

17345

21819

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. Attempt any TEN of the following: **20****
- a) State function of expanding comb on beam warping machine.
 - b) State the function of traversing reed on sectional warping machine.
 - c) Leasing is carried out at the start of each section on sectional warping machine. State reason for the same.
 - d) State the function of master cylinder on cross border dobbie.
 - e) State any four advantages of rotary dobbie over other dobbies.
 - f) Draw schematic diagram of semi-open shed.
 - g) State any four advantages of dobbie shedding mechanism.

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- h) State the function of modulator and reading mechanism on rotary doobby.
- i) State objectives of drop-box motion. List down different types of drop box motions.
- j) What is “weft mixing” using drop box motion?
- k) State the importance of safety devices used on drop box mechanism
- l) State the principle of jacquard shedding
- m) Write a short note on figuring capacity of jacquard.
- n) Explain casting out in jacquard designing.
- o) State the significance of count of point paper in jacquard designing.

2. Attempt any FOUR of the following: 16

- a) List down different creels used on beam warping machine. Discuss their relative merits demerits.
- b) For good quality warping beams the beam warping machine must have efficient braking system. Explain.
- c) Compare right hand doobby with left hand doobby.
- d) Explain the method pegging of right hand doobby assuming your own peg plan on 12 heald shafts.
- e) Draw diagram of a London or cross tie.
- f) Which type of shed is formed on double lift single cylinder jacquard? Explain it with help of a schematic diagram. What is its advantage over single life-cylinder jacquard?

3. Attempt any TWO of the following: 16

- a) Explain the passage of warp on sectional warping machine with the help of a neat labeled diagram.
- b) Draw diagram of climax doobby and label the parts. Explain its working.
- c) Explain the working of “Cow-burn and Peck” drop box motion with the help of a neat diagram.

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

- a) (i) Calculate the production of beam warping machine in yards/shifts and kg/shift from following data:

- 1) Warping speed 500 yards/min
- 2) Efficiency 60%
- 3) Number of ends on beam = 500
- 4) Count of yarn = 30^s Ne.

Calculate number of beams produced in a shift of 8 hr if the length of warp on each beams is 14400 yards.

- (ii) A stripe warp of following particular is to be made on sectional warping machine:

- 1) Total no of ends = 2240
- 2) No of ends/pattern = 32
- 3) No of extra pattern ends at both ends near selvedge = 24
- 4) Selvedge ends at each side = 20
- 5) Creel capacity = 480
- 6) Width of warp in reed = 35".

Calculate:

- 1) No of complete patterns in warp
- 2) No of section to be made
- 3) No of ends per section
- 4) Width of warp on weaver's beam
- 5) Width of a section

- b) Describe the working of a cross border dobby with three cylinders with the help of a neat diagram.

- c) Draw diagrams of different cards used for drop box motion and draw pattern card chain without card saving for following weft pattern.

White	-	8 picks
Red	-	4 picks
Blue	-	2 picks
Yellow	-	4 picks
Blue	-	2 picks
Red	-	<u>4 picks</u>
Total		24 picks

5. Attempt any TWO of the following: 16

- a) Describe working of paper pattern doobby with the help of a neat diagram.
- b) Describe working of Eccle's drop box motion with the help of a neat diagram.
- c) Describe the working of cross border jacquard with the help of a neat diagram.

6. Attempt any TWO of the following: 16

- a) Explain working of double life double cylinder jacquard with the help of a neat labeled diagram.
- b) (i) Compare conventional doobby with cam doobby and paper pattern doobby.
- (ii) Write down various features of electronic jacquard and state its advantage.
- c) (i) Describe the method of transferring design on graph paper from artist's sketch.
- (ii) Explain in brief method of card cutting and card lacing.
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