GOVERNMENT MILLENNIUM POLYTECHNIC, CHAMBA
DEPARTMENT OF APPLIED SCIENCES & HUMANITIES
SUBJECT : MATHEMATICS II
SESSION : JAN-MAY 2025

| LECT NO. | NAME OF THE CHAPTER | CONTENT TO BE TAUGHT | LEARNING OBJECTIVES |
|---|---|---|---|
| 1 | DETERMINANT AND MATRICES | Introduction and discussion on the contents of the syllabus and distribution of marks etc. | The students are expected to acquire necessary background in **Determinants** and **Matrices** so as to appreciate the importance of the **Determinants** are the factors that scale different parameterizations so that they all produce same overall integrals, i.e. they are capable of encoding the inherent geometry of the original shape. |
| 2 | | Introduction to Matrices ,types of Matrices,algebra of Matrices | |
| 3 | | Introduction to Determinant , minor , co-factors in a Determinant. | |
| 4 | | Miscelleneous questions on Matrices and Determinant. | |
| 5 | | DCS | |
| 6 | | Elementary properties of Determinant upto 3rd Order | |
| 7 | | Miscelleneous questions on Elementary properties of Determinant upto 3rd Order | |
| 8 | | Consistency of Linear equations, Crammer rule | |
| 9 | | Miscelleneous questions on Crammer rule. | |
| 10 | | DCS | |
| 11 | | Inverse of a Matrix | |
| 12 | | Miscelleneous questions on Inverse of a Matrix | |
| 13 | | Matrix Inverse method to solve a system of Linear equations in 3-variable | |
| 14 | | Miscelleneous questions on Matrix Inverse method to solve a system of Linear equations in 3-variable | |
| 15 | | DCS | |
| 16 | INTEGRAL CALCULUS | Introduction to Integration, Integration as a inverse operation of differentiation | The students are expected to learn **'The cumulative effect of the original quantity or equation is the Integration'.** |
| 17 | | Simple integration by Substitution | |
| 18 | | Miscelleneous questions on Integration by substitution and simple integration. | |
| 19 | | Integration by Parts | |
| 20 | | DCS | |
| 21 | | Miscelleneous questions on Integration by Parts. | |
| 22 | | Integration by Partial Fraction (For Linear Factors only) | |
| 23 | | Miscelleneous questions on Integration by Partial Fraction (For Linear Factors only) | |
| 24 | | Revision on miscelleneous question for class test-I. | |
| 25 | | DCS | |
| 26 | | Revision on miscelleneous question for class test-I. | |
| 27 | | Revision on miscelleneous question for class test-I. | |
| 28 | | Class Test-I | |
| 29 | | Use of formulae $\int_0^{\pi/2} \sin^n x\,dx$, $\int_0^{\pi/2} \cos^n x\,dx$, $\int_0^{\pi/2} \sin^m x \cos^n x\,dx$. for solving problems where m and n are positive integers. | |
| 30 | | Miscelleneous questions on Use of Standard Integral formulae | |
| 31 | TEGRAL CALCULUS | Application of Integration for Evaluation of area bounded by a curve and axex. | The students are expected to learn that **'The cumulative effect of the original quantity or equation is the Integration'.** |
| 32 | | Simple problems on Application of Integration for Evaluation of area bounded by a curve and axex. | |
| 33 | | DCS | |
| 34 | | Application of Integration for calculation of Volume of a solid formed by revolution of an area about axex. | |
| 35 | | Simple problems on Application of Integration for calculation of Volume of a solid formed by revolution of an area about axex. | |
| 36 | | Revision on miscelleneous question of method of Integration (Substitution method) | |
| 37 | | Revision on miscelleneous question of method of Integration (by parts method) | |
| 38 | | DCS | |
| 39 | | Revision on miscelleneous question of method of Integration (Partial fraction method) | |
| 40 | | Revision on Miscelleneous questions on Use of Standard Integral formulae | |

