



17345

21415

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.

MARKS

1. Attempt **any ten** :

20

- a) State objectives of beam warping.
- b) State the function of expanding comb on beam warping machine.
- c) State the importance of leasing on sectional warping machine.
- d) State main advantages of dobby shedding mechanisms over tappet shedding mechanisms.
- e) Elaborate difference between positive dobby and negative dobby.
- f) Elaborate the necessity of two cylinder and three cylinder in cross border dobby.
- g) State the function of modulator and reading in mechanism on Rotary dobby.
- h) State the objects of multiple box motion.
- i) List down various types of multiple box motions.
- j) Explain the concept of weft mixing. Why it is done ?
- k) List down different types of Jacquards.
- l) Classify Jacquards depending on the type of shed formed.

P.T.O.



## MARKS

- m) What is 'casting out' in Jacquard designing ?
- n) State the advantage of double lift Jacquard over single lift Jacquard.
- o) State the principle of Jacquard shedding with the help of diagram.

2. Attempt **any four** :

16

- a) Draw schematic diagram of beam warping machine and label the parts.
- b) Give a brief account for different types of creels used and their relative merits and demerits.
- c) State importance of stop motion on beam warping machine. State its relation with beam quality.
- d) Draw schematic diagram of sectional warping machine and label the parts.
- e) Compare beam warping with sectional warping.
- f) Calculate the production of beam warping machine in yards/shift-and lbs/shift from the following data :
  - i) Warping speed – 600 yards/min.
  - ii) Efficiency of machine – 70%
  - iii) Length of warp on beam – 12600 yards
  - iv) No. of ends on beam – 524
  - v) Count of warp = 30<sup>s</sup> cotton.

Also find out the number of warping beams produced in a shift of 8 hours.

3. Attempt **any two** :

16

- a) Explain the working of climax dobby with the help of a neat diagram.
- b) What is right hand dobby and left hand dobby ? Explain the method of pegging a right hand dobby assuming your own peg plan.
- c) Draw a neat labelled diagram of paper pattern dobby and explain its working.



**MARKS**

4. Attempt **any two** : **16**

- a) Explain the working of Cowburn and Peck's drop-box motion with the help of a neat diagram.
- b) Draw diagrams of different types of cards used for in box motions and draw pattern chain without card saving for following weft pattern :

White	8 picks
Red	2 picks
Blue	2 picks
Yellow	2 picks
Blue	2 picks
Red	2 picks
<b>Total</b>	<b>18 picks</b>

- c) With the help of a neat diagram explain the working of Eccle's drop box motion.

5. Attempt **any four** : **16**

- a) Compare conventional dobby with cam dobby.
- b) Explain the significance of cylinder selection mechanism of cross border dobby.
- c) State features and advantages of rotary dobby.
- d) Write a detailed note on figuring capacity of Jacquard.
- e) Compare Jacquard shedding mechanism with dobby shedding mechanism.
- f) Write down various features of electronic Jacquard and state its advantages.



6. Attempt **any two** :

**16**

- a) Explain working of single lift single cylinder Jacquard with the help of a neat diagram.
  - b) Explain working of double lift double cylinder Jacquard with the help of a neat diagram.
  - c) Cross border Jacquard is used for weaving which type of fabrics ? Explain the working of cross border Jacquard with the help of a neat diagram.
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