

Code No: 155GT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, March - 2024

TEXTILE WET PROCESSING

(Textile Engineering)

Time: 3 Hours

Max. Marks: 75

Note: i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A**(25 Marks)**

- 1.a) Why GSM of fabric is the base for water calculation in wet processing house? [2]
- b) What types of sorts are normally singed and why? [3]
- c) How full bleach differs from half bleach? [2]
- d) Mention the common Scouring loss for Cotton sorts and advance the reasons for the same. [3]
- e) Why 18 % NaOH is required for Mercerization of Cotton? [2]
- f) What is Chromophore and Auxchromophore? [3]
- g) Show the Exhausting agent % as a function of Dye % shade. [2]
- h) How Enzymes are useful in ETP? [3]
- i) What is the basis for selection of Dyeing machines? [2]
- j) When do you prefer one bath dyeing of blends? [3]

PART – B**(50 Marks)**

2. Give the water calculations for a Plain fabric with 185GSM till finishing. [10]
- OR**
3. Discuss the effect of parameters on Singed fabric quality in Gas Singeing. [10]
4. The GSM of a plain Cotton fabric is 150. Describe the process set up for Scouring. [10]
- OR**
5. Discuss the Open width Bleaching of Cotton fabric with necessary technical data. [10]
6. Give an account of quality control procedures in Mercerizing. [10]
- OR**
7. Develop an expression for Solubility parameter in Dyeing kinetics. [10]
8. Give the industrial procedure set up for dyeing 67/33 P/V blends with necessary calculations. [10]
- OR**
9. Compare and Contrast the Fastness of dyes of Direct, Sulphur and Vat dyes. [10]
10. With neat sketch, explain the working of Twin jet dyeing machine with necessary calculations. [10]
- OR**
11. Give an account of dyeing problems and solutions thereof. [10]

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