variations.

### Section-B

#### Unit-I

2. Discuss the meaning, objectives, types and limitations of classification.
3. Using suitable examples, explain and illustrate the construction of :
- (a) Multiple bar diagram,
- (b) Sub-divided bar diagram and range graph.

57516-3800-(P-4)(Q-9)(16) (2)

#### Unit-II

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

Output (units)	20-25	25-30	30-35	35-40	40-45	45-50	50-55
Number of Operators	5	15	28	42	15	12	3

5. Differentiate between measures of central tendency and measures of variations. Discuss the merits, demerits and application of median range and quartile deviation.

#### Unit-III

6. Differentiate between correlation and regression. Highlight their significance and properties of correlation and regression co-efficient.
7. (a) Find the value of rank correlation co-efficient for the following series :

X	52	53	42	60	45	41	37	38	25	27
Y	65	68	43	38	77	48	35	30	25	50

57516-3800-(P-4)(Q-9)(16) (3)

[ Turn Over