

22675

12425

3 Hours / 70 Marks

Seat No.

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- Instructions –*
- (1) All Questions are *Compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.
 - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. **Attempt any FIVE of the following:** **10**
 - a) State the features of integrated monitoring system at draw frame.
 - b) Enlist the applications of BREF-2 yarn.
 - c) Define back doubling.
 - d) State the properties and end uses of air-jet yarn.
 - e) Classify advanced spinning system.
 - f) Explain the principle of open end spinning with neat sketch.
 - g) Enlist properties of air-vortex spun yarn.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Draw and describe air-vortex spinning.
 - b) State the features of modern comber.
 - c) Explain in brief formation of yarn in rotor spinning.
 - d) Draw the structure of air-jet spun yarn and also give the raw material requirements of same.
- 3. Attempt any THREE of the following:** **12**
- a) State the influence of rotor diameter and speed in structure and properties of rotor spun yarn.
 - b) Draw the structure of friction spun yarn and also give the properties of same.
 - c) Explain in detail waste disposal system in blow room and carding.
 - d) Draw and explain repco spinning.
- 4. Attempt any THREE of the following:** **12**
- a) State the features of modern speed frame.
 - b) Draw and label DREF-3 spinning machine. Also describe its working.
 - c) Explain the effect of process parameters on air-vortex spun yarn.
 - d) Give advantages of advanced spinning methods over ring spinning.
 - e) Explain false twist spinning principle with neat sketch.

5. Attempt any TWO of the following:**12**

- a) State the features of modern blow room line on following points.
 - i) Contamination clearer.
 - ii) Automatic opening machine.
- b) With neat sketch explain SIRO spinning technology. Also give technical significance of it.
- c) Explain the following points on rotor spinning:
 - i) Wrapper fibres
 - ii) Navel
 - iii) Yarn withdrawal tube.

6. Attempt any TWO of the following:**12**

- a) Describe the construction and working of rotor machine with neat sketch.
 - b) Draw and describe the MJS air-jet spinning machine.
 - c) Explain the following points on plyfil spinning:
 - i) Operating principle
 - ii) Construction and working.
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