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: 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
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	
01/10/22 ~~29/09/22~~	Conceptual explanation of energy & its sources	same	same	
14/10 ~~22/09~~/22	Work, heat	Work, heat	Comparison	
15/10 ~~30/09~~/22	Work transfer 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 Ist law of thermodynamics	same	Defination and explaination	
21/10/22	Limitation of Ist laws of thermodynamics	Limitations	perpetual motion machine	
25/10/22	Comparison of heat and work	same	Differences	
28/10/22	Application of Ist law of thermodynamics	Application	Application	
29/10/22	Steady flow energy Equation	same	Derivation	
31/10/22	Application of Ist law in turbine & compressor	same	same	
01/11/22	Second law of thermodynamics	same	same	
04/11/22	Application of 2nd law	same	same	
05/11/22	Determination of efficiency & COP	same	Derivation	
07/11/22	Numericals	Numericals	Numericals	
11/11/22	Introduction to properties and processes of perfect gases	same	Defination	

Subject: TC-1 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
12/10/22	Laws of perfect gases	Boyles law charles law	Defination Derivation	
14/10/22	General gas eqn	same	Derivation	
15/10/22	Specific heat of gas (Cp & Cv)	Cp, Cv	Defination & Derivation	
11/11/22	Relation bet' Cp & Cv	same	Cp-Cv = R Derivation	
19/11/22	Enthalpy of gases	Enthalpy	Defination	
21/11/22	Work done during nonflow process	same	same	
22/11/22	Free expansion & Throttling process	same	Defination	
25/11/22	Numericals	Numericals	Numericals	
26/11/22	Overall chapter discussion	Overall chapter discussion	Overall chapter discussion	
28/11/22	Introduction to IC engine	Introduction to IC engine	Introduction to IC engine	
29/11/22	Explain and classify IC engine	same	same	

Subject: TLT 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
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" petrol and Diesel engine	same	Differences	
6/12/22	Working principle of 2stroke engine	same	Functions	
9/12/22	Working principle of 4stroke engine	same	Functions	
10/12/22	Difference bet" 2stroke and 4stroke 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-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
23/12/22	Diesel cycle	Diesel cycle	Diesel cycle	
24/12/22	Numericals	Numericals	Numericals	
26/12/22	Dual cycle	Dual cycle	Dual cycle	
27/12/22	Numericals	Numericals	Numericals	
30/12/22	Introduction to Fuel and Combustion	same	same	
2/1/23	Define fuel	same	same	
3/1/23	Types of fuels	Types	Types	
7/1/23	Application of diff. types of fuel	same	same	
9/1/23	Heating value of fuel	Calorific value of fuel	Defination	
10/1/23	Quality of IC engine	same	same	
10/1/23	Octane Number Cetane Number	same	same	

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
10/1/23	Numericals	Numericals	Numericals	
11/1/23	Application of 1st law of thermodynamics in non flow process	same	same	
11/1/23	Overall discussion	Overall discussion	Overall discussion.	