



SE-7503

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

April / May - 2011

Modern Weaving Technology

Time :3 Hours]

[Total Marks : 100

Instructions :

नीचे दशांशवैल निशानीवाणी विगतो उत्तरवडी पर अवश्य कभवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. E. - 4 (SEM. 7) (T.T.)

Name of the Subject :
Modern Weaving Technology

Subject Code No. : 7 5 0 3 Section No. (1, 2,.....) : NIL

Seat No. : [][][][][][][]

Student's Signature

(1) Figures to the right indicate full marks.

Q1a.) Fill in the blanks : [10]

- _____ number of projectile is required for every 10 inches of fabric to be woven.
- _____ Weft supply packages are produced on Precision winding machines.
- Pneumatic weft accumulator is not preferable for _____ and _____ yarn.
- Perforated bobbins are used when yarn is taken for _____ process.
- _____ bobbins are preferred for Rapier type of shuttleless looms.
- _____ is used to transfer the grippers from receiving side to picking side of a projectile loom.
- Weft insertion rate of Multi Phase loom is about _____ times than that of Single Phase shuttleless loom.
- Weaver's beam of M8300 Multi Phase loom has _____ mm diameter.
- _____ floor space requirement is the main advantage of flexible type of rapier loom.
- Detector bar is the main part to operate all the _____ & _____ motions of Sulzer Projectile loom.

Q1b.) Explain different types of weft feeding devices, with the help of neat diagrams. [10]

Q2.) With the help of neat diagrams, explain Shedding and Picking mechanisms of [15] projectile loom.

OR

Q2.) Classify Rapier looms. With the help of neat diagrams, explain the mechanisms used [15] to drive the rapier heads on flexible and rigid rapier looms.

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[Contd...

- Q3 .) Write Short Notes on : (Any three) [15]
- i. Types of weft tensioners used on shuttleless looms
 - ii. Types of weft supply packages
 - iii. Shedding and beat-up mechanisms of M8300 multi phase loom
 - iv. Guiding elements for flexible and rigid rapier heads

- Q4a.) Explain in one sentence: [10]
- i. Traverse aids used on air-jet looms.
 - ii. System used to discard the water used on water-jet looms.
 - iii. DISCO LENO system
 - iv. Fused selvedge
 - v. The first commercial air-jet machine
 - vi. Closing confusors
 - vii. Electromagnetic shuttle drive
 - viii. Infra red heater on water jet looms
 - ix. Function of reed on circular looms
 - x. Number of shuttles used on circular looms.

Q4b.) Explain with neat sketch the nozzle on water-jet looms. [10]

Q5a .) Explain with neat sketch the profile reed on air-jet looms. [06]

Q5b.) Explain with neat sketch the sequence of operations on jet looms. [09]

OR

Q5a .) Explain with neat sketch the Dautricourt circular looms. [05]

Q5b.) Explain with neat sketch the timing on water-jet weaving machine. [10]

- Q6 .) Write Short Notes on : (Any three) [15]
- i. Triaxial Weaving.
 - ii. Electronics on air-jet looms.
 - iii. The air-jet compressor house.
 - iv. The theory of Air-jet loom.