

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV EXAMINATION – SUMMER 2025

Subject Code:3142907

Date:17-05-2025

Subject Name:Textile Processing

Time:10:30 AM TO 01:00 PM

Total Marks:70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Give the general sequence of wet processing.	03
	(b) Give in details classification of different types of finishes.	04
	(c) Explain with neat sketch construction and working of rotary screen printing machine with neat sketch.	07
Q.2	(a) What are the objects of bleaching.	03
	(b) Enumerate on shearing and cropping process with its significance.	04
	(c) Explain the terms: Saponification, Emulsification, Wetting and Detergency in context to scouring.	07
	OR	
	(c) Describe the enzymetic method of desizing with its merits and demerits.	07
Q.3	(a) What are the objects of scouring process?	03
	(b) What are enzymes? Give their principle working.	
	(c) What are the merits of Vat dyes? Classify vat dyes. Show principle of dyeing vat dyes with chemical reaction.	07
	OR	
Q.3	(a) Give the advantages of block printing methods.	03
	(b) Compare dyeing with printing process.	04
	(c) Enlist various methods of mercerization. Discuss any one method for fabric mercerization with merits and demerits.	07
Q.4	(a) Enlist the ingredients used in scouring process.	03
	(b) State the basic difference between anti-crease, wash & wear and durable press finishes.	04
	(c) Elaborately discuss the process of dyeing cotton with direct dyes. Name the treatments used to improve the washing fastness of direct dyeing.	07
	OR	
Q.4	(a) Differentiate dyes and pigments.	03
	(b) Classify dyes according to their applications.	04
	(c) Define singeing. Elaborately discuss gas singeing process with schematic diagram, merits and demerits.	07
Q.5	(a) Differentiate dyes and pigments.	03
	(b) Write the advantages of Rotary Screen Printing.	04
	(c) Explain the resist style of printing.	07
	OR	
Q.5	(a) State the objectives of calendaring.	03
	(b) Explain the working of Schreiner calendar with neat diagram.	04
	(c) Write a short note on Flame Proof Finish.	07
