



**RN-7503**

**B. E. - IV (Sem. VII) (T. T.) Examination**

**May / June - 2010**

**Modern Weaving Technology**

Time : 3 Hours]

[Total Marks : 100

**Instructions :**

(1)

नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. E. - 4 (Sem. 7) (T. T.)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Modern Weaving Technology"/>	<input type="text"/>
Subject Code No. : <input type="text" value="7"/> <input type="text" value="5"/> <input type="text" value="0"/> <input type="text" value="3"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="1&amp;2"/>	<input type="text"/>
	Student's Signature

- (2) Answers to the **two** sections must be written in **separate** answer books.
- (3) Figures to the right indicate full marks.
- (4) Tie **two** sections **separately**.

**SECTION - I**

- 1 (a) Fill in the blanks : 10
- (i) B C Spooler is used to produce \_\_\_\_\_ type of weft supply package.
- (ii) Single and \_\_\_\_\_ type of rapier looms are available in the market.
- (iii) Pneumatic weft accumulator is preferable for \_\_\_\_\_ and \_\_\_\_\_ yarn.
- (iv) The weft is inclined at an angle of \_\_\_\_\_ degrees to warp in case of rectilinear multi phase loom.
- (v) \_\_\_\_\_ bar is the important part of Sulzer projectile picking mechanism.
- (vi) Dwell period or reed is \_\_\_\_\_ degrees in case of projectile beat-up motion.

- (vii) Diameter : Length ratio is always less than 1 in case of \_\_\_\_\_ types of weft supply package.
  - (viii) Conveyer chain is used to \_\_\_\_\_ the grippers from receiving side to picking side of a projectile loom.
  - (ix) Less floor space requirement is the main advantage of \_\_\_\_\_ type of rapier loom.
  - (x) Tension on weft can be set to control \_\_\_\_\_ on measuring drum of feeding system.
- (b) Explain different types of weft supply packages used on shuttleless looms with the help of neat diagrams. **10**
- 2** State and explain different modules of M 8300 multi phase loom. With the help of neat diagrams, explain shedding, weft insertion and beat-up mechanisms of the said loom in detail. **15**

**OR**

- 2** State the requirements for weft supply packages used on shuttleless looms. With the help of neat diagrams, explain different types of weft feeding systems and weft tensioners used on shuttleless looms. **15**
- 3** Write short notes on : (any **three**) **15**
- (i) Tip transfer type double rapier loom
  - (ii) Technological problems of multi-phase looms
  - (iii) Shedding mechanism of projectile loom
  - (iv) Driving mechanisms for flexible rapier heads.

**SECTION - II**

- 1** (a) State whether True or False : **10**
- (1) Profile reed is a traverse on air-jet loom.
  - (2) The suction nozzle aids in straightening the weft thread.
  - (3) The twin nozzle helps in increasing air-jet speeds.
  - (4) The water-jet weaving shed requires anti-corrosive parts.

- (5) The conductivity of water does not affect the water-jet weaving process.
- (6) The circular looms use multiple shuttles.
- (7) Triaxial weaving consists of weaving with 2 sets of yarns.
- (8) On modern air-jet looms the individual compressors are fitted.
- (9) The distance between all sub-nozzles is the same.
- (10) The modern air-jets use E-shedding devices.
- (b) Explain in detail the working of compressor house used in air-jet looms. **10**
- 5** (a) Explain in detail the sequence of operations on water-jet looms with neat diagrams. **7**
- (b) Explain in detail the water quality standards used on water-jet looms. **8**
- OR**
- 5** (a) Explain in detail the relay-jet air-jet looms. **8**
- (b) Explain in detail the theory of air-jet picking process. **7**
- 6** Write short notes on: (any **three**) **15**
- (i) Foyelle ancet circular loom
- (ii) Fabric drying system on water-jet looms
- (iii) Timing of water-jet looms
- (iv) Triaxial weaving.
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