DL-7 Your Roll No.....

BACHELOR OF BUSINESS ADMINISTRATION I YEAR EXAMINATION, 2010

Paper — BBAD-203

BUSINESS STATISTICS

Time : 2½ Hours *Maximum Marks : 70*

(Write your Roll No. at the top immediately on receipt of this question paper.)

Answer all Sections as per instructions given in each Section.

SECTION -A (1 × 10 = 10)

Answer ALL questions.
All questions carry one mark.

1. Statistics is concerned with scientific methods of collecting, organizing, summarizing, presenting and analyzing data. (True/False)

2. If a variable can assume only one value, it is called a constant. (True/False)

3. Median and Mode are mathematical averages. (True/False)

P.T.O.

4. The regression equations are not useful for predicting the value of dependent variable for the given value of the dependent variable. (True/False)

5. One of the objectives of measuring dispersion is to facilitate the computation of other statistical measures. (True/False)

6. Correlation coefficient is a numerical measure of degree of association between two or more variables. (True/False)

7. Index numbers cannot be expressed in terms of percentages. (True/False)

8. Statistical Quality Control is only of remedial in nature. (True/False)

9. Main objective of the analysis of any time series data is to make forecast for future. (True/False)

10. A statistics is a measure computed from the observations of the population. (True/False)

SECTION -B $(6 \times 5 = 30)$

Answer any SIX questions.
Each question carries FIVE marks.

11. Define Statistics and discuss its relationship with natural and other sciences.

12. What are sampling and non-sampling errors? Suggest one method of controlling them.

13. What are the functions of an average ? Discuss the relative merits and demerits of various types of statistical averages.

14. What do you mean by Dispersion ? Mention some common methods of measuring dispersion.

15. Distinguish between correlation and regression. Discuss least square method of fitting regression.

16. What are index numbers? Discuss their uses and limitations.

17. Explain the meaning and objectives of time series analysis. Discuss briefly the methods of measuring of trend.

18. What do you understand by theoretical probability distribution ? How it is used in business decision making ?

SECTION - C (3 × 10 = 30)

Answer any THREE questions.
Each question carries 10 marks.

19. Calculate the mean and standard deviation of weights of 100 students.

Weight (Kg)	60-62	63-65	66-68	69-71	72-74
Frequency	5	18	42	27	8

20. Find the probability of boys and girls in families with three children, assuming equal probabilities for boys and girls.

21. Obtain a linear regression of Y on X to the following data:

X	1	2	3	4	5	6	7	8
Y	65	80	45	86	178	205	200	250

22. Compute coefficient of correlation from the following data:

X	8	12	15	10	12	16
Y	6	10	12	7	10	12

23. Prepare weighted aggregative index numbers from the following information for 1981 and 1982 taking prices of 1975 as base:

Commodities	Prices in		
	1975	1981	1982
A	20.00	24.00	21.00
B	1.25	1.50	1.00
C	5.00	8.00	8.00
D	2.00	2.25	2.12

Assume weights to the four commodities as 4, 3, 2 and 1 respectively.