



RM-7903

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

May / June - 2010

Process Control in Weaving

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशांशवैध निशानीवाणी विगतो उत्तरवही पर अवश्य लખवी. 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. 8) (T.T.)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Process Control in Weaving"/>	<input type="text"/>
Subject Code No. : <input type="text" value="7"/> <input type="text" value="9"/> <input type="text" value="0"/> <input type="text" value="3"/>	<input type="text" value="Student's Signature"/>
Section No. (1, 2,.....): <input type="text" value="1&2"/>	

- (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 up the blanks : 5
- (i) Splicing is difficult in Rotor yarns and retained splice strength varies between ____% of parent yarn strength.
- (ii) By detecting contaminants in yarns, fabric repairs costs are reduced by upto ____%.
- (iii) Yarn Waste during splicing a break/cop change in Muratec make autoconer ranges from _____.
- (iv) The recommended wax pick up for synthetics is ____ gas per kg of yarn.
- (v) For polyester staple fibre blended warps hardness of rubber coated squeezing roller should be _____ shore.

- (b) Define the terms : 5
- (i) RKM
- (ii) Cobweb
- (c) Discuss the factors determining the quality of knot. 5
- (d) Discuss the wrong work practices which would affect the hard waste level in winding. 5
- 2** (a) Enlist the settings to be adopted to the yarn processed on splicer. 5
- (b) Discuss in detail recent developments in the headstock of Direct Warper. 10
- OR**
- 2** (a) Enlist the factors on which winding production depends. 5
- (b) Highlight the innovation in the area of warping beam in a warping machine. 10
- 3** Write short notes on : (any three) 15
- (i) Autotense FX
- (ii) Wet Splitting
- (iii) After waxing
- (iv) High pressure squeezing

SECTION - II

- 4** (a) State whether True or false: 10
- (i) Barco Cyclops is an automatic fabric inspection system.
- (ii) Gout is a type of fabric defect.
- (iii) The gauge of the reed does not affect the end breaks on the loom.
- (iv) Nylon monofilament loops control weft breaks on the loom.
- (v) ATIRA cam analyser is used to check the tappet profile.

- (vi) With increasing warp density in the size through the hairiness of the sized warp yarn increases.
 - (vii) Wet splitting with splitting rods improves warp yarn weaving behaviour.
 - (viii) Absorption of moisture at higher humidities can make the size film plastic.
 - (ix) The nip at the draw roller is an isolating nip in sizing machine.
 - (x) The drying rate is not affected by the irregularity of the warp sheet.
- (b) Discuss in brief the effect of cylinder dimensions on the drying capacity of a cylinder drier. **5**
- (c) Define : **5**
- (i) Non-genuine wet splitting
 - (ii) Genuine wet splitting
- 5** (a) Explain in detail the various means to control efficiency in the loom shed. **15**
- OR**
- (a) Explain in detail the automatic inspection systems used on the loom. **10**
- (b) Explain the precautions for weaving Dyed yarns. **5**
- 6** Write short notes (on any **three**) **15**
- (i) Loom speed
 - (ii) Warp streaks
 - (iii) Weaving of Voiles
 - (iv) Polyester/cotton blend weaving.