

22366

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.

Marks

1. **Attempt any FIVE of the following:** **10**
- a) State the objects of warping machine.
 - b) Name the different types of warping machine.
 - c) State the need for warping process.
 - d) Select the warping machine needed to manufacture stripe shirting with eight blue, two white and six black ends.
 - e) State the advantages of any two types of creels used for Beam warping machine.
 - f) State the function of lease rod in sectional warping.
 - g) State the objects of sizing.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) State the differences between sectional warping and beam warping.
 - b) State the importance of tensioner and their types used in beam warping.
 - c) Enlist the features of modern sectional warping machine.
 - d) Calculate production of beam warping machine in kg/shift of eight hours working with following particulars.
Speed of machine - 600 m/min.
Count of yarn - 15 Tex
Number of ends - 800
Efficiency of m/c - 60%
- 3. Attempt any THREE of the following:** **12**
- a) Describe different winding packages used for warping, with sketch.
 - b) Draw the passage of warp yarn through beam warping machine and label the parts.
 - c) Calculate the required creel capacity for sectional warping machine for
production of stripe shirting fabric
having rpi = 80 ; reel space = 60" and
number of sections on drum are 12.
 - d) State what is congealing property of size paste with its importance and disadvantages.
- 4. Attempt any THREE of the following:** **12**
- a) State the steps in preparation of size paste.
 - b) Draw the sketch of size pressure cooker and label the parts.
 - c) Draw the sketch of any size box and label the parts.
 - d) Explain the factors affecting the rate of drying of sized warp yarn-
 - e) State the factors governing pickup of size paste.

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

- a)
 - i) Explain the importance of temperature and level control at size paste.
 - ii) State the wet splitting of sized warp and its importance.
- b) List the factors affecting migration of ends in sizing
- c) The speed of sizing machine is 30 yards/min. then
Calculate
 - i) Actual production in yards/shift of 8 hours if efficiency is 50%
 - ii) The total length of warp sized in a shift if total number of ends in a beam are 3000

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

- a) Describe with the sketch of the passage of warp yarn through sectional warping machine.
 - b) Describe the passage of warp through multicylinder sizing machine and label the parts.
 - c) State the principle at working of automatic size box and how it controls the variation in size add-on.
-