

**RAJIV GANDHI PROUDYOGIKI VISHVAVIDYALAYA (DIPLOMA WING)**

**BHOPAL T02 DIPLOMA IN TEXTILE TECHNOLOGY**

**PART A:- PROCESS OF CURRICULUM DEVELOPMENT**

**LIST OF IDENTIFIED PROFESSIONAL ROLES**

1. To apply knowledge of mathematics, science, and engineering.
2. To design and conduct experiments, as well as to analyze and interpret data.
3. To design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. To function on multidisciplinary teams.
5. To identify, formulate, and solve engineering problems.
6. To understand professional and ethical responsibility.
7. To communicate effectively.
8. To understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. To engage in lifelong learning.
10. To use the techniques, skills, and modern engineering tools necessary for engineering practice.

## **LOs FORMATION**

**COURSE NAME: - WET PROCESSING (503)**

**(Total 100 Hrs. , Total 100 Marks)**

### **List of COs and Los**

**CO1: To Understand the value addition and chemical processes of cloth (20Hrs, 20 marks)**

LO1: To understand the concept of chemical processes and sequence of processes for different types of clothes. (10 Hrs., 10 Marks)

LO2: To understand the processes of stitching, brushing, shearing, singeing and desizing (10 Hrs., 10 Marks)

**CO2: To Understand the concept of processes for preparation of cloth for bleaching(20Hrs, 20 marks)**

LO1: To understand the concept of Scouring, types of kiers and recipe (10 Hrs., 10 Marks)

LO2: To understand the process of mercerization of cloth (10 Hrs., 10 Marks)

**CO3: To Understand the process, method and machinery for bleaching of cloth.  
(20Hrs, 20 marks)**

LO1: To understand the process, importance and methods of bleaching(10 Hrs., 10 Marks)

LO2: To understand the various types of machines used for bleaching process (10 Hrs., 10 Marks)

**CO4: To Understand the different types of dyes and dyeing machines.**

**(20Hrs, 20 marks)**

LO1: To understand the different types of dyes and their application methods. (10 Hrs., 10 Marks)

LO2: To learn the different types of dyeing machines. (10 Hrs., 10Marks)

**CO5: To Understand the printing and finishing process of cloth.**

**(20 Hrs, 20 marks)**

LO1: To understand the concept, need and methods for printing of clothes  
(10 Hrs, 10 Marks)

LO2: To understand the concept and types of various finishes applied on cloths.  
(10Hrs,10 Marks)

**PART B:- CURRICULUM OF TEXTILE TECHNOLOGY**

RGPV (Diploma Wing ) Bhopal			COURSE PLAN				<b>Format -2</b>	Sheet No. 1/1	
Course Name		<b>WET PROCESSING</b>				Semester		<b>FIFTH</b>	
Branch	TEXTILE TECHNOLOGY		Course Code	503	No. of COs	05	No. of LOs	10	
Total Hrs. of Teaching Learning	100	Total Marks	100	Total no. of Assessments	10	Types of Assessments	No. of External Assessments	NIL	
DESCRIPTION OF OUTCOMES							T-L Hrs.	Max. Marks	
CO 01	T025031	To Understand the value addition and chemical processes of cloth					20	20	
Los	T0250311	To understand the concept of chemical processes and sequence of processes for different types of clothes.					10	10	
	T0230512	To understand the processes of stitching, brushing, shearing, singeing and desizing					10	10	
CO 02	T025032	<b>To Understand the concept of processes for prepreation of cloth for bleaching</b>					20	20	
Los	T0250321	To understand the concept of Scouring, types of kiers and receipe					10	10	
	T0250322	To understand the process of mercerization of cloth					10	10	
CO 03	T055033	<b>To Understand the process, method and machinery for bleaching</b>					20	20	
Los	T0250331	To understand the process, importance and methods of bleaching					10	10	
	T0250332	To understand the various types of machines used for bleaching process					10	10	
CO 04	T025034	<b>To Understand the different types of dyes and dyeing machines.</b>					20	20	
Los	T0250341	To understand the different types of dyes and their application methods					10	10	
	T0250342	To learn the different types of dyeing machines.					10	10	
CO 05	T025035	<b>To Understand the printing and finishing process of cloth</b>					20	20	
Los	T0250351	To understand the concept, need and methods of printing of cloth					10	10	
	T0250352	To understand the concept and types of various finishes applied on cloths.					10	10	

