

**GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN**

<b>Discipline : Mechanical ENGG.</b>		<b>Semester: 5th Sem</b>	<b>Name of the Teaching Faculty : Mihir kumar mohanta</b>
<b>Subject : EM &amp; ST</b>		<b>No. of Days / per week class allotted : 04</b>	<b>Semester From date : 15.09.2022 To Date : 19.12.2022</b>
<b>MONTH</b>	<b>Week</b>	<b>Day</b>	<b>Topics</b>
<b>SEPTEMBER</b>	<b>4TH</b>	1ST	1. Entrepreneurship
		4TH	Concept /Meaning of Entrepreneurship
	<b>5th</b>	1st	Need of Entrepreneurship
		2nd	Characteristics, Qualities and Types of entrepreneur, Functions
		3rd	Barriers in entrepreneurship
		4th	Entrepreneurs vrs. Manager
<b>OCTOBER</b>	<b>1ST</b>	2nd	Forms of Business Ownership: Sole proprietorship, partnership forms and others
		3RD	Types of Industries, Concept of Start-ups
		4TH	Entrepreneurial support agencies at National, State, District Level( Sources): DIC, NSIC,OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.
	<b>2ND</b>	1ST	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks
		2nd	2. Market Survey and Opportunity Identification (Business Planning)
		3RD	Business Planning
		4TH	SSI, Ancillary Units, Tiny Units, Service sector Units
		1ST	Time schedule Plan, Agencies to be contacted for Project Implementation

	3rd	2nd	Assessment of Demand and supply and Potential areas of Growth
		3RD	Identifying Business Opportunity
		4TH	Final Product selection
	4TH	3rd	<b>CLASS TEST-1</b>
		4th	3. Project report Preparation
	5th	1st	Preliminary project repor
		2nd	Detailed project report, Techno economic Feasibility
NOVEMBER	1ST	3RD	Project Viability
		4TH	4. Management Principles
	2ND	1st	Definitions of management
		2nd	Principles of management
		3rd	Functions of management (planning, organising, staffing, directing and controlling etc.)
		4th	Level of Management in an Organisation
	3rd	1st	5. Functional Areas of Management
		2nd	a) Production management ,Functions, Activities ,Productivity ,Quality control ,Production Planning and control
		3RD	b) Inventory Management ,Need for Inventory management ,Models/Techniques of Inventory management
		4TH	c) Financial Management ,Functions of Financial management, Management of Working capital Costing (only concept)
	4th	1st	Break even Analysis , Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts)
		2nd	d) Marketing Management
		3rd	Concept of Marketing and Marketing Management
		4TH	Marketing Techniques (only concepts)

	5th	1st	Concept of 4P s (Price, Place, Product, Promotion)
		2nd	<b>INTERNAL</b>
		3rd	e) Human Resource Management • Functions of Personnel Management • Manpower Planning, Recruitment, Sources of manpower, Selection process, Method of Testing, Methods of Training & Development, Payment of Wages
		4th	6. Leadership and Motivation a) Leadership , Definition and Need/Importance , Qualities and functions of a leader , Manager Vs Leader , Style of Leadership (Autocratic, Democratic, Participative)
DECEMBER	2ND	1st	b) Motivation , Definition and characteristics , Importance of motivation , Factors affecting motivation , Theories of motivation (Maslow) , Methods of Improving Motivation , Importance of Communication in Business , Types and Barriers of Communication
		2nd	7. Work Culture, TQM & Safety , Human relationship and Performance in Organization ,Relations with Peers, Superiors and Subordinates ,TQM concepts: Quality Policy, Quality Management, Quality system
		3rd	Accidents and Safety, Cause, preventive measures, General Safety Rules , Personal Protection Equipment(PPE)
		4th	8. Legislation a) Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights
	3rd	1st	Features of Factories Act 1948 with Amendment (only salient points) c) Features of Payment of Wages Act 1936 (only salient points)
		2nd	9. Smart Technology
		3rd	Concept of IOT, How IOT works
		4th	Components of IOT, Characteristics of IOT, Categories of IOT
	4TH	1st	Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc.



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**PROGRESS I****SUB:-DIGITAL ELECTRONICS & MICROPROCESSOR****NAME C**

SL.NO	DATE	TOPIC TO BE COVERED AS PER LESSION PLAN
1	8/1/2023	Introduction to Digital Electronics
2	8/2/2023	Binary, Octal, Hexadecimal number systems and compare with Decimal system.
3	8/3/2023	Binary addition, subtraction, Multiplication and Division.
4	8/4/2023	binary number 1.4 Subtraction of binary numbers in 2's complement method.
5	8/7/2023	1.5 Use of weighted and Un-weighted codes & write Binary equivalent number for a number in 8421, Excess-3 and Gray Code and vice-
6	8/8/2023	1.6 importance of parity bit. 1.7 Logic Gates: AND, OR, NOT, NAND, NOR and EX-OR gates with truth table.
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**REGISTER FOR THE ACADEMIC YEAR-2023:**

