THE TEXTILE ASSOCIATION (INDIA)
A.T.A. (REVISED) EXAMINATION – 2015
Part III– (COMPULSORY SUBJECTS)

ELEMENTS OF TECHNICAL TEXTILES

Date: 24.12.2015  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. Explain the terms giving examples
   i. Agrotech  ii. Sport tech  iii. Indutech  iv. Home tech
   b. Justify the following products as technical textiles

Q2. a. Define nonwoven fabrics. State the advantages of nonwoven fabrics
   b. With a neat and labeled diagram, explain the needle-punched nonwoven fabric manufacturing technique

Q3. a. Compare and contrast the process of coating and laminating.
   b. Explain in brief two processes involved in coating and laminating technology.

Q4. a. What are Geotextile? Enumerate the various fibres used for the area of Geotextile.
   b. Explain the application of Geotextiles in railways.

Q5. Write a short note on Any Two:
   i) Flame retardant textile ii) Automotive textiles iii) Textiles used in conveyor belts.

Q6. a. Define medical textiles. Classify them based on their application.
   b. Explain the different fibres that are used in the area of medical textiles.

Q7. a. Explain the various types of Protective textiles based on their functional requirements
   b. What are defence textiles. Explain the various essential functional requirements for defence textiles.

Q8. a. Explain in detail the properties of textile materials used in filtration.
   b. What is chaffer fabric? How is it used in the tyre cord industry?