THE TEXTILE ASSOCIATION (INDIA)
A.T.A PART – III NEW THREEYEAR EXAMINATION - 2017
PAPER – A.3.OA
MODERN YARN MANUFACTURE

Date:26.12.2017 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 next main question on new page
3. Figure to the right indicate full marks
4. Illustrate your answer with sketches and flow chart whenever 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 Answer all the questions (Briefly)
   i. State the limitations of ring spinning.
   ii. State the principles of rotor spinning.
   iii. Describe the effect of environmental conditions in the ring frame
   iv. Describe the impact of recycling of cotton
   v. Justify “Bysinosis is a threat to workers in the blow room”

Q2. Explain the following:
   a. Discuss open end spinning technique of yarn manufacture
   b. Discuss the limitations of open end spinning process

Q3. Explain the following:
   a. Write a note on ‘Air jet spinning’
   b. Write a note on ‘Self Twist Spinning’

Q4
   a. Discuss the techno-economics of rotor spinning.
   b. State the advantages of rotor spinning

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

Q6
   a. Write a note on Twillless spinning.
   b. Write a note on ‘Siro spinning’.

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Q7

a. Explain briefly the Cover spinning technique.

b. Discuss briefly the new developments in spinning process with special reference to blow room and carding process.

Q8.

a. Name any 5 important parts of rotor spinning machine. Explain the functioning of them

b. Write a small note on
   i) Bale management
   ii) Chute feed system