

PROFESSOR'S NAME	Prof. A. P Mahanty		
DEPARTMENT	Chemistry		
INSTITUTE	IIT Kharagpur		
COURSE OUTLINE	Laws of Thermodynamics; Phase Equilibrium in Pure Substances; Simple Mixtures; Phase Equilibrium in Mixtures; Chemical Equilibrium; Equilibrium Electrochemistry.		
COURSE DETAILS			
S. No	Module ID/ Lecture ID	Lecture Title/Topic	Duration
1	S9-Mod1	Introduction to Classical Chemical Thermodynamics	1:05:48
2	S9-Mod2	1st Law of Thermodynamics -1	1:05:44
3	S9-Mod3	1st Law of Thermodynamics -2	0:56:47
4	S9-Mod4	1st Law of Thermodynamics -3	1:05:14
5	S9-Mod5	1st law of Thermodynamics-4	1:01:39
6	S9-Mod6	2nd Law of Thermodynamics-1	1:02:06
7	S9-Mod7	2nd Law of Thermodynamics-2	0:42:16
8	S9-Mod8	2nd Law of Thermodynamics -3	1:07:30
9	S9-Mod9	2nd Law of Thermodynamics -4	1:01:39
10	S9-Mod10	2nd Law of Thermodynamics -5	0:44:08
11	S9-Mod11	2nd Law of Thermodynamics -6	1:02:31
12	S9-Mod12	Criteria for Spontaneous Change	0:57:57
13	S9-Mod13	Maxwells Relations	0:56:33
14	S9-Mod14	Gibbs Free Energy and Open System	1:02:00
15	S9-Mod15	Simple Mixture and Open System-2	0:58:11
16	S9-Mod16	Simple Mixture and Open System-3	0:44:28

17	S9-Mod17	Simple Mixture, and Phase Equilibrium and Phase Transition-1	0:51:48
18	S9-Mod18	Phase Equilibrium and Phase Transition - 2	0:41:44
19	S9-Mod19	Phase Equilibrium and Phase Transition - 3	1:11:30
20	S9-Mod20	Phase Diagram and Phase Transition -4	0:59:46
21	S9-Mod21	Non-ideality in Gases	0:44:20
22	S9-Mod22		
23	S9-Mod23		
24	S9-Mod24		
25	S9-Mod25		
26	S9-Mod26		
27	S9-Mod27		

References if Any: