

17463

15162

3 Hours / 100 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.
 - (8) Use of Steam tables, logarithmic, Mollier's chart is permitted.

Marks

1. **Answer any FIVE of the following:** **20**
 - a) State the objects of sizing and define stretch.
 - b) State the essential and desirable properties of sizing materials.
 - c) State the different types of creel used in sizing machine.
Explain any one with sketch.
 - d) State the factors affecting size pick up in the material.
 - e) Compare ordinary loom with automatic loom.
 - f) State the merits of centre weft fork motion.
 - g) Explain the semi automatic reaching in process.

P.T.O.

2. Answer any FOUR of the following:**16**

- a) Explain with neat sketch electric warp stop motion.
- b) Explain the need for warp preparation for automatic looms.
- c) Draw the schematic figure of size box and label its parts.
- d) State the importance of congealing and keeping properties of size paste.
- e) State the measurement of stretch and its control at different zones.
- f) Write a note on care and storage of reeds.

3. Answer any FOUR of the following:**16**

- a) State the various ingredients required for preparing a size paste and explain any two ingredients in detail.
- b) State the function of temperature control and size paste level control.
- c) Give the formulae to calculate the size concentration (%) and size add on (%).
- d) Define lappers and migration ends. Also state the measurement of migration.
- e) State the concept of colour retaining device and state its importance.
- f) Draw and explain the different types of healds and heald wires.

4. Answer any TWO of the following:**16**

- a) (i) Write a note on viscosity of size solution.
- (ii) Define the terms:
 - 1) pure sizing
 - 2) light sizing
 - 3) medium sizing
 - 4) heavy sizing

- b) State the function of:
 - (i) expanding comb
 - (ii) sheeting rollers
 - (iii) drag rollers
 - (iv) squeeze roller
- c) (i) Compare shuttle changing loom with pirn changing loom.
(ii) Explain with neat sketch centre selvedge motion.

5. Answer any TWO of the following: 16

- a) State the different methods of drying. Explain any one with neat sketch.
- b) Explain with neat sketch the working of pirn changing mechanism.
- c) Explain with neat sketch Ruti let-off motion.

6. Answer any TWO of the following: 16

- a) (i) State importance of splitting zone? Explain with diagram splitting of sized warp sheet.
(ii) Write a note on PIV gears used in sizing machine.
 - b) (i) State the evaluation method for sized yarn quality.
(ii) What is the necessity to maintain the natural moisture control in sized yarns.
 - c) (i) Compare automatic pirn with non automatic pirn.
(ii) Explain with neat sketch the working of photoelectric feeler.
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