

LECTURE PLAN (Theory)

CLASS : F.E.

SUBJECT : Engineering Chemistry

UNIT(X)	L.NO.(Y)	T.NO.(Z)	TOPICS TO BE COVERED	Wtge	UNIT(X)	L.NO.(Y)	T.NO.(Z)	TOPICS TO BE COVERED	Wtge
1	1	1	1 Impurities in water & Removal Methods	2	2	4	1	31 Precipitation Titration	3
		2	2 Hardness of Water -Types , Units	2	2	5	1	32 pH metry	3
		3	3 Determination of Hardness of Water	6	2	6	2	33 Potentiometry	6
		4	4 Numericals- Hardness of Water	3	2	7	1	34 Interaction Of Radiation with Matter	3
1	2	1	5 Alkalanity of water sample	6			2	35 Lamberts-Beers Law of Absorption	3
		2	6 Numerical on Alkalanity of water	3			3	36 UV Spectroscopy Instrumentation	6
1	3	1	7 Effect of Hard Water on Boiler	3	2	8	1	37 Electronic Transition	6
		2	8 Corrosion & Primming & Foaming	3			2	38 Blue ,Red Shift terms Used	3
		3	9 Sludge & Scales	3			3	39 Application of UV-Visible	3
		4	10 Caustic Embrittlement	3	3	1	1	40 Synthetic organic Polymers	2
1	4	1	11 Internal Treatment of Water in Boiler	3			2	41 Degree of Polymerisation	2
		2	12 Softening of water by Zeolite	6			3	42 Avg Molecular Weight of Polymer	3
		3	13 Numericals -Zeolite process	3			4	43 Glass Transition & Melting Temp.	3
1	5	1	14 Ion Exchange Method	6	3	2	1	44 Crystallinity in Polymer	3
1	6	1	15 Desalination of Brackish Water	3			2	45 Thermoplastic & Thermosetting	3
		2	16 Reverse Osmosis	3			3	46 Addition Mechanism of Polymerisation	6
1	7	1	17 Green Chemistry-Need,Goals	3	3	3	1	47 Condensation Polymerisation	6
		2	18 Synthesis of Adipic Acid	3			2	48 Bulk Polymerisation	3
		3	19 Synthesis of Polycarbonate	3			3	49 Solution Polymerisation	3
1	8	1	20 Synthesis of Indigo Dye	3	3	4	1	50 Suspension Polymerisation	3
		2	21 Principles of Green Chemistry	6			2	51 Emulsion Polymerisation	3
2	1	1	22 Electrochemistry	2			3	52 Compounding Of Plastics	6
		2	23 Calomel Electrode	3			4	53 Low & High Density Polyethylene	3
		3	24 Glass Electrode	3	3	5	1	54 Epoxy Resin	3
		4	25 Ion selective Electrode	3			2	55 Natural & Synthetic Rubber	3
2	2	1	26 Conductance by Electrolyte	2			3	56 Vulcanisation Of Rubber	6
		2	27 Measurement of Conductance	2	3	6	1	57 Polycarbonate	3
		3	28 Variation Of Equivalence Conductance	3			2	58 Biodegradable Polymer	3
2	3	1	29 Kohlrausch's Law	3	3	7	1	59 Conducting Polymer	3
		2	30 conductometric Titrations	3			2	60 Fibre Reinforced Plastic	3

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3	8	1	61 Liquid Crystal Polymer	3	5	6	1	91 Graphite	5
		2	62 Electroluminescent polymer	3	5	7	1	92 Fullerece	5
4	1	1	63 Calorific Calue-GCV & NCV	3	5	8	1	93 Carbon Nanotubes	5
		2	64 Bomb Calorimeter	6			2	94 Amorphous Carbon Allotropes	4
4	2	1	65 Boy's Calorimeter	6	6	1	1	95 Corrosion	2
		2	66 Numericals on GCV & NCV	3			2	96 Galvanic series	2
4	3	1	67 Proximate Analysis of Coal	6			3	97 Dry corrosion-mechanism	5
		2	68 Ultimate Analysis of Coal	6	6	2	1	98 Nature of Oxide Film	5
4	4	1	69 Refining Of Petroleum	6			2	99 Pilling Bedworth Rule	2
4	5	1	70 Octane Number of Petrol	3			3	100 wet corrosion -mechanism	5
		2	71 Cetane Number of Diesel	3	6	3	1	101 Factor Influencing Corrosion	4
		3	72 Power Alcohol	3			2	102 Nature of metal & Environment	4
4	6	1	73 Biodiesel	3			3	103 Pourbox Diagram	4
		2	74 Gaseous Fuel-CNG,LPG	3	6	4	1	104 Cathodic Protection	4
4	7	1	75 Phosphoric Acid Fuel Cell	3			2	105 Anodic Protection	4
		2	76 Polymer Electrolyte Fuel Cell	3			3	106 Anodic & Cathodic Coating	4
4	8	1	77 Calculation of Air For Combustion	3	6	5	1	107 Tining & Galvanising	5
5	1	1	78 Hydrogen Element	2			2	108 Surface Conversion Coating	5
		2	79 Isotopes of Hydrogen	4	6	6	1	109 Powder Coating	4
		3	80 Production of Hydrogen Gas	5			2	110 Plasma Spraying	4
5	2	1	81 Elecrolysis production of H ₂	5	6	7	1	111 Corrosion Inhibitors	4
		2	82 Water Splitting production of H ₂	5			2	112 Electroless Plating	5
		3	83 Difficulties in Storage of H ₂	4	6	8	1	113 Electro Plating	4
5	3	1	84 Chemical Storage of Hydrogen	4				114	
		2	85 Molecular Hydride	4				115	
		3	86 Silane	4				116	
5	4	1	87 Germane	4				117	
		2	88 Saline Hydride	4				118	
5	5	1	89 Isotopes of Carbon	4				119	
		2	90 Allotropes of C -Diamond	4				120	