

**BBA-05**

December - Examination 2016

**BBA Pt. I Examination****Fundamentals of Business Statistics****Paper - BBA-05****Time : 3 Hours ]****[ Max. Marks :- 80**

**Note:** The question paper is divided into three sections A, B and C. Write answers as per given instructions.

**Section - A****8 × 2 = 16**

(Very Short Answer Type Questions)

**Note:** Answer **all** questions. As per the nature of the questions you delimit your answer in one sentence or upto 30 words. Each question carries 2 marks.

- 1) (i) What do you mean by Secondary Data?
- (ii) What do you understand by the term 'Inclusive series'?
- (iii) Explain any two differences between 'Skewness and Dispersion'.
- (iv) What is 'Rank correlation'?

- (v) compute the Index Numbers for each year from the following prices of a commodity with 2011 as base:

Years	Price in Rs.
2011	20
2012	25
2013	50
2014	80
2015	100

- (vi) What do you understand by 'cumulative frequency curve (Ogive curve)'?
- (vii) What are the components of Time Series?
- (viii) Find the values of:
- (i)  ${}^6P_2$       (ii)  ${}^7P_4$

### Section - B

$4 \times 8 = 32$

(Short Answer Type Questions)

**Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

- 2) Distinguish between:
- (i) Continuous series and Discrete series
- (ii) Correlation and Regression
- 3) What is meant by 'Dispersion'? Explain any one method of measuring dispersion.

- 4) Compute the trend for the following data using method of 'Least squares':

<b>Years</b>	<b>Price in Rs.</b>
2011	83
2012	92
2013	71
2014	90
2015	162

- 5) Write short notes on following:
- (i) Median
  - (ii) Karl Pearson's coefficient of correlation
- 6) What is a 'Questionnaire'? What is the difference between questionnaire and schedule? What are the chief requirements of a good questionnaire?
- 7) (i) If a card is drawn from a pack of 52 cards. What is the probability that drawn card is either a Jack or a Queen?
- (ii) 40 balls are numbered from 1 to 40 and are put into a bag. What is the probability that the ball drawn is a multiple of 5 or 6 or 8.
- 8) Discuss in brief the Binomial method of Interpolation. Also discuss the assumption under which this method is most suitable.
- 9) Discuss the meaning, utility and limitations of the 'Diagrammatic Representation of Data'.

**Section - C** $2 \times 16 = 32$ 

(Long Answer Type Questions)

**Note:** Answer **any two** questions. Each question should not exceed 500 words. Each question carries 16 marks.

10) From the following data calculate mean, median and mode:

Marks	No. of students
0-10	8
10-20	12
20-30	8
30-40	7
40-50	5

11) What is 'skewness'? How will you measure it? Explain.

12) Write explanatory notes on the following: (any two)

- (i) Langrange's method of interpolation
- (ii) Yule's coefficient of Association of Attributes
- (iii) Regression coefficients

13) From the following data, calculate Fisher's Index Number and also show as to how it satisfies the time reversal test and factor reversal test:

Commodities	Base year		Current year	
	Price	Quantity	Price	Quantity
A	6	50	10	55
B	2	100	2	120
C	4	60	6	60
D	10	30	12	24
E	8	40	12	36