RGPV (DIPLOMA WING) BHOPAL		OCB CURRICULUM FOR THE COURSE		FORMAT- 3	Sheet No. 1/3
Branch	TEXTILE TECHNOLOGY		Semester	FIFTH	
Course Code	503	Course Name	WET PROCESSING		
<b>CourseOutcome 1</b>	<b>To Understand the value addition and chemical processes of cloth</b>			Teach Hrs	Marks
Learning Outcome 1	To understand the concept of chemical processes and sequence of processes for different types of clothes.			10	10
CONTENT	The importance of wet processes the textile products. The various types of impurities present in grey cloth and their classifications chart. Block diagrams of the sequences of machineries used for manufacturing various types of clothes like bleached, dyed, printed on white base and printed on dyed base.				
Method of Assessment	Paper pen test				
Learning Outcome 2	To understand the processes of stitching, brushing, shearing, singeing and desizing			10	10
CONTENT	The processes and functions of stitching, brushing and shearing processes. The description and importance of singeing process, various types of singeing processes like plate singeing, roller singeing and gas singeing along with well labelled sketches, advantages and disadvantages. The description, objectives and different types of desizing processes.				
Method of Assessment	Paper pen test				
<b>CourseOutcome 2</b>	<b>To Understand the concept of processes for preparation of cloth for bleaching</b>				
Learning Outcome 1	To understand the concept of Scouring, types of kiers and recipe			10	10
CONTENT	Introduction and function of scouring processes. The well labelled sketches of open kier and pressure kiers. The recipes and steps of filling and emptying the open kier and pressure kiers.				
Method of Assessment	Paper pen test				
Learning Outcome 2	To understand the process of mercerization of cloth			10	10
CONTENT	The process, objects and changes due to mercerisation. The description and sketch of yarn mercerizing machine. Line sketches and description of various types of cloth mercerizing machines.				

Method of Assessment	Paper pen test		
<b>CourseOutcome 3</b>	<b>To Understand the process, method and machinery for bleaching of cloth</b>		
Learning Outcome 1	To understand the process, importance and methods of bleaching	10	10
CONTENT	The process and importance of bleaching process. The different methods and chemicals used in bleaching processes. Comparison of sodium hypochrite bleaching and hydrogen peroxide bleaching processes.		
Method of Assessment	Paper pen test		
Learning Outcome 2	To understand the various types of machines used for bleaching processes	10	10
CONTENT	Sketches and description of rope bleaching machines alongwith their receipes. The description and well labelled sketches of openwidth cloth bleaching machines. Batch process bleaching and continous bleaching machines.		
Method of Assessment	Paper pen test		
<b>CourseOutcome 4</b>	<b>To Understand the different types of dyes and dyeing machines.</b>		
Learning Outcome 1	To understand the different types of dyes and their application methods.	10	10
CONTENT	The different types of dyes like direct dyes, reactive dyes, azoic dyes, sulpher dyes, vat dyes, pigments and natural dyes alongwith their respective methods of application and merits and demerits.		
Method of Assessment	Paper pen test		
Learning Outcome 2	To learn the different types of dyeing machines.	10	10
CONTENT	The well labelled line sketches and description of vaious dyeing machines like fiber dyeing machine, yarn dyeing machines like hank yarn, cone/cheese yarn dyeing, beam dyeing machine, jigger dyeing machine, padding mangles,		
Method of Assessment	Paper pen test		
<b>CourseOutcome 5</b>	<b>To Understand the printing and finishing process of cloth</b>		
Learning Outcome 1	To understand the concept, need and methods for printing of clothes	10	10
CONTENT	The concept, types of printing and steps involved in printing process. The printing techniniques like tie and dye, block printing, batik printing. The description and well labelled sketches of roller printing machine.		

Method of Assessment	Paper pen test		
Learning Outcome 2	To understand the concept and types of various finishes applied on cloths.	10	10
CONTENT	The objects, classifications and different types of finishes applied on clothes. The functions and chemical used for the finishes like calendering, back fillings, resin finish, water proofing, fire proofing and soil release finishes alongwith their end uses.		
Method of Assessment	Paper pen test		

LO 1 To differentiate the different types of cloth and sketch the sequence of processes for grey, dyed, printed on white base and printed on dyed base

LO2 To bleach the cloth and sketch and explain the bleaching machines used in industry

LO 3 To dye the cloth with the suitable style and explain the bleaching machines

LO 4 To prepare the different pattern on cloth with tie and dye techniques

