THE TEXTILE ASSOCIATION (INDIA)
A.T.A. (REVISED) EXAMINATION – 2015
Part I – A 1.4

ELEMENTS OF TEXTILE TECHNOLOGY

Date: 27.12.2015
Marks: 100
Time: 10 am to 1 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
a) Say true or false
   i. Carded yarn is more even than combed yarn.
   ii. Tex means weight in gms per 1000 meter.
   iii. Polyester fibre is regenerated fibre.
   iv. Disperse dye is mostly used for cotton.
   v. Production rate of card is less than draw frame
   vi. Carding is done after draw frame.
   b) Fill in the blanks.
      i. Cotton fibre absorbency is ________ than polyester.
      ii. Draw frame sliver is ________ parallisation than carded sliver.
      iii. Desizing process is done ________ dyeing process.
      iv. Polyester fibre is ________ stronger than cotton fibre.
      v. After sizing strength of yarn is ________
   c) Write a short notes on the following (any three)
      i. Carding ii. Weaving iii. Plain weave derivatives. iv. Texturising

Q2
Explain objects of following in brief. (Any four)

Q3
   a. Explain the fibre classification by neat chart
   b. Explain following fibre properties (any two)
      i. Cotton ii. Polyester iii. Wool

Q4
   a. Explain the spinning process flow chart of carded & combed yarn
   b. Write short notes (any four)
      i) Ginning ii) Mixing iii) Comber preparatory iv) Comber v) Speed frame
      v. Ringframe

Q5
a. Explain yarn numbering system with examples.
b. Convert i. 90 den to tex. ii. 60s Ne to tex

c. Explain weaving process flow chart

Q6  a. Explain primary & secondary motion of loom
    b. Explain following (any two)
       i) Winding   ii) Warping iii) Design, draft, peg plan

Q7  a. Draw flow chart of wet process of cotton fabric
    b. Explain the following (any three)
       i) Vat dye. ii) Direct dye. iii) Disperse dye. iv) Acid dye

Q8  a. Explain the following (any three)
    i) Bleaching ii) Scouring iii) Printing iv) Singeing
    b. Write short notes. (Any two)
       i) Woven fabric ii) Filament yarn iii) Non-woven fabric

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