THE TEXTILE ASSOCIATION [India]
G.M.T.A. (Revised) Examination – 2014
Section - B Paper - B.3
Textile Wet Processing

Date: 26.12.2014 Marks: 100 Time: 2.00 pm to 5.00 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 communication devices are not allowed in exam hall
7. Assume suitable data wherever necessary

Q.1 Answer in short (any ten)
   a. Give the sequence of textile wet processing. (20)
   b. What is the object of Shearing and Cropping?
   c. What are different positions of flame in singeing of fabrics?
   d. Give reason - It is necessary to use wetting agent in scouring process.
   e. Write down the names of various bleaching agents.
   f. What is the change in the properties of cotton fabric after mercerization?
   g. Match the following:

<table>
<thead>
<tr>
<th>Dyes</th>
<th>Acid</th>
<th>Vat</th>
<th>Disperse</th>
<th>Cold brand reactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature of dyeing</td>
<td>130°C</td>
<td>40°C</td>
<td>100°C</td>
<td>60°C</td>
</tr>
</tbody>
</table>

h. Explain the meaning of Transfer printing.
   i. Divide following in mechanical and chemical finishing –
      Sanforising, softening, heat setting, fire-proof finish
   j. Write down the names of machines used for dyeing of knitted fabrics.
   k. What are the disadvantages of acid desizing of cotton?
   l. Fill in the blanks -
      pH of reactive dyeing is ___, pH of disperse dyeing is ___.

Q.2 Answer the following-
   a. Explain the process of continuous singeing and desizing. (5)
   b. Describe dyeing of cotton with vat dyes. (6)
   c. Write down different types of softeners. What are the properties of good softener? (5)

Q.3 Answer the following-
   a. Explain the process of bleaching of polyester with Sodium chlorite. (5)
   b. Write a detail note on Pigment printing. (6)
   c. What is Calendering? Describe any one method of calendering. (5)

Q.4 Answer the following-
   a. Write a note on Degumming of silk. (4)
   b. What is zero-zero finishing? Explain the machine and process for this finishing. (8)
   c. Explain the process of checking rubbing fastness of dyed material. (4)
   d. ____________________________

Q.5 Answer the following-
   a. Which dyes are used for dyeing of wool? Explain any one method of wool dyeing. (6)
   b. Describe process of mercerization and machine used for mercerization. (6)
   c. Explain the sequence of finishing of knitted fabrics. (4)
Q.6 Answer the following-
  a. Describe the mechanism of dyeing of polyester with suitable dyes. (5)
  b. Explain the printing with semi-automatic flat-bed screen printing machine. (8)
  c. Write a short note on resin finish. (3)

Q.7 Answer the following-
  a. Which precautions are necessary during singeing? (3)
  b. What is the test to check desizing efficiency? (3)
  c. What is the effect of MLR on dyeing? (4)
  d. Write a note on Discharge style of printing. (6)

Q.8 Answer the following-
  a. What are different finishing methods for woolen fabrics? (4)
  b. Explain the function of following chemicals in printing paste-
     Urea, Thickener, Resist salt L. Rongalite C (5)
  c. Write down the chemicals and their use in reactive dyeing of cotton. (3)
  d. Write a note on scouring of synthetic fibres. (3)

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