

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

Lesson plan

Semester: 5th

Subject: Heat Transfer

Lecture	Module	Topic
1	01	Introduction
2	01	Fourier's Law, Composite Wall problem
3	01	Steady state conduction in cylinder
4	01	Composite cylinder, sphere, composite sphere
5	01	Thermal contact resistance, Problem
6	01	Heat Transfer coefficient, Overall heat Transfer coefficient
7	01	Combined Conduction and convection
8	01	Problems associated with h, U for flat slab, cylinder and sphere
9	01	Critical radius, Extended surfaces
10	01	Fin efficiency and fin effectiveness
11	01	Lumped Heat parameter system
12	01	Time constant & response of temperature measuring instrument
13	01	Unsteady state Heat conduction in semi infinite surface
14	02	Dimensionless number in convection
15	02	Analogy between heat, momentum and mass transfer
16	02	Thermal Boundary Layer
17	02	Forced Convection
18	02	Reynolds Analogy
19	02	Colburn Analogy
20	02	Convection problems
21	03	Heat Exchanger
22	03	Types of heat exchanger
23	03	Logarithmic Mean Temperature Difference
24	03	Effectiveness, Number of Transfer Unit
25	03	Heat exchanger Problems
26	03	Evaporation, Types of evaporator
27	03	BPR and Duhring's rule
28	03	Problems of single effect evaporator
29	03	Types of Feed arrangement
30	03	Multiple effect evaporation system
31	03	Multiple effect evaporation system problem
32	04	Radiation, Stefan's Boltzman Law
33	04	Radiation between planes, view factor
34	04	Radiation problems
35	04	Boiling Phenomena
36	04	Forced convection Boiling
37	04	Filmwise condensation
38	04	Problems
39	04	Dropwise condensation
40	04	Problems

Signature of the Faculty Member:

Date:

Counter Signature of H.O.D