

B.TECH DEGREE EXAMINATIONS: NOV/DEC 2010

Fifth Semester

TEXTILE TECHNOLOGY

U07TT504: Textile Chemical Processing - I

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions:-

PART A (10 x 1 = 10 Marks)

1. During Desizing the main impurity removed is;
A) Wax B) Pigments C) Starch D) Fats
2. Carbonization in wool material is carried out to remove;
A) Vegetable matters B) Greasy Substances C) Mineral matters D) Pigment contents
3. The textile material suitable for Calcium hypochlorite bleaching is;
A) Wool B) Cotton C) Silk D) Nylon
4. The chemical used in Mercerization process is;
A) Sulphuric acid B) Sodium chloride C) Sodium bisulphite D) Sodium hydroxide
5. Choose the insoluble dye among the following;
A) Direct dye B) Vat dye C) Reactive dye D) Acid dye
6. Name the chemical used in Vatting process;
A) Sodium sulphate B) Calcium carbonate
C) Sodium hydrosulphite D) Magnesium hydroxide
7. The most suitable dye for Polyester dyeing is;
A) Direct dye B) Disperse dye C) Basic dye D) Vat dye
8. The temperature set for Thermosol dyeing on polyester is;
A) 50°C B) 100°C C) 110°C D) 210°C
9. Name the machine used for cotton scouring
A) Kier B) Winch C) Soft Flow D) Padding Mangle
10. Select the machine used for dyeing Knitted cotton fabric
A) Padding mangle B) Jigger C) Winch D) HT Beam

PART B (10 x 2 = 20 Marks)

11. Give the wet processing sequence for silk dyeing.
12. State the advantages of Enzymatic Desizing.
13. List out the problems associated with Calcium hypochlorite bleaching.

14. What are the limitations of Mercerization?
15. Discuss briefly about the Vatting process.
16. Give the reasons for ban of some Synthetic dyes.
17. Why carrier dyeing is not recommended for dyeing of Polyester?
18. List out the dyes suitable for Nylon dyeing?
19. Justify the economic aspects involved in Cotton Scouring.
20. Name the parameters involved in Padding Mangle.

PART C (5 x 14 = 70 Marks)

21. a) Write the Saponification reaction. Explain with recipe, how Saponification helps in Cotton scouring? (6+8)

(OR)

b) Write the importance of Singeing. Give the types of Singeing; and Elaborate the suitable method for heavy fabrics. (4 + 2 + 8)
22. a) Explain the mechanism of Hydrogen peroxide bleaching suitable for Cotton.

(OR)

b) Elaborate the Mercerization process carried out in Circular machine.
23. a) Give an account of the method of application of Reactive dyes on Cotton Material.

(OR)

b) Give an account on the method of application of Vat dyes on Cotton Material.
24. a) What are the advantages of Textured Filament? Describe the method of dyeing of Textured Polyester filament. (6 + 8)

(OR)

b) What is Mass Colouration? Explain the method of Mass Colouration? Give its advantages. (4 + 8 + 2)
25. a) With neat diagram, explain the dyeing operation performed in Jigger dyeing machine. (4 + 10)

(OR)

b) With neat diagram, explain the dyeing operation performed in Soft Flow dyeing machine. (4 + 10)
