

Code No: 155GT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, August/September - 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 Enzymatic desizing is not preferred in Dye house? [2]
- b) How do you evaluate the Singed goods? [3]
- c) Explain: Whiteness Index. [2]
- d) What is the effect of Scouring on fabric tensile property? [3]
- e) How Cold and Hot Mercerization of Cotton differ? [2]
- f) What is Grafting in Dyes? Why its needed? [3]
- g) Show the Dye Exhaustion % as a function of Dyeing temperature. [2]
- h) Why it is necessary to have an ETP at textile wet processing unit? [3]
- i) What are the requirements of packages for Package dyeing? [2]
- j) Classify the types of Jet dyeing machines. [3]

PART – B**(50 Marks)**

2. Give the Industrial procedure set up for desizing of Cotton Poplin with necessary calculations. [10]

OR

3. Discuss the effect of detergents on processed grey fabric properties. [10]

4. The GSM of a plain Cotton fabric is 150. Describe the process set up for Peroxide Bleaching. [10]

OR

5. Discuss the quality control aspects in Scouring process. [10]

6. Give an account of suitability of Liquid Ammonia Mercerizing. [10]

OR

7. Discuss the thermodynamics aspects of Dyeing kinetics. [10]

8. Give the industrial procedure set up for dyeing 67/33 C/V blends with necessary calculations. [10]

OR

9. Compare and Contrast the Fastness of dyes of Basic, Acid with Sulphur dyes. [10]

10. With neat sketch, explain the working of Beam Dyeing machine with necessary calculations. [10]

OR

11. Give an account of Ultrasonic dyeing and its prospectus and problems. [10]

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