

LESSON PLAN

Department: ECE

NAME OF THE FACULTY: Malla.Balkrishna

CLASS: 1-B Tech

BRANCH: ECE

SUBJECT: Engineering Chemistry

Year: 2013-14

SEM: 1st Sem

Period	Date (Tentative)	Topic	Unit	Teaching Methodology	Remarks	Corrective action upon Review
1	03/10/2013	Polymerization reactions, Basic concepts	1	CR		
2	05/10/2013	Types of polymerization, addition and condensation polymerizations	1	CR		
3	08/10/2013	Plastics: Thermosetting and Thermoplastics – differences	1	CR		
4	17/10/2013	Compounding of Plastics	1	CR		
5	21/10/2013	Moulding of plastics 1) Compression, 2) injection moulding	1	CR		
6	25/10/2013	Moulding of plastics 1) transfer and 2) extrusion moulding	1	CR		
7	31/10/2013	Preparation of PE, PVC, Teflon, Bakelite, Nylon, Polyesters				
8	02/11/2013	Properties of PE, PVC, Teflon, Bakelite, Nylon, Polyesters	1	CR		
9	04/11/2013	Uses of PE, PVC, Teflon, Bakelite, Nylon, Polyesters	1	CR		
10	05/11/2013	Classification of Cement, raw materials of Portland cement	1	CR		
11	07/11/2013	Manufacture of Portland cement	1	CR		
12	08/11/2013	Chemical constitution of Portland cement	1	CR		
13	09/11/2013	Setting and Hardening of Portland Cement	1	CR	1 st Unit Will Be Completed	
		1st Mid Examinations				
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14	15/11/2013	Introduction to Water technology: Hardness of Water	2	CR		
15	16/11/2013	Temporary and Permanent hardness	2			
16	18/11/2013	Units and inter conversions of Units	2	CR		
17	21/11/2013	Estimation of hardness by EDTA Method	2	CR		
18	23/11/2013	Problems on Temporary and Permanent hardness	2	CR		
19	25/11/2013	Problems on Temporary and Permanent hardness	2	CR		
20	26/11/2013	Problems on Temporary and Permanent hardness, Disadvantages of Hard Water	2	CR		
21	28/11/2013	Methods of Treatment of Water for Domestic Purposes: Sedimentation, Coagulation, Filtration	2	CR		
22	29/11/2013	Methods of Treatment of Water for Domestic Purposes: Disinfection - Sterilization, Chlorination, Break Point chlorination, Ozonisation	2	CR		
23	30/11/2013	Industrial Water Treatment – Desalination, Reverse Osmosis Treatment	2	CR		
24	2/12/2013	Industrial Water Treatment – Lime-Soda Process (Hot Lime Soda and Cold Lime Soda Process)	2	CR		
25	3/12/2013	Industrial Water Treatment - Zeolite Process,	2	CR		
26	3/12/2013	Industrial Water Treatment – Ion-Exchange Process	2	CR	2 nd Unit Will Be Completed	
27	05/12/2013	Definition, examples of Corrosion	3	CR		
28	06/12/2013	Types of corrosion: Dry Corrosion and Wet Corrosion	3	CR		

29	06/12/2013	Principles of corrosion:	3	CR		
30	07/12/2013	Galvanic series, Galvanic corrosion, Concentration cell corrosion	3	CR		
31	07/12/2013	Mechanism of Wet Corrosion: Hydrogen evolution Type	3	CR		
32	09/12/2013	Mechanism of Wet Corrosion: Oxygen Absorption Type	3	CR		
33	10/12/2013	Factors influencing the rate of corrosion	3	CR		
34	12/12/2013	Factors influencing the rate of corrosion	3	CR		
35	13/12/2013	Control of corrosion - proper design, use of pure metal and metal alloys, Passivity	3	CR		
36	14/12/2013	Control of corrosion - Cathodic Protection – Sacrificial anode and impressed current	3	CR		
37	16/12/2013	Control of corrosion - Modifying the environment	3	CR		
38	17/12/2013	Control of corrosion - Use of inhibitors.	3	CR	3 rd Unit Will be completed	
		2 nd Mid Examinations				
		2 nd Mid Examinations				
		2 nd Mid Examinations				
		2 nd Mid Examinations				
39	23/12/2013	Introduction to Liquid Fuels	4	CR		
40	24/12/2013	Classification of Crude Oil	4	CR		
41	26/12/2013	Fractional Distillation	4	CR		
42	27/12/2013	Cracking (Thermal &Catalytic)	4	CR		
43	27/12/2013	Manufacturing of Synthetic Petrol: Fischer-Tropschs Process.	4	CR		
44	28/12/2013	Manufacturing of Synthetic Petrol: Bergius Process	4	CR		
45	28/12/2013	Polymerization	4	CR		
46	30/12/2013	Refining &Reforming	4	CR		
47	30/12/2013	Knocking –Anti Knocking Agents	4	CR		

48	31/12/2013	Octane & Cetane Number	4	CR		
49	31/12/2013	Lubricants: Principle and functions of lubricants, Types of lubricants.	4	CR		
50	02/01/2014	Mechanism of Lubrication: Thick film or Hydrodynamic lubrication, thin film lubrication	4	CR		
51	02/01/2014	Extreme pressure lubrication:	4	CR		
52	03/01/2014	Classification of Lubricants	4	CR		
53	03/01/2014	Properties of lubricants – Viscosity, flash and fire points.	4	CR		
54	04/01/2014	Properties of lubricants – cloud and pour points, aniline points	4	CR		
55	04/01/2014	Properties of lubricants – neutralization number and mechanical strength	4	CR	4 th Unit Will Be completed	
56	06/01/2014	Solar Energy - Introduction – harnessing solar energy.	5	CR		
57	07/01/2014	Photo voltaic cells (Construction & Working of PV Cells)	5	CR		
58	09/01/2014	Concentrated Solar Power Plants	5	CR		
59	10/01/2014	Green house concept.	5	CR		
60	11/01/2014	Introduction to Green Chemistry. Principles of Green Chemistry: 1 to 4 principles of Green chemistry	5	CR		
61	17/01/2014	5 to 8 principles of Green chemistry	5	CR		
62	18/01/2014	9 to 12 principles of Green chemistry	5	CR		
63	20/01/2014	Green synthesis: Engineering Applications in Green Chemistry	5	CR		
64	21/01/2014	Introduction to Nano materials: preparation of few Nano materials: Carbon Nano Tubes	5	CR		

65	23/01/2014	preparation of few Nano materials: Carbon Nano Tubes, Fullerenes etc.,	5	CR		
66	25/01/2014	Top down and Bottom up concepts: Properties of Nano materials- Silver and Gold Nano particles	5	CR		
67	25/01/2014	Engineering & Biomedical applications in Nanotechnology	5	CR	5 th Unit will Be completed	
		3 rd Mid Examinations				
		3 rd Mid Examinations				
		3 rd Mid Examinations				
		3 rd Mid Examinations				