THE TEXTILE ASSOCIATION (INDIA)
G.M.T.A. (REVISED) EXAMINATION – 2019
SECTION – D PAPER – D.1
Wet Processing - Pretreatment and Bleaching

Date: 21.12.2019 Marks: 100 Time: 2.00 pm to 5.00 pm

Instructions:
1. Attempt any Six questions out of which Q.1 is Compulsory
2. Answer each next question on new page
3. Figures to the right indicate full marks
4. Illustrate your answers with neat sketches & flow charts wherever necessary
5. Use of non-programmable electronic pocket calculator is permissible
6. Mobile and any other communication devices are not allowed in the Examination hall.
7. Assume suitable data wherever necessary

Q.1 Attempt any Five

1. Enlist the advantages of Mercerizing cotton.
2. Define the objectives of desizing?
3. Give the importance of souring of cotton from dyer point of view? Write the general recipe used for the souring of cotton.
4. Write the significance of Degumming of Silk. Explain any one method.
5. What are the objectives of scouring cotton? Write the general recipe of chemicals used.
6. Enlist any two advantages and two limitations of H₂O₂ bleaching.
7. Draw a neat labeled diagram of decatizing machine and write its working principle.
8. What are the objectives of scouring of synthetic fibres?

Q.2

1. With a neat labeled diagram and the parameters, explain continuous scouring of cotton in detail.
2. Enlist and explain the quality control parameters for cotton after mercerization.

Q.3

1. Explain with the help of a neat labeled diagram, wool scouring. Also explain the operating conditions.
2. Write a note on scouring of woven cotton fabrics. Explain the modifications required for scouring of knitted cotton in comparison to woven cotton fabrics.
Q.4
1 Explain in detail with the help of neat diagram, the Potting process carried out on wool. Write the conditions and the process details. 08
2 Why is H₂O₂ called as universal bleaching agent? Explain the procedure of hydrogen peroxide bleaching of cotton. Enlist the chemicals used in peroxide bleaching and write their functions. 08

Q.5
1 Draw a neat labeled diagram of Gas singeing machine. Write the precautions to be taken while working of machine. Also write the advantages and limitations. 08
2 Write a detailed note on the different machineries employed for carrying the mercerization of textiles. 08

Q.6
1 With a neat labeled diagram, explain the Kier boiling scouring method. Write its advantages and limitations. 08
2 Write a note on the bleaching of cotton with peracetic acid. Give any two advantages and limitations Compare it with hydrogen peroxide bleaching. 08

Q.7
1 Write a detailed note on the Continuous Bleaching Range used for bleaching of textiles. 08
2 With a neat labeled diagram, describe the working principle and procedure of a Chain mercerizing machine? Write its advantages and limitations. 08

Q.8
1 Write down the bleaching recipes and conditions of bleaching polyester/ cotton and polyester / wool blended fabrics. Explain the function of each chemical used. 08
2 Give the classification of the different methods of Desizing? Write the procedure and conditions of the enzymatic method. Compare with acid desizing method. 08

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