

22366

23124

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) 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 need of warping process.
 - b) Classify the warping process.
 - c) State the need of tensioners in warping process.
 - d) State the functions of section drum.
 - e) State the functions of squeeze roller and size roller.
 - f) State the concept of stretch.
 - g) State the concept of lappers.
2. **Attempt any THREE of the following:** **12**
- a) Draw diagrams of different types of winding package used in textile industry.
 - b) Describe with sketch passage of yarn through direct warping machine
 - c) Describe with sketch salient feature of V-creel.
 - d) Explain with sketch two cylinder sizing process.

P.T.O.

- 3. Attempt any THREE of the following:** **12**
- a) List the merits and demerits of over and unwinding package and side unwinding package.
 - b) List various types of creel used for warping and state its merits and demerits.
 - c) Describe the functions of expanding comb with sketch.
 - d) Determine the no. of sections and section width, if weavers beam contains 7000 ends with beam width of 60 inch. The beam is processed on 800 creel capacity machine.
- 4. Attempt any THREE of the following:** **12**
- a) Calculate the production of a warping machine in yards and kgs from following data.
 - i) Number of cones on creel - 520
 - ii) Warping speed = 600 yards/min
 - iii) Warping efficiency = 60%
 - iv) Count of yarn = 30^s Ne
 - b) Discuss the selection criteria for selecting the relevant warping process for different types of yarns.
 - c) List the merits and demerits of two cylinder sizing machine.
 - d) List the various size paste ingredients with its role in sizing process.
 - e) State the importance of following parts on sizing machine
 - i) marking and measuring device
 - ii) Expanding comb
 - iii) Drag roller
 - iv) Lease rods

- 5. Attempt any TWO of the following:** **12**
- a) State the importance of leasing and describe the step by step process of leasing on sectional warping.
 - b) Describe with sketch the pressure cooker of size paste preparation.
 - c) Draw splitting and leasing arrangement used for 8 creel beams.
- 6. Attempt any TWO of the following:** **12**
- a) Describe with sketch the schematic figure of modern size box.
 - b) Describe with sketch the method to determine the migration in sizing process.
 - c) i) Define following term
 - (1) Size pick up
 - (2) Size add-on
 - ii) State the significance of stretch on performance of subsequent process.
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