THE TEXTILE ASSOCIATION (INDIA)
A.T.A. PART – I EXAMINATION -2019
PAPER-A1.4
ELEMENTS OF TEXTILE TECHNOLOGY
Marks – 100

Date: 24.12.2019
TIME: 10.00 am to 1.00 pm

Instructions:
1. Attempt any six questions out of which Q.1 is compulsory
2. Answer each next main question on new page.
3. Figure to the right indicates full marks.
4. Illustrate your answer with sketches and flow chart wherever necessary.
5. Use of non programmable electronics pocket calculator permissible.
6. Mobile and other communication devices are not allowed in exam hall.
7. Assume suitable data wherever necessary.

Q 1.a) Fill in the blanks. (6)
   i) Polyester fibre is ________ fibre.
   ii) Fibrefineness is measured in ________ unit.
   iii) Knitted fabrics have ________ stretch ability than woven fabrics.
   iv) ________ dye is mostly used for cotton dyeing.
   v) Fibre to fibre separation is done by ________ machine.
   vi) Wet strength of viscose fibre is ________ than dry strength.

b) Say True or False (6)
   i) Carded yarn is less uniform than combed yarn
   ii) Metric is direct yarn numbering system.
   iii) Take up is a secondary motion of loom.
   iv) Viscose fibre is regenerated type of fibre.
   v) Output of carding machine is sliver.
   vi) Sizing improve yarn abrasion

c) Write short notes on following (any two) (8)
   i) Texturizing
   ii) Blowroom
   iii) Thermoplastic fibre with list

Q 2. a) Explain objects of following in brief (Any Two) (8)
   i) Comber preparatory     ii) Carding
   iii) Draw Frame

b) Explain input and output of each process of cotton spinning (8)
Q.3. a) Explain fibre classification by neat chart

b) Explain following terms
   i) Contender
   ii) Carding flat

Q.4. a) Explain primary and secondary motions of loom in details

b) Explain process flow chart for yarn into fabric for cotton

c) Explain sizing process

Q.5. a) What are the objects of winding and warping?

b) Explain yarn numbering system with examples.

Q.6. a) Explain different end uses of woven, non-woven and knitted fabrics.

b) Explain staple and continuous filament with examples.

c) Convert the following (Any two)
   i) 10 Tex to Ne
   ii) 60° Metric (Ne) to English count
   iii) 80 denier to Ne

Q.7. a) Explain different types dyeing

b) Explain the process flow chart of wet processing for cotton fabric.

Q.8. a) Explain objectives of following processes (Any two)
   i) Desizing    ii) Mercerizing    iii) Bleaching

b) Explain the following (Any two)
   i) Finishing
   ii) Scouring
   iii) Singing

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