

17568

16172

3 Hours / 100 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data, if necessary.
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any TEN of the following:

20

- State objects of yarn doubling.
- Enlist various types of Fancy yarn.
- Give the characteristics of chinelle yarns.
- State objects of yarn winding.
- What is knotting? Enlist various types of knots with its figure.
- State reasons for patterning on cone winding machine.
- Draw ring and open end rotor yarn structure.
- State the function of opening roller in open End spinning.
- State the properties of open End spinning.
- List applications of DREF II yarns.
- List two features between DREF II and DREF III machines.
- State the features of compact yarn.

P.T.O.

- m) Explain effect of short fibres and fineness on air jet process.
- n) Write advantages of Siro spun yarns.

2. Attempt any TWO of the following: 16

- a) Describe construction and working of drum winding machine and give its limitations.
- b) Describe construction and working of TFO machine.
- c) Explain effect of rotor speed and rotor diameter on rotor yarn characteristics.

3. Attempt any TWO of the following: 16

- a) Explain and draw various fancy yarns structures.
- b) Enlist package faults on yarn winding and explain the causes and remedies for the faults.
- c) Describe working of rotor spinning machine with neat sketch.

4. Attempt any TWO of the following: 16

- a) Explain the effect of direction, amount of twist and tension on doubled yarn properties.
- b) State the features of modern winder.
- c) Explain following about Open End spinning.
 - (i) Yarn withdrawing and winding unit.
 - (ii) Types of navel
 - (iii) Draw tube

5. Attempt any TWO of the following: 16

- a) State the features of modern rotor machine and explain their technical significance.
- b) Explain the effect of opening roller speed, rotor groove and navel types on rotor spun yarn.
- c) Explain self twist spinning with sketch and describe a machine based on this principle.

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[3]

Marks

6. Attempt any TWO of the following:

16

- a) Compare rotor yarn with ring and dref yarns.
 - b) Explain principle of Air jet spinning. Compare air jet spun yarn properties with ring spun yarns.
 - c) (i) Explain operating principle of parafil yarns with sketch.
(ii) Describe Bobtex process with sketch.
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