THE TEXTILE ASSOCIATION (INDIA)
G.M.T.A. (REvised) EXAMINATION – 2012
SECTION-B PAPER-V (B-5)

TEXTILE TESTING

Date: 26.12.2012
Marks: 100

Time: 2 to 5 pm

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 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.

Q.1. Give the point answer to the following questions
   a. What is the standard atmospheric condition for testing? (20)
   b. State the warning limit and action limit of a control chart
   c. What is maturity of cotton fibre
   d. What is 2.5% span length?
   e. Define FQI.
   f. Convert 30s Ne count to tex count.
   g. What is twist multiplier?
   h. Define crimp % of the yarn in the fabric
   i. What is KAWABATA system?
   j. Name solvent of cotton, polyester and viscose

Q.2. a. What are the various technique available for sampling of fibre? Describe one of them. (08)
   b. Define Moisture regain and Moisture content of textile fibre. Establish the relationship between them. (08)

Q.3. a. What is HVI and AFIS? Describe the working principle of an AFIS system. (08)
   b. How the maturity of cotton fibre can be measured? What is the maximum and minimum value of maturity ratio? (08)

Q.4. a. What are the reasons of generation of hairiness in the yarn? (08)
   b. Define hairiness value ‘H’. How the hairiness is measured by photo-elective method? (08)

Q.5. a. What is ‘S’ and ‘Z’ twist? What are the various method of measuring yarn twist? (04)
   b. How the single yarn twist can be measured by using straightening method? (06)
   c. Write down the effect of twist on yarn and fabric properties. (06)

Q.6. a. Define drape co-efficient. How you will measure the drape of a given fabric? (08)
   b. Distinguish between
      (i) Grab test and strip test of fabric (08)
      (ii) Crease recovery and wrinkle recovery

PTO

Q.8. Write short note on the following
   a. Abrasion resistance of fabric
   b. Colour fastness
   c. Yarn evenness tester
   d. Neps counting methods