THE TEXTILE ASSOCIATION (INDIA)
A.T.A PART-III NEW THREE YEAR EXAMINATION-2018
PAPER- A.3.OA
MODERN YARN MANUFACTURE

Date: 25.12.2018          Marks: 100          Time: 10am to 1 pm

Instructions:
1. Attempt SIX questions out of which Q1 is Compulsory
2. Answer each next question on nev page
3. Figures to the right indicate full marks
4. Illustrate your answers with sketches and flow charts wherever necessary
5. Use of nonprogrammable electronic pocket calculator permissible
6. Mobile and any other communication devices are not allowed in the exam hall
7. Assume suitable data wherever necessary

Q1: Answer the following questions (Briefly)
   i. Give the limitations of ring spinning
   ii. State the principle of cover spun spinning
   iii. Give the classification of different modern yarn manufacturing systems.
   iv. Discuss the impact of recycling of cotton
   v. Give the principle of rotor spinning

Q2.
   a. Describe the open end spinning technique of yarn manufacture.
   b. Explain the limitations of open end spinning process.

Q3.
   a. Explain the working principle of Friction spinning with neat labelled sketch.
   b. Discuss Siro Spinning with neat labelled sketch.

Q4.
   a. Give the disadvantage of rotor spinning.
   b. Discuss the techno-economics of rotor spinning.

Q5.
   a. What are rotor deposits? State the problems related to them along with remedial measures.
   b. Describe the properties of rotor spun yarns

Q6.
   a. Write a note on 'Twistless spinning'.
   b. Discuss Self twist spinning.

Q7.
a. Discuss briefly the cover spinning technique.  
b. Discuss briefly about Air-jet spinning technique.

Q8.
a. Explain briefly the new developments in spinning process with special reference to blow room and carding process.
b. Write a short notes on:
   i. Automatic Bale openers
   ii. Chute feed system.