

GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

**Discipline : Mechanical
ENGG.**

Semester: 6th Sem

Name of the Teaching Faculty : Mihir kumar mohanta

Subject : IE & M

**No. of Days /
per week class allotted : 04**

Semester From date : 14.02.2023

To Date : 23.05.2023

MONTH

Week

Day

Topics

FEBRUARY

3rd

2nd

PLANT ENGINEERING:

3rd

1.1 Selection of Site of Industry

4th

1.2 Define plant layout.

4th

1st

1.3 Describe the objective and principles of plant layout

2nd

1.4 Explain Process Layout, Product Layout and Combination Layout.

3rd

1.5 Techniques to improve layout

4th

1.6 Principles of material handling equipment

5th

1st

1.7 Plant maintenance.

2nd

1.7.1 Importance of plant maintenance

1st

3rd

1.7.2 Break down maintenance.

2nd

4th

1.7.3 Preventive maintenance.

3rd

1st

1.7.4 Scheduled maintenance

2nd

2. OPERATIONS RESEARCH

3rd

2.1 Introduction to Operations Research and its applications.

4th

2.2 Define Linear Programming Problem,

1st

2.3 Solution of L.P.P. by graphical method.

2ND

2.4 Evaluation of Project completion time by Critical Path Method and PERT

MARCH

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| | 4th | 3rd | 2.5 Explain distinct features of PERT with respect to CPM. |
| | | 5th | 3. INVENTORY CONTROL: |
| APRIL | 5th | 1st | 3.1 Classification of inventory |
| | | 2nd | 3.2 Objective of inventory control. |
| | | 3rd | 3.3 Describe the functions of inventories |
| | 2nd | 1st | 3.4 Benefits of inventory control. |
| | | 2nd | 3.5 Costs associated with inventory. |
| | | 3rd | 3.6 Terminology in inventory control |
| | | 4th | 3.7 Explain and Derive economic order quantity for Basic model. (Solve numerical) |
| | 3rd | 1st | 3.8 Define and Explain ABC analysis. |
| | | 2nd | REVISION |
| | | 3rd | 4. INSPECTION AND QUALITY CONTROL |
| | | 4th | 4.1 Define Inspection and Quality control. |
| | 4TH | 1st | 4.2 Describe planning of inspection. |
| | | 2nd | 4.3 Describe types of inspection |
| | | 3rd | 4.4 Advantages and disadvantages of quality control. |
| | | 4th | 4.5 Study of factors influencing the quality of manufacture |
| | 5th | 1st | 4.6 Explain the Concept of statistical quality control, Control charts (X, R, P and C - charts). |
| | | 2nd | 4.7 Methods of attributes |
| | | 3rd | 4.8 Concept of ISO 9001-2008. |
| | | 4th | 4.9.1 Quality management system, Registration /certification procedure |
| | 1ST | 1st | 4.9.2 Benefits of ISO to the organization. |
| | | 2nd | 4.9.3 JIT, Six sigma, 7S, Lean manufacturing |
| | | 3rd | 4.9.4 Solve related problems |
| | | 4th | REVISION |
| | 2ND | 1st | 5.0 PRODUCTION PLANNING AND CONTROL |
| | | 2nd | 5.1 Introduction, 5.2 Major functions of production planning and control |

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| MAY | | 3rd | INTERNAL |
| | | 4th | 5.3 Methods of forecasting |
| | 3rd | 1st | 5.3.1 Routing |
| | | 3rd | 5.3.2Scheduling |
| | | 4th | 5.3.3 Dispatching |
| | | 4th | 5.3.4 Controlling |
| | 4TH | 1st | 5.4.1 Mass production |
| | | 2nd | 5.4.2 Batch Production |
| | | 3rd | CLASS TEST-2 |
| | | 4th | 5.4.3 Job order production |

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

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SEPTEMBER

JANUARY/OCTOBER

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.

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| SEMESTER:-5TH |

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GOVT.

| Discipline : | | Semester: 3rd Sem |
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| Subject : EME | | No. of Days / per week class allotted : 04 |
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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

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| 6.2 State their types and difference |
| Working principle of surface condenser |
| Revision |
| Revision |
| 7. I.C. ENGINE: 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 |
| 8.HYDROSTATICS: 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 |
| 9.HYDROKINETICS: 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 |
| HYDRAULIC DEVICES AND PNEUMATICS |
| 10.1 Intensifier |
| 10.2 Hydraulic lift |
| 10.3 Accumulator |
| 10.4 Hydraulic ram |
| Class test -2 |
| Revision |
| Revision |