



**B. TECH DEGREE EXAMINATIONS: MAY/JUNE 2023**

(Regulation 2018)

Sixth Semester

**TEXTILE TECHNOLOGY**

U18TXI6202: TEXTILE CHEMICAL PROCESSING -II

**COURSE OUTCOMES**

<b>CO1:</b>	Discuss the style and methods of printing.
<b>CO2:</b>	Explain the working principle of various printing machines
<b>CO3:</b>	Contrast the mechanism of various finishes.
<b>CO4:</b>	Explain the mechanism of functional finishes.
<b>CO5:</b>	Summarize the pollution control measures in the textile processing industry.

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions: -**

**PART A (10 x 2 = 20 Marks)**  
**(Answer not more than 40 words)**

1.	Illustrate the sequence of the printing process.	CO1	[K <sub>2</sub> ]
2.	Indicate the technique of block printing.	CO1	[K <sub>2</sub> ]
3.	Justify the effect of flock printing in the electrostatic method.	CO2	[K <sub>4</sub> ]
4.	Interpret the concept behind the sublimation transfer printing.	CO2	[K <sub>2</sub> ]
5.	Show the reason behind the application of softener on the fabric.	CO3	[K <sub>3</sub> ]
6.	Determine the advantages of using the pad dry cure application method.	CO3	[K <sub>5</sub> ]
7.	Infer the mechanism of water repellency.	CO4	[K <sub>2</sub> ]
8.	Attribute the need for an anti-static finish in man-made fabrics.	CO4	[K <sub>4</sub> ]
9.	List the opportunities for waste minimization in textile chemical processing.	CO5	[K <sub>1</sub> ]
10.	Illustrate the flow process of tertiary treatments of effluents.	CO5	[K <sub>2</sub> ]

**Answer any FIVE Questions:-**

**PART B (5 x 16 = 80 Marks)**  
**(Answer not more than 400 words)**

11.	a)	Explain the essential ingredients of printing paste and their functions.	10	CO1	[K <sub>L</sub> ]
	b)	Classify the styles of printing.	06	CO1	[K <sub>2</sub> ]
12.	a)	Summarize the working flow of the flatbed screen printing machine.	10	CO2	[K <sub>2</sub> ]

	b)	Integrate the preparation of screens for rotary printing	06	CO2	[K <sub>4</sub> ]
13.	a)	Justify the following: i) Schreiner Calendaring and ii) Swiss Calendaring.	10	CO3	[K <sub>4</sub> ]
	b)	Attribute the principle of controlled compressive shrinkage.	06	CO3	[K <sub>L</sub> ]
14.	a)	Explain the application of an anti-microbial finish to the cellulosic material for wound healing.	10	CO4	[K <sub>4</sub> ]
	b)	Outline the theory and mechanism of flame retardancy.	06	CO4	[K <sub>2</sub> ]
15.	a)	Execute suitable techniques for effluent treatment to be carried out in the textile chemical processing industry.	10	CO5	[K <sub>4</sub> ]
	b)	Summarize the need for chemical and auxiliary conservation in the textile chemical processing industry.	06	CO5	[K <sub>2</sub> ]
16.	a)	Justify the operational techniques of decatizing treatment given to textile material.	10	CO3	[K <sub>4</sub> ]
	b)	Interpret the bio-polishing treatment given to the fabric.	06	CO4	[K <sub>2</sub> ]

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Please indicate knowledge level (K<sub>1</sub>toK<sub>6</sub>) and Course Outcome level (CO1 to CO5) against each question for each subdivision.