THE TEXTILE ASSOCIATION (INDIA)
A.T.A PART-III EXAMINATION-2016
PAPER-A 3.0A
MODERN YARN MANUFACTURE

Date: 26.12.2016  Marks: 100  Time: 10.00 am to 1.00 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. Justify the statement giving reasons. (20)
   i. Recycling of cotton waste is required to control the cost of mixing.
   ii. Roller ginned cotton found to be better than Saw ginned cotton
   iii. Short staple and trashy cottons spin well in Rotor spinning system.
   iv. Byssinosis is a threat to the worker who is exposed to cotton dust.
   v. Classimat faults can be reduced by proper settings and work practice.

Q.2. What are the limitations of the ring spinning system? Explain in detail how you overcome these limitations (16)

Q.3. Discuss in brief the classification of modern spinning systems. Explain in brief the principle concept of any one of major modern spinning system. (16)

Q.4. With a neat diagram describe the construction and working of any one method of modern spinning system giving details of settings, speed etc., (16)

Q.5. With the advent of computer controlled aided devices in yarn manufacture, many gadgets are adopted in spinning to gather Quick and reliable Information’s. Discuss and describe at least 2 gadgets you are familiar with. (16)

Q.6. What is the necessity of having auto levelers at card and draw frame. Explain in brief any one type of auto leveler as adopted in the modern draw frame. (16)

Q.7. Discuss in detail the advances and recent developments taken place from blow room to winding sections. (16)

Q.8. Write short notes on the following:
   i. Contaminations in baled cotton
   ii. Bale management
   iii. Compact spinning
   iv. Classification of auto levelers

******

Page 1 of 1