

17345

16117

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.

**Marks**

**1. Attempt any FIVE :**

**20**

- (a) What are objects of warping ? Classify warping machines.
- (b) What are different types of sheds formed ? Explain each with neat figure.
- (c) Briefly describe various shed forming mechanisms.
- (d) Enlist various types of dobbies you know. Differentiate between positive dobbie and negative dobbie.
- (e) Explain different types of drop box motion used briefly.
- (f) Why  $4 \times 1$  multiple box motion are required in weaving check fabric.
- (g) Differentiate between mechanical and electronic Jacquard.

**2. Attempt any TWO :****16**

- (a) Explain types of creels used on beam warping with their relative merits and demerits.
- (b) Explain passage of warp through Beam warping machine with neat figure.
- (c) Calculate production of a beam warping machine from following particulars and also no. of ends/beam.

Creel capacity = 600 cones

Fabric width = 63 inches

Ends/ Inch = 60

Warp count = 40<sup>s</sup> Ne

Warping speed = 650 mts/min.

Efficiency = 68%

**3. Attempt any TWO :****16**

- (a) Draw 3/2, 2/1 twill weave and show right hand and left hand dobby. Pegging with neat figure.
- (b) Explain construction and working of keighly dobby with neat sketch.
- (c) Differentiate between Conventional dobby, Cam dobby and Paper cam dobby.

**4. Attempt any TWO :****16**

- (a) Describe construction and working of eules drop box motion with neat figure.
- (b) What is need of cross border dobby ? Explain construction and working of a cross border dobby with neat sketch.
- (c) What are different types of cords used for drop box motion ? Prepare a cord chain for following pattern :

8 Red, 20 Blue, 16 Yellow, 10 White

**5. Attempt any TWO :****16**

- (a) What is need of Jacquard Shedding ? Explain with neat figure construction and working of single lift single cylinder Jacquard.
- (b) Describe process of “Cord lacing” and casting out from Jacquard.
- (c) Explain modern developments of modern Jacquard.

**6. Attempt any TWO :****16**

- (a) Explain with neat figure Double lift Double Cylinder Jacquard.
  - (b) Explain salient features of modern warping machine.
  - (c) Write short notes on following :
    - (i) Pick and pick mechanism
    - (ii) Pick at will mechanism
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