17691

16172 3 Hours / 100 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.

1. Attempt any FIVE of the following : 20 Describe methods to establish Standard Norms. (a) (b) Explain 4-steps involving in Direct Control Methodology. (c) Explain the causes of low productivity in warping. (d) How to minimize mechanical stoppages in pirn winding machine? (e) Write a scope of process control in loom shed. (f) Mention various parameters consider while preparing package for dyeing. List a points to be consider for weaving of PC Blended fabrics. (g) 2. 16 Attempt any TWO of the following : (a) Explain a Approach to process control. (b) State factors affecting quality of Beam in Warping. Describe 10 point fabric Inspection System. (c) [1 of 4] **P.T.O.**

3. Attempt any TWO of the following :

- (a) Describe factors to be consider while minimising end breakages in warping.
- (b) Explain factors affecting size pick-up.
- (c) (i) List different zones in modern sizing machine where stretch is generated and explain how to control stretch in each zone.
 - (ii) What is size loss and give formula to calculate the same ?

4. Attempt any TWO of the following :

- (a) Calculate expected efficiency of warping machine with following particulars :
 - Speed = 350 mpm.
 - Set length = 20,000 metres.
 - Yarn length on cone = 55,000 metres.
 - No. of ends per warp beam = 500
 - End breaks per 400 ends/1000 mt = 4
 - Time to mend one warp break = 35 sec.
 - Time to change a beam = 500 sec.
 - Time to change a creel = 3000 sec.
 - Time loss due to miscellaneous causes/1000 metre = 25 sec.
- (b) (i) Sketch different types of drop wires and write their respective use.
 - (ii) State selection criteria for different reeds and heald wire.
- (c) Describe factors consider to improve built of pirn.

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5. Attempt any TWO of the following :

- (a) Compare individual drive and group drive at loom shed (any eight points).
- (b) Explain factors affecting loom efficiency.
- (c) (i) Explain any two-fabric defect with its reason and remedies.
 - (ii) Describe factors to be consider while selection of shuttle.

6. Attempt any TWO :

- (a) List various methods to assess loom performance and how to decide no. of snap round required to know efficiency with \pm 1% accuracy.
- (b) Explain process waste and incidental waste in sizing department.
- (c) Write process sequence in detail for manufacturing voil fabric.

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