

Dicipline:	Mech.	Semester: 4th	Name of the Teaching Faculty: Satyakam Acharya	
Subject:	T. E - 2	No of Days/Week Class Allotted: 4	Semester From date: 13/02/23 To date: 23/05/23	No. of Weeks:
WEEK	Class Day	Theory Topics		
1	1st	Define mech. efficiency, indicated thermal efficiency		
	2nd	Relative efficiency, brake thermal efficiency,		
	3rd	Mean effective pressure, specific fuel consumption		
	4th	Define air-fuel ratio, sp. fuel consumption		
	5th	Satyakam Acharya		
2	1st	Explain function of compressor		
	2nd	Industrial use of compressed air		
	3rd	Classify air compressor		
	4th	Principle of operation		
	5th			
3	1st	Describe the parts of R.A.C		
	2nd	Explain the terminology of R.A.C		
	3rd	Derive the work done of single stage & 2 stage compressor		
	4th	Solve simple problems		
	5th	Satyakam Acharya		

WEEK	Class Day	Theory Topics
A	1st	Difference bet <sup>n</sup> gas & vapour
	2nd	Formation of steam
	3rd	Representation on p-v, T-s, H-s & T-H diagrams
	4th	Definition & properties of steam.
	5th	<u>Satyahan Acharys</u>
5	1st	Use of steam table & mollier chart
	2nd	Non-flow & flow process
	3rd	p-v, T-s & H-s diagram
	4th	Determine the change in properties.
	5th	<u>Satyahan Acharys</u>
6	1st	Solve simple numericals
	2nd	Classification & types of boiler
	3rd	Important terms for boiler
	4th	Comparison bet <sup>n</sup> fire tube & water tube boiler.
	5th	<u>Satyahan Acharys</u>

Dicipline:	Mech.	Semester: 1th	Name of the Teaching Faculty: Satyacham Acharya	
Subject:	T.E-2	No of Days/Week Class Allotted: 1	Semester From date: 13/02/23 To date: 23/05/23	No.of Weeks:
WEEK	Class Day	Theory Topics		
7	1st	Description & working of common boiler		
	2nd	Boiler draught		
	3rd	Boiler mounting & accessories		
	4th	Carnot cycle with vapour		
	5th	Satyacham Acharya		
8	1st	Representation of P-V, T-S & H-S diagrams		
	2nd	Derive work & efficiency		
	3rd	Effects of various end condn. in Rankine cycle.		
	4th	Reheat cycle & regenerate cycle.		
	5th	Satyacham Acharya		
9	1st	Solve simple numericals.		
	2nd	Modes of heat transfer		
	3rd	Fourier's law of heat conduction.		
	4th	Newton's law of cooling		
	5th	Satyacham Acharya		

WEEK	Class Day	Theory Topics
10	1st	Radiation heat transfer
	2nd	Black body radiation ,
	3rd	Emissivity, absorptivity & transmissibility
	4th	Revision on above topics
	5th	<u>Sodjahan Achanz</u>
	1st	
	2nd	
	3rd	
	4th	
	5th	
	1st	
	2nd	
	3rd	
	4th	
	5th	