THE TEXTILE ASSOCIATION (INDIA)
G.M.T.A. (REVISED) EXAMINATION – 2015
SECTION-B - PAPER-B.3

TEXTILE WET PROCESSING

Date: 26.12.2015
Marks: 100
Time: 2 pm to 5pm

Instructions: 1. Attempt SIX questions out of which Q1 is compulsory
2. Answer each next 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

Q1 Answer in short (any ten)

a. Explain the meaning of shearing and singeing.

b. What is the purpose of scouring of textiles?

c. What is Barium Activity Number?

d. Explain meaning of wash fastness of dyed material.

e. Which dyes are used for dyeing of silk?

f. Write proper word from given in bracket- (oxidation, ingrain, mineral)
   Aniline Black is ______ colour & Mineral Khaki is ______ colours.

g. Which fabrics are given Water Repellent finish?

h. Explain whether True or False. Write correct statement if false-
   i. For fixation of pigment binder is necessary.
      ii. Nickel screens are used in Roller printing.
   i. What is the object of calendaring finish?

j. What is use of thickeners in printing?

k. Which chemicals are used for azoic dyeing?
I. Match the following

   a. Process  i. Property for textiles
   b. Printing  ii. Whiteness
   c. Finishing  iii. Attractive
   d. Bleaching  iv. End use quality
   e. Dyeing  v. Decorative

Q2  a. Explain the quality test to check perspiration fastness of dyed fabric  04
    b. Explain dyeing of reactive dyes on cotton.  08
    c. Explain function of urea in steaming of printed fabric.  04

Q3  a. Explain mechanical and chemical finishing with examples.  04
    b. Describe printing on flat bed screen printing machine.  08
    c. Explain importance of following in gas singeing-
       i. nature of flame  ii. purpose of quenching with water

Q4  a. Why mercerization is necessary for cotton? Write the types of various mercerizing
    machines used for fabric.  06
    b. Explain the effect of Material to Liquor Ratio (MLR) on dyeing of textiles.  05
    c. Describe working of slitter machine in knitted fabric processing.  05

Q5  a. Describe process of bleaching with hydrogen peroxide with reactions.  06
    b. What is Soft finish? What are different types of softeners?  06
    c. What is the meaning of Resist style of printing?  04

Q6  a. Describe the principle and process of Zero-Zero finishing.  07
    b. Explain degumming of silk. What are different methods of degumming of silk?  05
    c. Explain method of carrier dyeing of polyester with disperse dyes?  04

Q7  a. Describe Pigment printing process with chemicals used.  05
    b. Explain functions of wetting agent and sequestering agent in textile wet processing.  06
    c. Explain dyeing of cotton with vat dyes.  05

Q8  a. Describe heat setting process for synthetic fabrics.  06
    b. Explain reductive bleaching of wool.  04
    c. Write the chemicals, conditions of Enzymatic desizing. Give its advantages.  06