

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA**Lesson plan****Semester: 7th****Subject: Petroleum Refinery engineering**

Lecture	Module	Topic
1	1	Introduction to Petroleum Refinery Engineering :Origin of Petroleum
2	1	Mendeleev, Englers' theories
3	1	Composition of petroleum, Indian oil fields, Composition of Indian crudes
4	1	Evaluation of oil stocks: Base of crude oil
5	1	Evaluation of oil stocks: Base of crude oil
6	1	Properties of crude and products, Characterization factor– TBP apparatus
7	1	Properties of crude and products, Characterization factor– TBP apparatus
8	1	CURVE Analysis :Gravity and mid-percent curve
9	1	Yield curve, Equilibrium flash vaporization curve
10	1	ASTM distillation, Characteristics of products
11	1	ASTM end points and TBP cut point
12	2	Desalting and dehydration of crude, Topping
13	2	Atmospheric and vacuum distillation
14	2	Cracking and Reforming
15	2	Important cracking and reforming reactions
16	2	Thermal cracking
17	2	Fixed bed, Moving bed and Fluidized bed catalytic cracking
18	2	Fixed bed, Moving bed and Fluidized bed catalytic cracking
19	2	Catalytic reforming, Processes like Polyforming and hydroforming
20	2	Polyforming and hydroforming
21	2	Alkylation
22	3	Polymerization
23	3	Isomerisation
24	3	Conversion of petroleum gases : Alkylation, Polymerization and Isomerisation
25	3	Chemical treatment
26	3	Chemical treatment
27	3	Sweetening treatment
28	3	Solutizer process
29	3	Doctor's treatment
30	3	Catalytic desulphurization
31	3	Solvent extraction Process
32	4	Selection of solvents, Eldeleanu process
33	4	Selection of solvents, Eldeleanu process
34	4	Furfural processes
35	4	Characteristics of important products like gasoline, kerosene, diesel
36	4	Characteristics of important products like gasoline, jet fuels and lubricating oils
37	4	Characteristic analysis
38	4	Characteristic analysis
39	4	Class Test and Analysis of Previous year question paper
40	4	Analysis of Previous year question paper

Signature of the Faculty Member:

Date:

Counter Signature of H.O.D

Signature of the Faculty Member:
Date:

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