## VEER SURENDRA SAI UNIVRSITY OF TECNOLOGY, BURLA

## Lesson plan Semester: 4<sup>th</sup>

## **Subject: Chemical Process Calculations**

Lecture	Module	Торіс
1	1	Units And Dimensions
2	1	Composition Of Solids, Liquids And Gases
3	1	Excess And Limiting Reactant
4	1	Percent Excess
5	1	Selectivity
6	1	Yield
7	1	Percent Plant Yield
8	1	Percent Conversion
9	1	Degree Of Completion
10	1	Ideal Gas Equation
11	1	Mixtures Of Ideal Gases
12	2	Real Gases
13	2	Equations Of State
14	2	Vapor Pressure
15	2	Boiling Point
16	2	ClapeyronEquation
17	2	ClausiusClapeyronEquation
18	2	Antoine Equation
19	2	Vapor Pressure Plot
20	2	Ideal Solutions
21	2	Raoult'sLaw
22	3	Material Balance Calculations For Unit Operations
23	3	Mixing
24	3	Evaporation
25	3	Crystallization
26	3	Distillation
27	3	Bypass
28	3	Recycle
29	3	Purging
30	3	Internal Energy
31	3	Enthalpy, Heat Capacities
32	4	Mean Heat Capacity
33	4	Heat Capacity Of Mixtures Of Gases
34	4	Heat Capacity Of Solids And Liquids
35	4	Trouton'sRule, KistyakowskyEquation
36	4	Standard Heat Of Reaction, Combustion, And Formation
37	4	Hess's Law Of Constant Heat Summation
38	4	Effect Of Temperature On Heat Of Reaction
39	4	Temperature Of Reaction, Adiabatic Reaction Temperature
40	4	Adiabatic Flame Temperature, Theoritical Flame Temperature

Signature of the Faculty Member: Date:

Counter Signature of H.O.D