***DISCIPLINE:- ELECTRICAL ENG***

**OF THE TEACHING FACULTY:- LEENA MARNDI**

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GOVT. POLY

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## TECHNIC MAYURBHANJ LESSON PLAN

**Name of the Teaching Faculty :Sagar Kumar Mohapatra**

Semester From date : 01.08.2023

**To Date : 30.11.2023**

# Topics

[illegible]

[illegible]

SEPTEMBER

JAN DE NOV OCT

NOVEMBER

**PROGRESS REPORT**

**SUB:-DIGITAL ELECTRONICS & MICROPROCESSOR Lab**

**NAME OF THE STUDENT**

SL.NO	DATE	TOPIC TO BE COVERED AS PER LESSION PLAN
1	8/1/2023	Verify truth tables of AND, OR, NOT, NOR, NAND, XOR, XNOR gates.
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***GISTER FOR THE ACADEMIC YEAR-2023-24***

**DISCIPLINE:- ELECTRICAL ENGG.**

**THE TEACHING FACULTY:- LEENA MARNDI**

### TOPIC ACTUALLY COVERED

Verify truth tables of AND, OR, NOT, NOR, NAND, XOR, XNOR gates.

[illegible]

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<b>SEMESTER:-5TH</b>

[illegible]

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**GOVT.**

Discipline :		Semester: 3rd Sem
Subject : EME		No. of Days / per week class allotted : 04
MONTH	Week	Day
SEPTEMBER	1st	4th
		5th
	2nd	1st
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OCTOBER	2nd	4th
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NOVEMBER	1st	1st
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DECEMBER	1st	4th
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# POLYTECHNIC MAYURBHANJ LESSON PLAN

Name of the Teaching Faculty :Sagar Kumar Mohapatra

Semester From date : 15.09.2022

To Date : 21.01.2023

## Topics

**1. THERMODYNAMICS:**1 . 1 State Unit of Heat and work, 1st law of thermodynamics.

1 . 2 State Laws of perfect gases

Gas laws

1.3 Determine relationship of specific heat of gases at constant volume and constant pressure.

Different thermodynamic process

Revision

**2. PROPERTIES OF STEAM:**2 . 1 Use steam table for solution of simple problem

Formation of steam at constant pressure process

2 . 2 Explain total heat of wet, dry and super heated steam

Critical point, dryness fraction

Explain latent heat and sensible heat

Problem solved

Problem solved

**3. BOILERS:** 3 . 1 State types of Boilers

Difference between fire tube and water tube boiler

3 . 2 Describe Cochran boiler

Describe Babcock Wilcox boiler

3 . 3 Describe Mountings and accessories

3 . 3 Describe Mountings and accessories

Revision

class test -1

**4. STEAM ENGINES:** 4.1 Explain the principle of Simple steam engine

4.1 Explain the principle of Simple steam engine

classification of simple steam engine

4.2 Draw Indicator diagram

Theoretical indicator diagram

Actual indicator diagram

Diagram factor

4.3 Calculate Mean effective pressure, IHP and BHP and mechanical efficiency.

4.3 Calculate Mean effective pressure, IHP and BHP and mechanical efficiency.

4.4 Solve Simple problem.

4.4 Solve Simple problem.

4.4 Solve Simple problem.

**5. STEAM TURBINES** 5.1 State Types

Describe about pelton wheel and francis turbine

Describe about kaplan turbine

5.2 Differentiate between impulse and reaction Turbine

**6. CONDENSER:** classification of condenser

6.1 Explain the function of condenser

6.2 State their types and difference
Working principle of surface condenser
Revision
Revision
<b>7. I.C. ENGINE:</b> 7.1 Explain working of two stroke and 4 stroke petro engine
7.1 Explain working of two stroke and 4 stroke diesel engine
7.2 Differentiate between two stroke and 4 stroke engine
otto cycle and diesel cycle
<b>8.HYDROSTATICS:</b> 8.1 Describe properties of fluid
8.1 Describe properties of fluid
8.1 Describe properties of fluid
8.2 Determine pressure at a point,
pressure measuring Instruments
pressure measuring Instruments
Bourdon tube pressure gauge
Internal
solved problem
solved problem
<b>9.HYDROKINETICS:</b> different type of fluid flow
9.1 Deduce equation of continuity of flow
9.2 Explain energy of flowing liquid
9.3 State and explain Bernoulli's theorem
9.3 State and explain Bernoulli's theorem
<b>HYDRAULIC DEVICES AND PNEUMATICS</b>
10.1 Intensifier
10.2 Hydraulic lift
10.3 Accumulator
10.4 Hydraulic ram
Class test -2
Revision
Revision