THE TEXTILE ASSOCIATION (INDIA)
G.M.T.A (REVISED) EXAMINATION --2018

SECTION- B  PAPER --B.5
TEXTILE TESTING
Marks -100

Date:- 26.12.2018  Time:- 02.00 p.m. to 05.00 p.m.

Instructions: -
1. Attempt six questions out of which question no 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

Q1. Give short answer to the following questions 2x10=20

(a) Define English count.
(b) Define CV% and standard deviation
(c) List the standard Moisture regain value of cotton, silk and acrylic fibre.
(d) What are the maximum and minimum value of maturity ratio?
(e) Define CSP of yarn and its importance.
(f) What are the level of neps, thick and thin places in uster tester?
(g) What wil be the breaking length of a 40 tex yarn if it breaks at 100 gms. ?
(h) Name the solvent of polyester fibre.
(i) What is Thermal insulation value (T.I.V.)?
(j) What is air permeability and Air resistance?

Q2. (a) What is quality control chart? Describe various type of quality control chart.
(b) Define Moisture regain and Moisture content of textile fibre and established the relationship between them. What is oven dry weight of material? 8+8=16
Q3. (a) Distinguish between staple length, mean length, effective length and span length of fibre.  
(b) Describe the seven properties of fibre which are measured in HVI  
\[8 + 8 = 16\]

Q4 (a) Describe the yarn numbering system. Define at least two count in each category.  
(b) What are the methods of measuring the twist in the yarn? Explain one method of measuring the twist.  
\[8 + 8 = 16\]

Q5. (a) Write down the effects of twist on the fabric properties.  
(b) What is AFIS? How it works?  
\[8 + 8 = 16\]

Q6. (a) What is grab test and strip test of fabric? How the strength of fabric is measured in strip test?  
(b) Describe a method of measuring the crease recovery angle of a fabric.  
\[8 + 8 = 16\]

Q7. (a) What is drape coefficient? How the drapeability of fabric is measured?  
(b) How you will measure the washing fastness of colour in the fabric?  
\[8 + 8 = 16\]

Q8. Write short note on the following  
\[4 \times 4 = 16\]

(a) Pilling resistance  
(b) Abrasion resistance  
(c) Fabric assistance  
(d) Twist multiplier