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

Date: 24.12.2019
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. Figures to the right indicate full marks
4. Illustrate your answers with sketches and flow chart 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 classification of different modern yarn manufacturing system.
   iii. Explain the advantages of rotor spinning
   iv. Give the disadvantages of rotor spinning machine.
   v. Give the properties of self-twist spinning

Q2.
   a. Explain the working principle of rotor spinning with neat labeled sketch?
   b. Discuss the methods of sliver opening, fibre transfer and twist insertion of rotor spinning.

Q3.
   a. Discuss the working principle of friction spinning with neat labeled sketch.
   b. Explain the working principle of Airjet spinning with neat labeled sketch.

Q4.
   a. Describe the working principle of Twistless spinning with neat labeled sketch.
   b. Explain the working principle of Siro spinning with neat labeled sketch.

Q5.
   a. Explain the working principle of Cover spinning with neat labeled sketch.
   b. Explain the outline of different spinning systems?

Q6.
   a. Explain briefly idea about the advances and recent developments in spinning from blow room.
   b. Discuss briefly the new developments in spinning process with special reference.
to blow room and carding process.

Q7.

a. Explain the working principle of Automatic Bale openers. 08
b. Explain the principle of chute feed system in carding process. 08

Q8.

a. Explain the automated transport in combing and ring frame sections. 08
b. Explain the working principle of compact spinning with neat sketch. 08

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