THE TEXTILE ASSOCIATION (INDIA)
G.M.T.A (REVISED) EXAMINATION --2017
SECTION- B  PAPER --B.5
TEXTILE TESTING

Date:27.12.2017  Marks:100  Time: 2.00pm to 5.00pm

Instructions:  1. Attempt six questions out of which Q 1 is compulsory
2. Answer each next main question on new page
3. Figure to the right indicate full marks
4. Illustrate your answer with sketches and flow chart wherever necessary
5. Use of nonprogrammable 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  2x10 = 20
(a) Define denier and its relationship with English count.
(b) State the advantages of quality control chart
(c) Define uniformity ratio.
(d) What is FQI?
(e) State the official moisture regain of viscose. Polyester. Nylon and wool fibre.
(f) What is neps?
(g) What is CSP?
(h) What is Air permeability and air resistance?
(i) What do you understand by the term pilling?
(j) How do you do the blend analysis of polyester / viscose blended yarn?

Q2. (a) Explain the zonal technique used for sampling of cotton fibre from bale of cotton 8+8 = 16
(b) Define Moisture regain and Moisture content of textile fibre. Describe a method to measure the moisture regain.

Q3. (a) Describe a method to test the cotton fibre in a HVI instrument. 12 + 4 = 16
(b) What are the difference between HVI and AFIS?

Q4. (a) Classify the various type of yarn numbering system in term of direct and indirect system.
(b) How the yarn count and CV % are measured in a spinning mill?

Q5. (a) What is drape coefficient? How will you measure the drape coefficient of fabrics?
(b) What is pilling? How pilling resistance is measured?

Q6. Distinguish between
   (i) Crease and wrinkle
   (ii) Air permeability and air resistance
   (iii) Washing fastness and light fastness
   (iv) Mean length and span length of fibre.

Q7. (a) Describe a method to measure the bursting strength of fabric
(b) Distinguish between grab test and strip test of fabric

Q8. Write short note on the following
   (a) AFIS
   (b) Abrasion resistance
   (c) Crimp percentage
   (d) Yarn twist and its effects on fabric properties