THE TEXTILE ASSOCIATION (INDIA)
A.T.A. PART -III NEW 3 YEARS EXAMINATION - 2014
PAPER - A 3.06
PROCESS CONTROL IN FABRIC MANUFACTURE

MARKS: 100
TIME: 10.00AM TO 1.00 PM

Instructions:
1. Attempt any 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 answers 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

i) The guide distance on winding machines should be kept as close to the minimum value as is practically possible.

ii) Use of a magazine creel can very substantially cut down the loss in efficiency due to set changes.

iii) The process control programme at warping should aim at minimizing the end breakage rate and the production of satisfactory beams that will unwind well during sizing.

iv) The picking bands should be kept inside polythene bags and stored in a dry place.

B) Fill in the blanks

i) A ________ is a defect in the fabric in which weft loop protrudes from the cloth surface.

ii) A defect furrow-like appearance is seen in ________ fabrics at places along the fabric length giving a delusion of missing pile from these portions.

iii) The Polyester component in Polyester Blended yarns imparts them hydrophobic and ____________ properties.

iv) A ________ coating on the cylinders in a sizing machine will reduce stickiness.

C) Match the following

a) Weft Snarl
b) Drop pins
c) Staggering
d) Length measuring motion

a) Warping
b) Healds
c) Warp slip motion
d) Fabric defect
Q.2  
a. Explain the scope of process control in Warping.  
   (08)  
b. Explain snap study technique and its application in Loom shed.  
   (08)  

Q.3  
a. Explain the fabric defects with causes and remedies for Broken picks  
   and Lashing-in.  
   (08)  
b. Explain the concept of Quality of Sized Beam.  
   (08)  

Q.4  
a. What are the major factors for Quality Beam preparation in Warping  
   (08)  
b. What are the criteria for selection of Healds and Reeds?  
   (08)  

Q.5  
a. What is the scope of process control in Autoconer Winding machines?  
   (08)  
b. State the factors responsible for grey fabric inspection.  
   (08)  

Q.6  
a. Compare Wet and Dry splitting.  
   (08)  
b. Give steps to implement process control programme in Sizing.  
   (08)  

Q.7  
   (08)  
b. State types of winding faults with causes and remedies.  
   (08)  

Q.8  
a. Which factors decide the Automatic power loom performance.  
   (08)  
b. Briefly write a note on Quality of sized beams.  
   (08)  

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