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

FABRIC STRUCTURE AND DESIGN

Date: 28.12.2015
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 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 Match the following questions by choosing correct option (compulsory) 20 Marks

1. The draft in weave plan represents
   a) No. of repeats   b) Lifting of heald shafts   c) Pick density   d) Warp density
   2

2. Damask and brocade designs can be produced on
   a) Jacquard looms   b) Dobby looms   c) Pit looms   d) Jet looms
   2

3. The fabric structure which gives more lustre is
   a) Satin   b) Plain   c) Twill   d) Crepe
   2

4. Denim fabric is
   a) 2/1 twill   b) 3/1 twill   c) 4/1 twill   d) 3/2 twill
   2

5. ‘Crows foot’ is an example for
   a) Ornamentation of plain cloth   b) Modification of twill
   c) Colour and weave effect   d) A type of sateen cloth
   2

6. Orange colour denotes perception of
   a) Dull   b) Energy   c) Happiness   d) Tragedy
   2

7. Valetreen is a
   a) Weft pile   b) Pique   c) Plain double cloth   d) None of these
   2

8. In absence of light, we see
   a) No colour   b) Sapien   c) grey shades only   d) None of these.
   2

9. The weave most suitable for toweling fabric
   a) Plain   b) twill   c) Satin   d) Honeycomb
   2

10. According to color psychology, the most attractive color is
    a) Blue   b) Black   c) Red   d) Grey
    2

Q2 Explain weave design, draft and peg plan. Illustrate the same for 2/2 twill weave. 16
Q3 What are the derivatives of plain weave. Illustrate with suitable weave design.
Q4 Explain the types of twill weaves with suitable design, draft and peg-plans.
Q5 What are Light and Pigment colour theories? Explain pigment colour theory with a neat diagram.
Q6 What are double cloths? Explain self stitched and centre stitched double cloths with fabric design.
Q7 With a diagram explain the special mechanism required to produce terry pile fabrics.
Q8 What is Shaker motion? Explain the mechanism of shaker motion for production of leno fabrics.