THE TEXTILE ASSOCIATION (INDIA)
G.M.T.A. (REVISED) EXAMINATION – 2018
SECTION – D PAPER - D.3

ENGINEERING DESIGN OF FABRIC STRUCTURE

Date: 24.12.2018 Marks: 100 Time: 2 pm to 5 pm

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 flowchart 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. Answer the following questions (Compulsory question)
   a) Write a brief note on “Spider Leno” 10
   b) Write a brief note on “Terry Ornamentation”. 10

Q 2. Define the following (Any four)
   i) Diamond weave ii) Satin weave iii) Plain weave iv) Twill weave
   v) Tricot weave vi) Sponge weave vii) Corded weave 16

Q 3. Enlist the types of draft plan and describe them briefly with a diagram 16

Q 4. a. Give the classification of double cloth. Construct self stitched double cloth by using back to face principle. 08
   b. What is pile density? Discuss factors affecting pile density. 08

Q 5. a. Construct design, draft and peg-plan for the Bird’s eye effect. 08
   b. With the help of designs, explain how check pattern is obtained using simple weave. 08

Q 6. a. List out the steps to construct jacquard design. Hence explain how weave should be inserted in ground and foreground of jacquard design. 08
   b. With the help of neat sketch, explain positive easing motion incorporated in leno weaving 08
Q 7.  a. With the help of designs, explain how warp pile is obtained using face to face principle.  08
   b. Construct design, draft and peg-plan for the Treble cloth.  08
Q 8.  a. Compare Extra Warp Figuring with Extra Weft Figuring.  08
   b. State the function of easing motions & jumper device in leno weaving.  08