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| 41 | IV | Revision on Simple problems on Application of Integration for Evaluation of area bounded by a curve and axex. | |
| 42 | | Revision on Simple problems on Application of Integration for calculation of Volume of a solid formed by revolution of an area about axex. | |
| 43 | | DCS | |
| 44 | | Introduction to Geometry, its connection with Algebra , Basics of Co-ordinate Geometry | |
| 45 | | Slope of a line, various method to find the slope of a line | |
| 46 | CO-ORDINATE GEOMETRY | Equation of straight line parallel to x axis , parallel to y-axis, point slope form , Miscelleneous questions | The students are expected to learn that **'The coordinate geometry provides a connection between algebra and geometry throughgraphs of lines and curves'**. |
| 47 | | Equation of straight line in slope-intercept form , intercept form , two point form, Miscelleneous Questions | |
| 48 | | DCS | |
| 49 | | Revision on miscelleneous question for class test-II. | |
| 50 | | Revision on miscelleneous question for class test-II. | |
| 51 | | Class Test-II | |
| 52 | | Equation of straight line in normal form,symmetric form, general form of equation of straight line,Miscelleneous questions | |
| 53 | | Intersection of two straight lines, Miscelleneous questions | |
| 54 | | Angle between two lines,Miscelleneous questions | |
| 55 | | Parallel and perpendicular lines, Perpendicular distance formulae, Miscelleneous questions | |
| 56 | | DCS | |
| 57 | | Circle, various terms related to circle , General equation of circle and its characteristics | |
| 58 | | Equation of circle , given : Centre and radius | |
| 59 | | Equation of circle , given : Three points lying on it | |
| 60 | | Equation of circle , given : Co-ordinates of end points of a diameter | |
| 61 | | DCS | |
| 62 | | Definition of Conics ( Parabola , Ellipse, Hyperbola) | |
| 63 | | Standard equation of parabola , Miscelleneous questions on parabola when focus , directrices, vertices are given | |
| 64 | | Standard equation of Ellipse , Miscelleneous questions on Ellipse when foci , directrices, vertices are given | |
| 65 | | Standard equation of Hyperbola , Miscelleneous questions on Hyperbola when foci , directrices, vertices are given | |
| 66 | | DCS | |
| 67 | | Revision on miscelleneous question for House test | |
| 68 | | Revision on miscelleneous question for House test | |
| 69 | | Revision on miscelleneous question for House test | |
| 70 | | House Test | |
| 71 | DIFFERENTIAL EQUATION | Introduction to Differential Equation, Order and Degree of a Differential Equation | The students are expected to learn **the difference between a resultant and a concurrent force to model simple physical problems in the form of a differential equation, analyze and interpret the solutions.** |
| 72 | | Miscelleneous questions on Order and Degree of a Differential Equation | |
| 73 | | Solution of first order and first degree differential equation by Variable separable methods | |
| 74 | | Miscelleneous questions on solution of first order and first degree differential equation by Variable separable methods | |
| 75 | | DCS | |
| 76 | | Revision test of UNIT-I | |
| 77 | | Revision test of UNIT-II | |
| 78 | | Revision test of UNIT-III | |
| 79 | | Revision test of UNIT-IV | |
| 80 | | DCS | |

Amandeep

Signature Of Teacher

(Amandeep)

Signature Of OIC
(Applied Sciences)

## Department of Applied Science & Humanity, 2nd Semester

### FUNDAMENTALS OF ELECTRICAL & ELECTRONICS ENGINEERING :- Lesson plan for the Session Jan-May, 2025

| Lecture No. | Topics |
|---|---|
| | **Unit-1: Overview of Electronic Components & Signals (12 Hrs) 15 Marks** |
| 1 | Basic Introduction |
| 2 | Introduction of Passive Components: R,L,C |
| 3 | Introduction of Active Components: Diodes, Transistors, FET |
| 4 | MOS and CMOS and their Applications |
| 5 | Signals: DC/AC |
| 6 | Voltage/current |
| 7 | Periodic/nonperiodic signals |
| 8 | Average, rms, peak values |
| 9 | Different types of signal waveforms |
| 10 | Ideal/non-ideal voltage/current sources |
| 11 | Independent/dependent voltage sources |
| 12 | Independent/dependent current sources |
| | **Unit-2 : Overview of Analog Circuits (08 Hrs) 10 marks** |
| 13 | Introduction to Operational Amplifiers |
| 14 | Ideal Op-Amp |
| 15 | Practical op amp |
| 16 | Open loop and closed loop configurations |
| 17 | Application of Op-Amp as amplifier |
| 18 | Adder |
| 19 | Differentiator |
| 20 | Integrator |
| | **Unit-3: Overview of Digital Electronics (10 Hrs) 20 Marks** |
| 21 | Introduction to Boolean Algebra |
| 22 | Electronic Implementation of Boolean Operations |
| 23 | Gates-Functional Block Approach |
| 24 | Storage elements-Flip Flops-A |
| 25 | Functional block approach |
| 26 | Counters |
| 27 | Ripple |
| 28 | Up/down and decade |
| 29 | Introduction to digital IC Gates |
| 30 | Digital IC Gates of TTL Type |

