THE TEXTILE ASSOCIATION (INDIA)
G.M.T.A. (REVISED) EXAMINATION – 2015
SECTION –B PAPER B.5

Textile Testing

Date: 28.12.2015  Marks: 100  Time: 2 pm to 5pm

Instructions:
1. Attempt six questions out of which Q1 is compulsory
2. Answer each next question on 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 permissible
6. Mobile and any other communication devices are not allowed in exam hall.
7. Assume suitable data wherever necessary

Q1  Give to the point answer to the following questions  20 Marks

a. Define random sample and bias sample.  2
b. What are the advantages of quality control chart?  2
c. What is tenacity of fibre?  2
d. Define English count.  2
e. What are the standard condition of testing textile material?  2
f. Convert 40s Ne to tex count.  2
g. Differentiate crease and wrinkle  2
h. What is drape co-efficient?  2
i. What is the abrasion resistance of fabric?  2
j. A 50 tex yarn breaks at 200 gm weight. Calculate its breaking length.  2

Q2  a) Explain the quality control chart. What are the various control chart? Explain them.  8
     b) Define Moisture regain and Moisture content of textile fibre. Establish the relationship between them.  8

Q3  a) What is micronaire value? How the fineness of fibre can be measured by air flow method?  8
     b) Describe the measurement of span length by HVI instrument.  8

Q4  a) What is AFIS? How the fibre properties are measured in this instrument?  12
     b) Differentiate the HVI and AFIS instrument.  4
Q5  (a) Write short notes on
   i)  Measurement of yarn twist
   ii) Yarn numbering system
   iii) Measurement of yarn hairiness
   iv)  FQI (fibre quality index)

Q6  a) Describe a method of measuring the Air-permeability of fabric
    b) How the colour fastness to washing can be measured

Q7  a) What is drape? How the draping quality of a fabric can be measured?
    b) Distinguish between grab test and stripe test of fabric

Q8  a) What is pilling? How the pilling resistance of a fabric can be measured?
    b) Describe the method of blend analysis of polyester cotton blended yarn