

LESSON PLAN

Discipline: Civil/Mechanical/Electrical/CSE	Year: 1st year	Name of the teaching faculty: Sunil Kumar Martha (GF Chemistry)
Subject : Applied Chemistry Lab	No of days/week class allotted: 2	No. of weeks: 32 (From:17-08-26 to 17-04-27)
Week	Class Day	Practical Topics
1	1	Preparation of standard solution of oxalic acid or potassium permanganate.
	2	
2	1	Determination of strength of given sodium hydroxide solution by titrating against standard oxalic acid solution using phenolphthalein indicator.
	2	
3	1	Record checking and viva-voce
	2	
4	1	Standardization of KMnO_4 solution using standard oxalic acid and determine the percentage of iron present in given Hematite ore by KMnO_4 solution.
	2	
5	1	Iodometric estimation of copper in the copper pyrite ore.
	2	
6	1	Record checking and viva-voce
	2	
7	1	Volumetric estimation of total acid number (TAN) of given oil.
	2	
8	1	Volumetric estimation of Total hardness of given water sample using standard EDTA solution
	2	
9	1	Volumetric estimation of Alkalinity of given water sample using 0.01M sulphuric acid
	2	
10	1	Gravimetric estimation of moisture in given coal sample
	2	
11	1	Gravimetric estimation of ash in given coal sample
	2	
12	1	Record checking and viva-voce
	2	
13	1	Determine the conductivity of given water sample.
	2	
14	1	Determination of the Iron content in given cement sample using colorimeter.
	2	
15	1	Record checking and viva-voce
	2	
16	1	Determination of calorific value of solid or liquid fuel using bomb calorimeter.
	2	
17	1	Determination of viscosity of lubricating oil using Redwood viscometer.
	2	
18	1	Determination of flash and fire point of lubricating oil using Able's flash point apparatus.
	2	

19	1	Record checking and viva-voce
	2	
20	1	To verify the first law of electrolysis of copper sulfate using copper electrode.
	2	
21	1	Construction and measurement of emf of electrochemical cell (Daniel cell).
	2	
22	1	Record checking and viva-voce
	2	
23	1	Determination of amount of dissolved oxygen present in a water sample.
	2	
24	1	Determination of amount of BOD present in a water sample.
	2	
25	1	Record checking and viva-voce
	2	
26	1	Determination of amount of dissolved chlorine present in a water sample.
	2	
27	1	Determination of amount of COD present in a water sample
	2	
28	1	Record checking and viva-voce
	2	
29	1	Determination of amount of turbidity present in a water sample.
	2	
30	1	Determination of amount of TDS present in a water sample.
	2	
31	1	Record checking and viva-voce
	2	
32	1	Viva-voce (Miscellaneous)
	2	

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