THE TEXTILE ASSOCIATION (INDIA)
A.T.A PART-I NEW 3 YEARS EXAMINATION- 2014
PAPER-A 1.3
TEXTILE FIBRES

Date: 26.12.2014 Marks: 100 Time: 10.00 a.m. to
01.00 p.m.

Instructions:
1. Attempt any six questions out of which Q.1 is compulsory
2. Answer each next main question on a new page
3. Figure to the right indicate full marks
4. Illustrate your answers with sketches and flow-charts 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. State whether the following statements are true or false and if it is false rewrite
the correct statement. (20)

a. Nylon is not polyamide fibre.
b. Burning of wool give smell of burning of paper.
c. Polyester is soluble in fomic acid.
d. Silk is a cellulosic fibre.
e. Cotton is having lower moisture content than wool.
f. Tensile strength of polyester higher than viscose.
g. Manufacturing of polyester is carried out by wet spinning method.
h. Main component of silk filament is sericin.
i. Polypropylene is lighter than polyester.
j. Viscose is having higher alkali resistance.

Q. 2. a) What is the importance of identification of fibre? Give the burning test for
identification of silk, cotton and polyester. (8)

b) Describe in detail the manufacturing of polyester. (8)

Q. 3. a) Write the importance of blending of textile fibres. Give the advantages of polyester
cotton blending. (8)

b) What are essential and desirable properties of fibres? (8)

Q. 4. a) Write a note on ‘Developments in Synthetic fibres’. (8)

b) What are physical properties textile fibres? Give physical properties of cotton. (8)

Q. 5. a) What are the various spinning techniques of manufacturing of man-made fibre?
Explain any one with neat diagram. (8)

b) Describe the manufacturing of Viscose rayon. (8)
Q. 6. a) What do you meant by natural, synthetic and regenerated fibres? Give two examples of each category. Why viscose is called regenerated fibre? (8)
b) Write a note on ‘Production of Silk’. (8)

Q. 7. Describe in detail the chemical properties of textile fibres. (16)

Q. 8. Write a short note on the following (Any Four). (16)

   a. Applications of jute and flax fibres
   b. Draw longitudinal and cross sections view of any two textile fibres.
   c. What are the difference between viscose and cotton?
   d. Manufacturing of Nylon.
   e. Discuss the identification of wool and silk in detail.