THE TEXTILE ASSOCIATION (INDIA)
G.M.T.A. (REVISED) EXAMINATION –2014
SECTION-D  PAPER: SCD 2
LONG STAPLE AND OTHER YARN MANUFACTURE

Date: 25.12.2014  Marks:100  Time: 02:00 to 05:00 pm

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

Q.1. a. Define or explain the following terms:
   i. Kemp.  ii. Medulated fibre.
   b. What is carbonization? How it is done in processing wool fibres?  (10)

Q.2. a. Explain in brief the growth and cultivation of flax fibres.  (06)
b. Discuss in detail the sequence of processing machineries used converting
   flax fibre to yarn.  (10)

Q.3. List the impurities in wool and suggest the methods of removing it.  (16)

Q.4. With neat sketches explain in detail the conversion process of raw jute fibres to yarn.  (16).

Q.5. Explain in brief the features of the card ment for processing long staple fibres.
   also the technical details of the card setting, and clothing of carding elements.  (16)

Q.6. With neat diagrams explain the working of open and intersecting gill box.  (16)

Q.7. Trace the developments of the cotton yarn spinning machine starting from takli,
   mule etc., to the latest modern yarn spinning machines. Your answer should focus
   only on the concept of the spinning techniques.  (16)

Q.8. Write short notes on the following:
   i. Cotton Vs jute card.
   ii. Condenser spinning.
   iii. Wool combing.
   iv. Theory of long fibre drafting.  (16)