

Chapter No.	Co Statement	UO statement	Description	Link	
Chapter-1 Introduction to resins and concept of polymerization	CO-1: Explain various polymers and polymerization techniques.	1a. List various binders.	Assessment	https://drive.google.com/drive/folders/1t1BELS_I9Nx1SGEm8O86po7R_VrguBWT?usp=sharing	
			Study Material		
			PPT		
		1b. Classify resins.	Assessment		
			Study Material		
			PPT		
		1c. State properties of resins.	Assessment		
			Study Material		
			PPT		
		1d. Write reactions of polymerization.	Assessment		https://drive.google.com/drive/folders/1vhJ-Ajd-DwpKONue2sAj1VWb2YCaaqm4?usp=sharing
			Study Material		
			PPT		
		1e. Explain various methods of polymerization.	Assessment		
			Study Material		
			PPT		
Chapter-2 Natural Resins	CO:2 Select raw materials for resins.	2a. Name various sources of natural resins.	Assessment	https://drive.google.com/drive/folders/16GaTInJP7Z_LZGL4sIOMCOuKL6EZDGX4?usp=sharing	
			Study Material		
			PPT		
		2b. List natural resins.	Assessment		
			Study Material		
			PPT		
		2c. Describe different types of natural resins & their properties	Assessment		
			Study Material		
			PPT		
		2d. State modification of natural resins.	Assessment		https://drive.google.com/drive/folders/16GaTInJP7Z_LZGL4sIOMCOuKL6EZDGX4?usp=sharing
			Study Material		
			PPT		
		2e. State properties & applications of natural resins.	Assessment		
			Study Material		
			PPT		
		2f. State application of varnishes.	Assessment		
			Study Material		
			PPT		
		2g. List properties and application of bituminous & hydrocarbon resins.	Assessment		
			Study Material		

			PPT	
Chapter-3 Alkyd and Polyesters Resins	CO-3: State properties and applications of resins.	3a. Classify alkyd and polyester resins.	Assessment	https://drive.google.com/drive/folders/12625-XmGh2lRYUJL6iR1Ulicle3j6Y6j?usp=sharing
			Study Material	
			PPT	
		3b. Describe different raw materials for alkyd and polyester resins.	Assessment	
			Study Material	
			PPT	
	3c. Write esterification reactions for formation of alkyd and polyester resins.	Assessment		
		Study Material		
		PPT		
	CO-4: Determine physico-chemical properties of resins.	3d. Explain manufacturing method of alkyd and polyester resin.	Assessment	https://drive.google.com/drive/folders/1GQcGn1AHaOAXfzAWjA0QdLxnJYo_cGELg?usp=sharing
			Study Material	
			PPT	
3e. State properties & applications of alkyd & polyester resins.		Assessment		
		Study Material		
		PPT		
3f. Describe modifications of alkyd and polyester resins.	Assessment			
	Study Material			
	PPT			
Chapter-4 Amino and Phenolic resins	CO-4: Determine physico-chemical properties of resins.	4a. Classify amino resins.	Assessment	https://drive.google.com/drive/folders/1M9YVH5T7gmezGWDBV-BZ5tgkIptAgT5w?usp=sharing
			Study Material	
			PPT	
		4b. List raw materials for amino and phenolic resins.	Assessment	
			Study Material	
			PPT	
	4c. Describe synthesis methods of amino and phenolic resin.	Assessment		
		Study Material		
		PPT		
	4d. State properties & applications of amino and phenolic resins.	Assessment		
		Study Material		
		PPT		
4e. State significance of P: F ratio in synthesis of phenolics.	Assessment			
	Study Material			
	PPT			
4f. Describe phenolic resins as an insulating resin.	Assessment			
	Study Material			
	PPT			

		4g. List application of phenolic resin based insulating varnishes.	Assessment	
			Study Material	
			PPT	
		4h. Differentiate amino and phenolic resins.	Assessment	
			Study Material	
			PPT	
Chapter-5 Chlorinated Rubber and Nitrocellulose resins	CO-5 Select relevant resin for paints and coatings.	5a. State importance of chlorinated rubber as a binder.	Assessment	https://drive.google.com/drive/folders/1rAKQtp2sVYGmPZiO7Awxh-IbBJ4On3gw?usp=sharing
			Study Material	
			PPT	
		5b. Explain synthesis method of Chlorinated rubber and Nitrocellulose resins.	Assessment	
			Study Material	
			PPT	
		5c. State significance of dampening	Assessment	
			Study Material	
			PPT	
		5d. State properties and application of CR and NC.	Assessment	
			Study Material	
			PPT	
5e. Describe compatibility of CR and NC with other resins.	Assessment			
	Study Material			
	PPT			
5f. State application parameters of CR and NC.	Assessment			
	Study Material			
	PPT			