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| | **Unit-4: Electric and Magnetic Circuits (12 Hrs) 20 marks** |
| 31 | EMF, Current, Potential Difference |
| 32 | Power and Energy |
| 33 | M.M.F, magnetic force |
| 34 | Permeability, hysteresis loop |
| 35 | Reluctance, leakage factor |
| 36 | BH curve |
| 37 | Electromagnetic induction |
| 38 | Faraday's laws of electromagnetic induction, Lenz's law |
| 39 | Dynamically induced emf |
| 40 | Statically induced emf |
| 41 | Equations of self and mutual inductance |
| 42 | Analogy between electric and magnetic circuits |
| | **Unit-5: A.C. Circuits (14 Hrs) 25 marks** |
| 43 | Cycle, Frequency |
| 44 | Periodic time |
| 45 | Amplitude, Angular velocity |
| 46 | RMS value, Average value |
| 47 | Form Factor, Peak Factor |
| 48 | Impedance, phase angle |
| 49 | Power factor |
| 50 | Mathematical and phasor representation of alternating emf 48 and current |
| 51 | Voltage and Current relationship in Star and Delta connections |
| 52 | A.C in resistors |
| 53 | Inductors and capacitors |
| 54 | A.C in R-L series, R-C series |
| 55 | R-L-C series and parallel circuits |
| 56 | Power in A. C. Circuits, power triangle |
| | **Unit-6: Transformer and Machines (08 Hrs) 10 marks** |
| 57 | Introduction to Machine |
| 58 | General construction and principle of core type of transformers |
| 59 | General construction and principle of shell type of transformers |
| 60 | Emf equation |
| 61 | Transformation ratio of transformers |
| 62 | Auto transformers |
| 63 | Basic principle of Electromechanical energy conversion |
| 64 | Applications |

**Subject Teacher**

**HOD /OIC**

**Applied Science 2nd Semester**

ES plan for the Session Jan to May 2024

| Lecture NO | Topic NO |
|---|---|
| | **Unit-1 : Basics of Ecology (4 hrs)** |
| 1 | Structure of ecosystem, Biotic & Abiotic components Food chain and food web Aquatic |
| 2 | food web Aquatic (Lentic and Lotic) and terrestrial ecosystem |
| 3 | Carbon, Nitrogen Cycle .Sulphur, Phosphorus cycle, |
| 4 | Global warming -Causes, effects, process, Green House Effect, Ozone depletion. |
| | **Unit– 2 : Air and, Noise Pollution (5 hrs)** |
| 5 | Definition of pollution and pollutant, Natural and manmade sources of air pollution(Refriger- ants, I.C., Boiler) |
| 6 | Air Pollutants: Types, Particulate Pollutants: Effects and control (Bag filter, Cyclone separator, Electrostatic Precipitator). |
| 7 | Gaseous Pollution Control: Absorber, Catalytic Converter, Effects of air pollution due to Refrigerants. |
| 8 | I.C., Boiler, Noise pollution: sources of pollution, measurement of pollution level, |
| 9 | Effects of Noise pollution, Noise pollution (Regulation and Control) Rules, 2000. |
| | **Unit- 3: Water and Soil Pollution (7 hrs)** |
| 10 | Sources of water pollution, Types of water pollutants, Characteristics of water pollutants. |
| 11 | Tur-bidity, pH, total suspended solids, total solids BOD and COD: Definition, calculation. |
| 12 | Waste Water Treatment: Primary methods: sedimentation, froth floatation |
| 13 | Secondary methods: Activated sludge treatment, Trickling filter, Bioreactor |
| 14 | Tertiary Method: Membrane sepa- ration technology, RO (reverse osmosis). |
| 15 | Causes, Effects and Preventive measures of Soil Pollution. |
| 16 | Causes-Excessive use of Fertilizers, Pesticides and Insecticides, Irrigation, E-Waste. |
| | **Unit– 4: Renewable sources of Energy (8 hrs)** |
| 17 | Solar Energy: Basics of Solar energy. Flat plate collector (Liquid & Air). |
| 18 | Theory of flat plate col- lector. Importance of coating. Advanced collector |
| 19 | Solar pond. Solar water heater, solar dryer. Solar stills. Biomass: Overview of biomass as energy source. |
| 20 | Thermal characteristics of biomass as fuel. Anaerobic digestion. Biogas production mechanism. |
| 21 | Utilization and storage of biogas. Wind energy: Current status and future prospects of wind energy. Wind energy in India. |
| 22 | Environmental benefits and problem of wind energy.New Energy Sources: Need of new sources. |
| 23 | Different types new energy sources. Applications of (Hydrogen energy, Ocean energy resources). |
| 24 | Applications of Tidal energy conversion. Concept, origin and power plants of geothermal energy. |

