BBA/D-16
Business Statistics-I
PAPER-BBA-203

Time Allowed: 3 Hours Maximum Marks: 80

Note: Attempt five questions in all. Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. Explain/answer the following parts in very short :
   (a) Applications of Statistics in Business.
   (b) Limitations of Statistics.
   (c) What is the need of Business forecasting?
   (d) Distinguish between Mean and Median.
   (e) Write down formulae of computing the following?
      (i) Mean Deviation.
      (ii) Geometric mean.
      (iii) Paasche's Index number.
      (iv) Kelly's Index number.

   (f) Sampling Errors.
   (g) Meaning of Kurtosis.
   (h) Write formula of Skewness.

2. (a) Describe types of statistical methods.

   (b) Describe with example the use of graphs in business decision making.

3. (a) Draw a bar chart to represent the following :

Year	2009	2010	2011	2012	2013	2014
No. of Women MP	32	37	39	40	42	40

   (b) Describe any four methods of collecting primary data by giving merits and demerits of each.

4. (a) Explain the relationship between mean, median and mode.

   (b) From the following data compute the value of median and mode

Marks	10-20	20-30	30-40	40-50	50-60	60-70
No. of Students	4	6	10	15	8	7

5. For a certain class of workers, numbering 700, hourly wages vary between Rs. 30 and 75. 12% of the workers are earning less then Rs. 25 while 13% are getting equal to or more than Rs. 60, out of which 6% are earning between 70 and 75. The first quartile and median wages are, respectively, Rs. 40 and Rs. 47. The 40^{th} and 65^{th} percentile are Rs. 43 and 53 respectively. You are required to put the above information in the form of a frequency distribution and estimate the mean wages of the workers.

6. From the prices of x and y shares given below calculate standard deviation in prices of both and state which share is more stable in value :

Price of share x	55	54	52	53	56	58	52	50	51	49
Price of Share y	108	107	105	105	106	107	104	103	104	101

7. (a) Write advantages of sampling as compared with the census method.

   (b) Explain various methods of business forecasting by illustrations.

8. (a) Show that, in general, Laspeyre's price index is greater than Paasche's. When would this not be so?

   (b) Calculate index number of prices for 2005 on the basis of 2000 from the data given below :

Commodity	Weight	Price per unit 2000 (Rs.)	Price per unit 2005 (Rs.)
A	40	16	20
B	25	40	50
C	20	12	15
D	15	02	03