

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF  
ENGINEERING & TECHNOLOGY, BARGARH





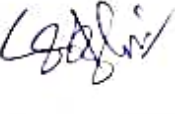

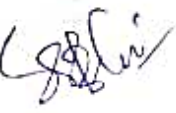



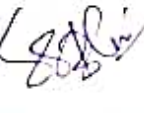


PROGRESS REGISTER  
Session-2022-2023

Discipline: Mechanical Engg.

Semester: 3rd      Subject: TE-I (Sec A)

Name of the Teaching Faculty: S.S. Bhoi

Subject: TE1 No. of Days/per week class allotted 04Semester From Date: 15/09/2022 To Date: 21/01/2023 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
16/09/22	Introduction to thermodynamic concept	Thermodynamic concept & terminology	Defination	
20/09/22	Thermodynamic system	same	same	
23/09/22	Thermodynamic Properties of a system	same	properties	
24/09/22	Intensive & Extensive properties	same	Differences	
26/09/22	process, path, cycle, state	same	Defination	
27/09/22	Thermodynamic equilibrium	same	Defination	
30/09/22	Quasi static process	same	same	
<del>01/10/22</del> 24/09/22	Conceptual explanation of energy & its sources	same	same	
<del>14/10</del> 29/09/22	Work, heat	Work, heat	Comperison	
<del>15/10</del> 30/09/22	Work done for Displacement work	same	same	
17/10/22	Introduction to laws of thermodynamics	same	Zeroth law, 1st law, 2nd law of thermodynamics	

Subject: TE-I No. of Days/per week class allotted 04


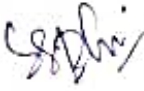

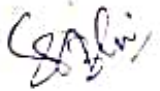
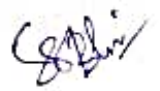
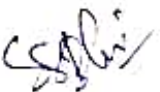

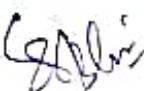



Semester From Date: 15/09/2022 To Date: 21/01/2023 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
18/10/22	State and explain 1st law of thermodynamics	same	Defination and explanation	<i>[Signature]</i>
21/10/22	Limitation of 1st laws of thermodynamics	Limitations	perpetual motion machine	<i>[Signature]</i>
22/10/22	Comparison of heat and work	same	Differences	<i>[Signature]</i>
23/10/22	Application of 1st law of thermodynamics	Application	Application	<i>[Signature]</i>
29/10/22	Steady flow energy equation	same	Derivation	<i>[Signature]</i>
31/10/22	Application of 1st law in turbine & compressor	same	same	<i>[Signature]</i>
01/11/22	Second law of thermodynamics	same	same	<i>[Signature]</i>
04/11/22	Application of 2nd law	same	same	<i>[Signature]</i>
05/11/22	Determination of efficiency & COP	same	Derivation	<i>[Signature]</i>
07/11/22	Numericals	Numericals	Numericals	<i>[Signature]</i>
11/11/22	Introduction to properties and processes of perfect gases	same	Defination	<i>[Signature]</i>

Subject: 701 No. of Days/per week class allotted 04Semester From Date: 15/09/2022 To Date: 21/01/2023 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (In brief)	Signature of Teacher
12/10/22	Laws of perfect gases	Boyle's law Charles's law	Definition Derivation	LG Singh
14/10/22	General gas eq <sup>n</sup>	same	Derivation	LG Singh
15/10/22	Specific heat of gas ( $C_p$ & $C_v$ )	$C_p$ , $C_v$	Definition & Derivation	LG Singh
11/11/22	Relation bet <sup>n</sup> $C_p$ & $C_v$	same	$C_p - C_v = R$ Derivation	LG Singh
19/11/22	Enthalpy of gases	Enthalpy	Definition	LG Singh
21/11/22	Work done during nonflow process	same	same	LG Singh
22/11/22	Free expansion & Throttling process	same	Definition	LG Singh
25/11/22	Numericals	Numericals	Numericals	LG Singh
26/11/22	Overall chapter discussion	Overall chapter discussion	Overall chapter discussion	LG Singh
28/11/22	Introduction to IC engine	Introduction to IC engine	Introduction to IC engine	LG Singh
29/11/22	Explain and classify IC engine	same	same	LG Singh

Subject: 7L1 No. of Days/per week class allotted 04Semester From Date: 15/09/2022 To Date: 21/01/2023 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
2/12/22	Terminology of IC engine	same	parts and components	
3/12/22	Working principle of IC engine	same	How it works	
5/12/22	Difference bet <sup>n</sup> petrol and Diesel engine	same	Differences	
6/12/22	Working principle of 2 stroke engine	same	Functions	
9/12/22	Working principle of 4 stroke engine	same	Functions	
10/12/22	Difference bet <sup>n</sup> 2 stroke and 4 stroke engine	same	Differentiation	
13/12/22	Introduction to Air Standard cycle	Air Standard cycle	same	
16/12/22	Carnot cycle	Carnot cycle	Carnot cycle	
17/12/22	Numericals	Numericals	Numericals	
19/12/22	Otto cycle	Otto cycle	Otto cycle	
20/12/22	Numericals	Numericals	Numericals	

Subject: TC-1 No. of Days/per week class allotted 04Semester From Date: 15/09/2022 To Date: 21/01/2023 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
23/12/22	Diesel cycle	Diesel cycle	Diesel cycle	C. S. Prasad
24/12/22	Numericals	Numericals	Numericals	C. S. Prasad
26/12/22	Dual cycle	Dual cycle	Dual cycle	C. S. Prasad
27/12/22	Numericals	Numericals	Numericals	C. S. Prasad
30/12/22	Introduction to Fuel and Combustion	same	same	C. S. Prasad
2/1/23	Define fuel	same	same	C. S. Prasad
3/1/23	Types of fuels	Types	Types	C. S. Prasad
7/1/23	Application of diff. types of fuel	same	same	C. S. Prasad
9/1/23	Heating value of fuel	Calorific value of fuel	Definition	C. S. Prasad
10/1/23	Quality of IC engine	same	same	C. S. Prasad
10/1/23	Octane Number Cetane Number	same	same	C. S. Prasad

