

LESSON PLAN

SUB:- ELEMENTS OF MECHANICAL ENGG.

BRANCH:- ELECTRICAL ENGG.

SEMESTER:3rd

SESSION:2022-2023

NAME OF FACULTY: -SUMANTA BISWAL



**GOVERNMENT POLYTECHNIC,
BHADRAK**

Hod Electrical

20/9/22
HOD (ELECT.)
G.P. BHADRAK

Academic Co-ordinator

Sumanta Biswal
Principal
Govt. Polytechnic Bhadrak
Bhadrak

Discipline:
ELECTRICAL

Semester:
3rd

Name of the
Teaching Faculty:
SUMANTA BISWAL

Subject: EME	No. of days/s/per week class allotted:	Semester From date:
	4	15/09/2022 To
		date:21/01/2023
		No of weeks: 15
		Theory Topics:
Week	Class Day	
1st	1st	THERMODYNAMICS:
	2nd	State Unit of Heat and work.
	3rd	1st law of thermodynamics.
	4th	State Laws of perfect gases
2nd	1st	Determine relationship of specific heat of gases at constant volume and constant pressure.
	2nd	
	3rd	PROPERTIES OF STEAM:
	4th	Use steam table for solution of simple problem..
3rd	1st	Explain total heat of wet, dry and super heated steam.
	2nd	BOILERS:
	3rd	State types of Boilers
	4th	Describe Cochran
4th	1st	Babcock Wilcox boiler.
	2nd	Describe Mountings
	3rd	Describe accessories
	4th	STEAM ENGINES:
5th	1st	Explain the principle of Simple steam engine.
	2nd	Draw Indicator diagram
	3rd	Calculate Mean effective pressure.
	4th	HIP and BHP and mechanical efficiency.

HYDRAULIC DEVICES AND PNEUMATICS:	
1 st	Intensifier
2 nd	Hydraulic lift.
3 rd	Accumulator
4 th	Hydraulic ram.
1 st	Revision class.
2 nd	Revision class.
3 rd	Revision class.
4 th	Revision class.
1 st	Revision class.
2 nd	Revision class.
3 rd	Revision class.
4 th	Revision class.
1 st	Revision class.
2 nd	Discussion of PYQ
3 rd	Discussion of PYQ
4 th	Discussion of PYQ
1 st	Discussion of PYQ
2 nd	Discussion of PYQ
3 rd	Discussion of PYQ
4 th	Discussion of PYQ
1 st	Discussion of PYQ
2 nd	Discussion of PYQ
3 rd	Discussion of PYQ
4 th	Discussion of PYQ

1 st	Solve Simple problem.
2 nd	STEAM TURBINES:
3 rd	State Types
4 th	2 Differentiate between impulse and reaction Turbine
1 st	CONDENSER:
2 nd	Explain the function of condenser
3 rd	State their types, condenser
4 th	I.C. ENGINE
1 st	Explain working of two stroke and 4 stroke petrol engine
2 nd	Explain working of two stroke and 4 stroke diesel engine.
3 rd	Differentiate between them.
4 th	HYDROSTATICS:
1 st	Describe properties of fluid
2 nd	Determine pressure at a point, pressure measuring Instruments
3 rd	pressure measuring Instruments
4 th	HYDROKINETICS:
1 st	Deduce equation of continuity of flow
2 nd	Explain energy of flowing liquid
3 rd	State and explain Bernoulli's theorem.
4 th	Bernoulli's theorem

6 th	7 th	8 th	9 th	10 th
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