

315395

12526

3 Hours / 70 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 FIVE of the following :** **10**
- a) List the raw-material requirements for shuttleless weaving machine.
 - b) List the salient features of projectile weaving machine.
 - c) Calculate the weft insertion rate of projectile in meters per min, if picks per min are 250 for 1.9 meter reed space and no. of photos are one.
 - d) List the various types of rapier weaving machines.
 - e) List the salient features of flexible rapier weaving machine.
 - f) List the different types of nozzles used in air-jet weaving machine with sequence.
 - g) List the novel weaving methods for woven fabric manufacturing.

P.T.O.

- 2. Attempt any THREE of the following : 12**
- a) Classify the weaving machines according to the weft insertion method.
 - b) Give the specifications for different types of projectile used in projectile weaving m/c.
 - c) Compare loop transfer and tip transfer technique in rapier weaving machine.
 - d) Explain the picking mechanism on water jet loom.
- 3. Attempt any THREE of the following : 12**
- a) Explain the principle of impulsive beat-up mechanism on projectile weaving machine.
 - b) Illustrate with neat sketch the features of profile reed.
 - c) Explain any one flexible rapier drive with suitable diagram.
 - d) Explain the working principle of circular weaving machine.
- 4. Attempt any THREE of the following : 12**
- a) Explain the principle of torsion bar picking mechanism with suitable diagram.
 - b) List the modern developments in projectile weaving machines.
 - c) Give the detailed classification of rapier weaving machines.
 - d) List the water quality requirements for water-jet loom.
 - e) Illustrate the principle of needle loom with neat sketch.

- 5. Attempt any TWO of the following :** **12**
- a) Compare shuttle loom weaving with shuttleless weaving with respect to raw material requirement, production, fabric quality, etc.
 - b) Illustrate with neat sketch the picking cycle on projectile loom.
 - c) Explain modern developments in rapier weaving machine with respect to terry weaving.
- 6. Attempt any TWO of the following :** **12**
- a) Explain the concept of bi-phase rapier weaving machine.
 - b) Explain the air quality requirements for air-jet weaving machine.
 - c) Illustrate with suitable diagram the picking cycle of air-jet weaving machine.
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