BBA-05

December - Examination 2017

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

 $8 \times 2 = 16$

(Very Short Answer Questions)

- **Note:** Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.
- 1) (i) What is a Questionnarie?
 - (ii) How are frequencies made cumulative? Explain with example.

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(iii) Obtain the value of median from the following data:

Marks (out of 100)			
80			
78			
90			
45			
36			
65			
70			
20			
55			

- (iv) Explain the difference between 'Dispersion and Skewness'.
- (v) What do you mean by 'Graphic Representation of Data'?
- (vi) Explain the objects of the calculation of moments. (Any two)
- (vii) From the following data calculate the chain Indices.

Years	2002	2003	2004	2005	2006	2007
Price (in Rs.)	75	50	60	60	75	70

(viii) What is 'Rank correlation'.

Section - B

(Short Answer Questions)

- **Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.
- 2) "Statistics may be defined as the collection, presentation, analysis and interpretation of Number Data". Explain.
- 3) Distinguish between :-
 - (i) Continuous and Discrete series.
 - (ii) Inclusive and Exclusive series.
 - (iii) More than and Less than frequency tables.
 - (iv) Simple table and Complex table.
- 4) What is meant by 'Dispersion'. Explain mean deviation method with an example.
- 5) Two Judges rank seven candidates in a beauty contest as follows:-

Contestant	Α	В	С	D	Е	F	G
Judge - I	2	1	4	5	3	7	6
Judge - II	3	4	2	5	1	6	7

Find out Rank coefficient of correlation.

- 6) Write short notes on following:-
 - (i) Regression coefficients.
 - (ii) Langrange's method of Interpolation.

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7) Construct the Fisher's Ideal Index from the following data :-

	Base	years	Current year		
Articles	Price	Quantity	Price	Quantity	
А	5	25	6	30	
В	10	5	15	4	
С	3	40	2	50	
D	6	30	8	35	

- 8) Explain the importance of Graphic Presentation of statistics. Discuss how would you construct an ogive curve.
- 9) What is time series Analysis? Explain the various methods of estimating the secular trend of time series.

Section - C

 $2 \times 16 = 32$

(Long Answer Questions)

- **Note:** Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.
- 10) Calculate mean, median and mode from the following data:

Classes	Frequency
0 – 10	15
10 – 20	20
20 – 30	25
30 - 40	24
40 - 50	12
50 - 60	31
60 - 70	71
70 – 80	52

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(Contd.)

- 11) Write explanatory notes on following :-
 - (i) Standard Deviation.
 - (ii) Karl Pearson's coefficient of correlation.
- 12) (i) What is the probability of drawing a card of spade or a king from a pack of playing cards?
 - (ii) What is the probability of getting a total of 2 or 8 or 12 on throwing a part of Dice?
 - (iii) In a randomly selected leap year, what is the probability that there are 53 Sundays?
 - (iv) A bag contains 8 white, 6 black, 3 green and 3 yellow balls. What is the probability of drawing a black or a green or a yellow ball in a test?
- 13) (i) Explain Yule's coefficient of Association of Attributes in brief.
 - (ii) Describe briefly the various methods of calculating moments.