THE TEXTILE ASSOCIATION (INDIA)

GMTA Examination - 2019
Section - C, Paper - C4
Applied Statistics

Date 24.12.2019   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 permitted.
6. Mobile and any other communication electronic 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. Use of statistics in decision making
   b. Frequency polygons.
   c. Frequency distribution and its use in Quality Control.
   d. Properties of Poisson Distribution.
   e. Importance of plotting data.
   f. Analysis of Variance.
   g. Sampling and use of random numbers.
   h. Line if regression.

Q2 a. Explain the importance of statistics in process control. 16
   b. Explain the difference between Random Variables and Discrete Variables.

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

Q4 a. Explain the effect of sample size and interval between tests on test results. 16
   b. How do you decide a sampling plan for checking materials in process?

Q5 a. Explain the term Test of Hypothesis. Give an example. 16
   b. Explain the method of testing of hypothesis with one and two variables.

Q6 a. Explain Line of Regression. Explain its use in taking decision. 16
   b. What is the use of Correlation Coefficient?

Q7 a. What is Boy’s theorem. Explain with an example. 16
   b. Explain Bernoulli’s trial. Give an example.

Q8 a. How do you decide whether two lots can be mixed or not in process? 16
   b. What is simple nonparametric test? Explain with some examples.