

CBCS SCHEME

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18TX45

Fourth Semester B.Tech. Degree Examination, July/August 2022

Chemical Processing of Textiles - II

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Write the classification of dyes. Briefly explain the principle of dyeing. (10 Marks)
b. Discuss the theories of dyeing. (10 Marks)

OR

- 2 a. Explain the process of selection of dyes for specific end uses. (10 Marks)
b. Write a note on effect of fibre structure on dyeing behavior of Textiles fibres. (05 Marks)
c. Briefly explain the action of electrolyte and effect of dye bath temperature on dyeing behavior of textile materials. (05 Marks)

Module-2

- 3 a. Describe the differences between cold brand and hot brand reactive dyes. (10 Marks)
b. Explain the basic principle of application of Vat dyes on cotton. Give the properties of Vat dyes. (10 Marks)

OR

- 4 a. What are solubilised Vat dyes? Describe the properties and application of Solubilised Vat dyes on cotton. (10 Marks)
b. Give the properties of Azoic dyes. Explain the stages of application of azoic dyes on cotton. (10 Marks)

Module-3

- 5 a. Give the classification of acid dyes based on their application. Discuss the affect of acid and leveling agents on dyeing performance of acid dyes on wool. (10 Marks)
b. Explain the properties and application of basic dyes on wool and cotton. (10 Marks)

OR

- 6 a. What are Mordant dyes? Briefly explain different methods of dyeing of cotton by using mordant dyes. (10 Marks)
b. Briefly explain the following :
i) Metal – Complex dyes ii) Natural dyes. (10 Marks)

Module-4

- 7 a. Mention the characteristics of disperse dyes. Describe the mechanism of disperse dyeing of man – made fibres. (10 Marks)
b. Briefly explain the thermosol dyeing of polyester. (05 Marks)
c. Write a note on modified basic dyes. (05 Marks)

OR

- 8 a. Briefly explain various after treatments given to synthetic dyed goods. (10 Marks)
b. Describe the methods of dyeing of blends. (10 Marks)

Module-5

- 9 a. Mention various advantages and limitations of garment dyeing. Explain the precautions to be taken for effective dyeing of garments. (10 Marks)
- b. With the help of a neat diagram, explain the working of Jet dyeing machine. (10 Marks)

OR

- 10 a. With the help of neat sketches, describe the working of Winch and Jigger. Give their suitability. (10 Marks)
- b. Write the importance of colour measurement and colour matching. Explain the working principle of Spectrophotometer. (10 Marks)

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