THE TEXTILE ASSOCIATION (INDIA)
G.M.T.A. (REVISED) EXAMINATION – 2013
SECTION-B PAPER-III (B-3)
TEXTILE WET PROCESSING

Date: 25.12.2013 Marks : 100 Time: 2 to 5 pm

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. Answer in short
   i. Write down the objects of shearing and cropping.
   ii. Write the names of machine used for heat setting and dimensional stability of fabrics.
   iii. What is degumming of silk?
   iv. Explain in short mercerization process.
   v. What is the pH of dye bath in fixation of reactive dyes?
      Which chemical is used for fixation?
   vi. Explain the use of urea in printing paste.
   vii. Write down different chemical finishes.
   viii. What is the meaning of fastness of dyed material?
   ix. Write proper word from given bracket- ( oxidation, in grain, mineral)
       Azoic colours are _______ colours & Anilic Black is _______ colour.
   x. What is the change in the cotton material after mercerization?

Q.2. a. What are the drawbacks of plate singeing and Cylinder singeing machines?
   b. Explain scouring process for cotton material.
      object, chemicals, conditions, reactions.
   c. Explain dyeing of polyester by HTHP method.

Q.3. a. What is calendaring? Explain calendaring process with any one machine.
   b. With a simple schematic diagram explain Transfer printing.
   c. With a neat diagram discuss bleaching process in J-box.

Q.4. a. Write a note on Hot mercerization.
   b. Which dyes are used for dyeing of wool? Explain dyeing with any one process.
   c. Describe heat setting process for polyester fabrics.
      object, machine used, conditions, importance

Q.5. a. What is the importance of thickeners in printing paste?
   b. Write down names of various thickeners.
   c. Explain Discharge style of printing. Write the names of different discharging agents.
   d. Write a note on Resin finishing.
Q.6  a. Explain dyeing of cotton with vat dyes.
    Why fastness properties of vat dyes are very good? (06)
    b. Describe the test to check washing fastness of dyed material. (04)
    c. Explain principle and process of Sanforising process. (06)

Q.7  a. Explain the process of bleaching of polyester with sodium chlorite. (05)
    b. Explain importance of gumming and washing of blanket in screen printing machine. (05)
    c. Write down the sequence of finishing processes for cotton knitted fabrics. (06)

Q.8  a. What is Ink-Jet printing?
    Explain two methods of Ink-Jet printing. (05)
    b. Explain washing of fabric on washing range.
    No. of tanks, flow of water, passage of fabric, heating system (06)
    c. Write a note on Barium Activity Number of mercerized fabric. (05)