

22675

22223

3 Hours / 70 Marks

Seat No.

--	--	--	--	--	--	--	--

- 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.
 - (8) Use of Steam tables, logarithmic, Mollier's Chart is permitted.

Marks

- 1. Attempt any FIVE of the following: **10****
- a) State the necessity of waste cycle.
 - b) State any four modern features of ring frame.
 - c) Differentiate any four points between ring yarn and rotor yarn.
 - d) State the function of navel.
 - e) Define wrapper fibres.
 - f) State the objects of Air-jet spinning.
 - g) List the application (any four) of wrap spun yarn.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) With neat diagram explain integrated monitoring system.
 - b) Explain in detail. Preparation of silver for rotor spinning.
 - c) State the effect of process parameter influencing properties of Dref yarn
 - d) List any eight application of twist spun yarn.
- 3. Attempt any THREE of the following:** **12**
- a) State the effect of rotor dia on rotor yarn quality.
 - b) Give the production formulas for rotor machine and range of twist, draft, speed and production.
 - c) Describe with neat sketch. DREF-3.
 - d) Give the application of DREF-2 yarn.
- 4. Attempt any THREE of the following:** **12**
- a) State the modern features of pre-comb process.
 - b) Describe with neat sketch working of rotor spinning machine.
 - c) Describe with neat sketch working of air-jet spinning.
 - d) Give the enduses (any eight) of air-vortex yarn.
 - e) State the properties of Polyfill yarn.
- 5. Attempt any TWO of the following:** **12**
- a) State the importance of automization in ring frame and also discuss the problems due to automization.
 - b) List the limitations of ring frame.
 - c) List the enduses of airjet yarn.

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

- a) List the properties of airjet yarn by considering
 - i) Raw material
 - ii) Airjet speed
 - iii) Draft
 - iv) Production rate
 - b) Explain the influence of process parameters on properties of air-vortex yarn.
 - c) Describe with neat sketch self twist spinning.
-