THE TEXTILE ASSOCIATION (INDIA)
GMTA Examination - 2020
Section – C, Paper – C4
Applied Statistics

Date 27.12.2020   Marks:100   Time 10.00 AM to 1.00 PM

Instructions:
1. Answer **any six** questions out of which **Question No 1** is compulsory.
2. Answer each next main question on a new page.
3. Figure to the right indicate full marks.
4. Illustrate your answers with sketches and flow chart wherever necessary.
5. Use of non- programmable electronic pocket calculator is permitted.
6. Mobile and any other communication devices are not allowed in examination hall.
7. Assume suitable data wherever necessary.

Q1   Write Short Notes on **any five** of the following   20
- a. Random variable –discrete and continuous variables
- b. Representation of numerical data by frequency distribution
- c. Measure of central tendency and dispersion
- d. Properties of Normal Distribution.
- e. Curve fitting
- f. Test of significance.
- g. Probability.

Q2   a. Explain how statistics can be used for decision making.   16
       b. Explain how numerical data is represented in different diagrams.

Q3   a. Define Conditional Probability. What is its use?   16
       b. What is Poisson Distribution? Explain with an example.

Q4   a. Define Population and Sample. Explain their relations.   16
       b. What is sampling plan? How it is worked out?

Q5   a. Explain the Bayesian estimation. Give an example.   16
       b. Explain the hypothesis concerning one and two variances

Q6   a. Explain the application of the theory of normal distributions to quality   16
         control charts.
       b. What is the difference between Poisson and Binomial distributions?

Q7   a. What is Coefficient of Variation? Explain with an example.   16
       b. Explain Mean, Median, and Mode with an example.

Q8   a. Explain the importance of plotting data with an example.   16
       b. What is the use of Random Number in assessing out-going quality?

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