

Roll No. ....

**57516**

**BBA 2nd Semester (N. S.) 2014-17**

**Examination – May, 2019**

**BUSINESS STATISTICS**

**Paper : BBAN-206**

**Time : Three Hours ] [ Maximum 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 examination.*

**Note :** Attempt *compulsory* Question No. 1 from **Section – A** and **four** questions from **Section – B** (**One** question from each Unit). All question carry equal marks.

**SECTION – A**

**1.** Briefly explain the following :

- (a) Importance of statistics
- (b) Objectives of classification
- (c) Harmonic mean
- (d) Measures of variation

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- (e) Rank correlation
- (f) Equation of Y on X
- (g) Consumer price index
- (h) Cyclical variations

**SECTION - B**

**UNIT - I**

2. Discuss the evolution, scope and applications of statistics.
3. Explain the meaning, types and advantages of tabulation. Also show the parts of a table.

**UNIT - II**

4. Find the values of arithmetic mean, median,  $Q_3$  and mode for the following distribution :

$x$	5-15	15-25	25-35	35-45	45-55	55-65	65-75
$f$	12	18	28	42	20	12	8

5. Describe different measures of variation. Why is standard deviation the most widely used measure ?

**UNIT - III**

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

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7. Obtain the regression equations for the following series :

X	71	89	75	80	56	76	92	88	49
Y	123	130	116	132	96	120	136	97	85

Estimate the value of (i) X if Y = 111 and (ii) Y if X = 79

**UNIT - IV**

8. From the following data, compute Laspeyre's, Paasche's, Fisher's and Marshal-Edgeworth price indices from the following data :

Commodity	$P_0$	$q_0$	$P_1$	$q_1$
A	6	50	10	56
B	2	100	2	120
C	4	60	6	60
D	10	30	12	24
E	8	40	12	36

Also find value index number.

9. Discuss the meaning and importance of time series analysis. Also describe the components of a time series.

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