

PART – B

(5 x 16 = 80 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	Illustrate the Ion exchange and Zeolite water treatment process with a neat diagram.	16	K3	CO1
	(OR)			
b)	Explain the chemical reactions involved in Phosphate, Carbonate, Colloidal, and Calgon conditioning methods used in the internal treatment of boiler feed water.	16	K2	CO1
12. a)	i. Deduce the reaction mechanism of Free radical Polymerization.	10	K2	CO2
	ii. Differentiate Thermoplastics and Thermosetting plastics.	6	K2	CO2
	(OR)			
b)	Explain the preparation properties and uses of Bakelite and Nylon 6,6.	16	K2	CO2
13. a)	Discuss in detail about the laser ablation and CVD methods of synthesizing the nano materials.	16	K2	CO3
	(OR)			
b)	Discuss the applications of Nanomaterials in Medicine, Agriculture, Energy and Catalysis.	16	K2	CO3
14. a)	Describe the working mechanism of Light water nuclear power plant with a neat diagram.	16	K3	CO4
	(OR)			
b)	Explain the construction and working mechanism of NICAD battery with reactions during charging and discharging.	16	K2	CO4
15. a)	Enumerate the control of corrosion by cathodic protection technique.	16	K3	CO5
	(OR)			
b)	Explain in detail the protection of metals by Electro plating and Electroless plating.	16	K2	CO5