

Faculty of Business Management

BBA I-Year, CBCS-II Semester Regular Examinations –January, 2021

PAPER: BUSINESS STATISTICS

Time: 2 Hours

Max Marks: 80

I. Answer any 5 from the following questions (5x16=80 Marks)

1. Define Statistics? Discuss the utility of Statistics to the States, Economists and the Industrialists.
2. What is Statistical table? Explain various types of tabulation with examples.
3. What do you understand by Measures of Central Tendency? Discuss the standard measures of Central Tendency with its applications.
4. An analysis of the monthly wages paid to workers in two firms A and B, belonging to the same industry, gives the following results:

	Firm - A	Firm-B
Number of Wages earners	550	650
Average monthly wages (in '00 Rs)	50	45
Standard deviation of the distribution of Wages	$\sqrt{90}$	$\sqrt{120}$

Answer the following questions with proper justifications:

- i. Which firm A or B pays larger amount as monthly wages?
 - ii. In which firm A or B, is there greater variability in individual wages?
 - iii. What are the measures of Average monthly wages, Standard deviation in the distribution of individual wages of all workers in the two firms taken together?
5. Explain how Index numbers are used to measure the purchasing power of money? Explain what do you understand by deflating of Index numbers with example
 6. Mean monthly wages (X) and cost of living index numbers (Y) for the year 2001 to 2006 are given below:

Year	2001	2002	2003	2004	2005	2006
Rs. X	360	400	480	520	550	590
Y	100	104	115	160	210	260

In which year the real income was (1) the highest (2) the lowest

7. What is sampling? Explain various methods of Probability Sampling with examples.
8. A doctor is to visit a patient. From the past experience, it is known that the

Probabilities that he will come by Car, Taxi, Scooter or by other means of transport are 0.3, 0.2, 0.1 and 0.4 respectively. The probabilities that he will be late are $\frac{1}{4}$, $\frac{1}{3}$ and $\frac{1}{12}$, if he comes by Car, Taxi, Scooter respectively. But, if he comes by other means of transport, then he will not be late. When he arrives, he is late. What is the probability that he comes by Car?

9. Define Correlation. Explain various types of Correlation with suitable examples. State the application of Correlation in business.
10. The sales of a company in Lakhs of rupees for the years 2004-2011 are given

below :

Year	2004	2005	2006	2007	2008	2009	2010	2011
Sales(in Lakhs)	550	560	555	585	540	525	545	585

- (i) Find the linear trend equation.
- (ii) Estimate the sales for the year 2003.
- (iii) Find the slope of the Straight line trend.

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