THE TEXTILE ASSOCIATION (INDIA)
A.T.A. (REVISED) PART-III EXAMINATION – 2012
PAPER – A 3.Ob1
PROCESS CONTROL IN FABRIC MANUFACTURE
MARKS : 100

Date: 24.12.2012

Instructions:
1. Attempt six questions out of which Q.1 is compulsory
2. Answer each next main question on new page
3. Figure to the right indicate full marks
4. Illustrate your answer with sketches and flow chart wherever necessary
5. Use of non programmable electronic pocket calculator permissible.
6. Mobile and any other communication devices are not allowed in exam hall.
7. Assume suitable data wherever necessary.

Q.1. a. State True or False:
1. Stoppage of warping machine due to an end break is likely to deteriorate the quality of beam.
2. The measure of machine productivity in weaving is the length of cloth produced per unit time.
3. A fabric defect “temple marks” is most likely seen in light fabrics such as fine poplins.
4. At pirm winding, the main purpose of applying tension in the yarn is to obtain a desired compactness of the yarn on the pirm.

b. Fill in the blanks:
1. __________ waste is the unavoidable waste that has to be incurred to carry out the operation in any process.
2. On automatic winding machines a yarn defect called __________ is formed due to excessive slackness of the yarn at the time of knotting.
3. The term used to express the percent increase in length that the yarn undergoes during sizing is called __________.
4. The strength of Polyester Cotton yarns __________ as the Polyester fibre content increases.

c. Match the following:
1. Lashing -in __________________
2. Soft nose __________________
3. Application of softener on sized yarns __________________
4. Lappers __________________
   a. Fabric defect __________________
   b. After-waxing __________________
   c. Winding __________________
   d. Sizing __________________

Q.2. a. Explain the scope of process control in Beam warping.
   (08)

b. State the factors affecting size pick-up and how to control it.
   (08)

Q.3. a. Explain the fabric defects with causes and remedies for Missing end and Reed mark
   (08)

b. Explain how to conduct a snap study in loom shed.
   (08)
Q.4.  
   a.  Explain breakage percentages and its control with reference to Efficiency in warping machine.  
   b.  Explain the concept of "Mill experimentation".  

Q.5  
   a.  What is the scope of process control in Autoconer winding machine.  
   b.  What are the different winding faults? State causes and remedies.  

Q.6  
   a.  How will you improve the build of pirn? State how to minimize End breaks in pirn winding.  
   b.  State different types of Hard wastes generated at Winding & Warping.  

Q.7  
   a.  Explain with example selection of accessories and its care in loomshed  
   b.  Explain the concept of Quality of Sized beam.  

Q.8  
   b.  Why wet splitting is better than dry splitting?