THE TEXTILE ASSOCIATION (INDIA)
PAPER – A 3.0B
PROCESS CONTROL IN FABRIC MANUFACTURE

DATE: 25.12.2016        Marks: 100        Time: 10.00 a.m. to 01.00 p.m.

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 device are not allowed in exam hall.
7. Assume suitable data wherever necessary.

Q.1

A) State True or False

i) Drop pins of stop motions should not have any grooves or cuts.
ii) Beams of small barrel diameter give rise to high unwinding tension at sizing.

iii) At winding process, waste occurs at the time of mending a break or changing a bobbin.

iv) The increase in the abrasion resistance of the yarn will be satisfactory if the level of size pick-up is adequate.

B) Fill in the blanks

a) A defect _____ is a weft loop protruding from the cloth surface.

b) _______ is an application of softener on the sized yarns in a more appropriate manner.

c) A fabric defect characterized by a grouping of warp ends through individual dents of the reed with a fine crack showing up between such groups is called _______.

d) A major cause of defect _______ at sizing is incorrect mending of ends at Warping.

C) Match the following –

1. Warp streaks  a) Winding
2. Sunken selvedge  b) Weaving
3. Tamarind Kernal powder  c) Fabric Defect
4. Slub  d) Sizing

Q.2

a. Explain the scope of process control in Winding

b. How effective slab catcher settings help in getting quality in winding?
Q.3
a. Explain how control on sizing conditions is effective. 08
b. Explain the fabric defects with causes and remedies- i. Weft Sners and ii. Weft bar

Q.4
a. What are the major factors for Quality Package preparation in Weft winding? 08
b. What parameters of Reed and Heald should be considered for process control on loom?

Q.5
a. What is the scope of process control in Warping? 08
b. What is machine audit? Why is it necessary in weaving?

Q.6
a. What is After-waxing? How it helps in improving sized yarn quality? 08
b. Which factors decide plain power loom performance?

Q.7
a. State the factors affecting size pick up and give steps to control them. 08
b. What are the factors for preparation of Quality Sized beam

Q.8
a. Give steps to implement process control program in Loom shed 08
b. What is Wet splitting? What are its advantages and disadvantages?

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