Diploma in Statistical Process Control and Operations Research (DSPCOR) Examination, August 2014
(Old Scheme)
Paper – ST-1 : DESCRIPTIVE STATISTICS

Time : 3 Hours   Max. Marks : 90

SECTION – I

Answer **any 2** questions and **each** question carries **15** marks.

1. Define statistics. Give the broad classification of statistical data with explanation and example if needed.

2. Explain :
   a) How to draw stem and leaf diagram ?
   b) How to construct boxplot ? What do you mean by outliers ?
   c) What do you mean by cumulative frequencies explain (i) less than method (ii) more than method.

3. Define (i) Arithmetic mean (ii) Geometric mean (iii) Harmonic mean (iv) Median (v) Mode, and write down the advantages and disadvantages of median and mode.

4. Define (a) Scatter plot (b) Linear regression.

SECTION – II

Answer **any 4** questions and **each** question carries **10** marks.

5. Distinguish between :
   a) Nominal and ordinal
   b) Qualitative and quantitative
   c) Discrete and continuous
   d) Primary and secondary

6. Explain the meaning of classification and tabulation and its necessity.

7. Define relative frequency. How is frequency table constructed ?

8. Define all measures of location.

9. When and how is relative frequency table formed ?

10. Distinguish between the bivariate table and contingency table.

11. Point out the differences in the process of tabulation of qualitative and quantitative data.

12. Explain the requisites of a good table.

SECTION – III

Answer **any 4** questions and **each** question carries **5** marks.

13. Explain the relationship between mean, median and mode.

14. Explain weighted arithmetic mean.

15. Explain the formula for computing the regression co-efficients.

16. Write a note on scatter diagrams.

17. What are principles of least squares ?

18. Explain the purpose of classification.

19. Explain the method of constructing histogram.

20. Write a note on pie-chart.

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