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| | **Unit-5: Solid Waste Management, ISO 14000 & Environmental Management (8 hrs)** |
| 25 | Solid waste generation- Sources and characteristics of : Municipal solid waste |
| 26 | E- waste, bio- medical waste.Metallic wastes and Non-Metallic wastes (lubricants, plastics, rubber) from industries. |
| 27 | Collection and disposal: MSW (3R, principles, energy recovery, sanitary landfill), Hazardous. |
| 28 | Waste Air quality act 2004, air pollution control act 1981 and water pollution and control act1996. |
| 29 | Structure and role of Central and state pollution control board |
| 30 | Concept of Carbon Credit, Carbon Footprint |
| 31 | Environmental management in fabrication industry. |
| 32 | ISO14000: Implementation in industries, Benefits |

**Signature of Teacher**
( Abhishek Vohra )
Lecturer Chemistry
GMP Chamba (H.P)

**Signature of HOD**

Semester - ... Systems)

**Semester - II**

**ES102 (Introduction to IT Systems)**

**Subject plan for the Session Jan - June 2025**

| Lecture No. | Topic | |
|---|---|---|
| | **UNIT 1: Basics of Computer System** | **(7hrs.)** |
| 1 | Block Diagram of Computer System | |
| 2 | General Understanding of various hardware components- CPU | |
| 3 | Memory, Types of Memory | |
| 4 | Display Devices (CRT and LCD Monitors) | |
| 5 | Keyboard, Types of Keyboards | |
| 6 | Mouse, Types of Mouse | |
| 7 | Working, Components of Hard Disk Drive | |
| | **UNIT 2: Software Concepts** | **(5hrs.)** |
| 8 | Software and its types | |
| 9 | Operating System | |
| 10 | Types of Operating System | |
| 11 | Functions of Operating System | |
| 12 | Booting the system (Cold and warm) | |
| | **UNIT 3: Internet Skills** | **(7hrs.)** |
| 13 | Understanding the terminology of internet-web browser | |
| 14 | Search Engine, Examples of Search Engine | |
| 15 | World Wide Web(WWW) | |
| 16 | Types of Networks | |
| 17 | Awareness about the government portals (state portals) | |
| 18 | Awareness about the government portals (national portals) | |
| 19 | Awareness about institute portals | |
| | **UNIT 4: Working with MS- Word** | **(5hrs.)** |
| 20 | File Management (Creating new document, saving a document) | |
| 21 | Printing a document | |
| 22 | Editing a document, use of Home ribbon. | |
| 23 | Use of Insert ribbon | |
| 24 | Use of Design Layout ribbon | |
| | **UNIT 5: Working with MS- Excel** | **(5hrs.)** |
| 25 | Working with spread sheets, entering data into the cells | |
| 26 | Merging cells, Formula bar | |
| 27 | Usage of simple functions such as sum, average, min, max | |
| 28 | Usage of simple functions such as percentage, round, floor, ceiling | |
| 29 | Conditional formatting of cells | |
| | **UNIT 6: Information Security** | **(3hrs.)** |
| 30 | Concept of online frauds | |
| 31 | Threats of online crime | |
| 32 | Virus attacks and use of antivirus | |

Vikas

Signature of Teacher

Signature of HOD/OIC

## Lesson Plan

Name of the Faculty : Sh. Omkar Singh

Semester : 2nd Civil Engg. (N-22 Scheme) and Mechatronics (N-22 Scheme)

Subject : Engineering Workshop Practice (Carpentry)

Duration : 14 Weeks

Work load per week 03Hrs Practical + DCS 03 Hrs

| Week | Group of the Discipline | Practical Topic |
|---|---|---|
| 1st | Group-1 | Demonstration of different wood working Tools |
| | Group-2 | |
| | Group-3 | |
| 2nd | Group-4 | |
| | Group-5 | Demonstration of different wood working Machines |
| | Group-1 | |
| 3rd | Group-2 | |
| | Group-3 | |
| | Group-4 | Demonstration of different wood working Processes Plaining |
| 4th | Group-5 | |
| | Group-1 | |
| | Group-2 | |
| 5th | Group-3 | Demonstration of different wood working Processes Marking |
| | Group-4 | |
| | Group-5 | |
| 6th | Group-1 | |
| | Group-2 | Demonstration of different wood working Process Turning of wood |
| | Group-3 | |
| 7th | Group-4 | |
| | Group-5 | |
| | Group-1 | Job Practice on wood Half Lap Joint |

| | | |
|---|---|---|
| 8th | Group-2 | Job Practice on wood Half Lap Joint |
| | Group-3 | |
| | Group-4 | |
| 9th | Group-5 | Job Practice on wood T-Half Lap Joint |
| | Group-1 | |
| | Group-2 | |
| 10th | Group-3 | |
| | Group-4 | Job Practice on wood T-Half Lap Joint |
| | Group-5 | |
| | Group-1 | |
| 11th | Group-2 | |
| | Group-3 | Making of Job by Students by use of above Techniques |
| | Group-4 | |
| | Group-5 | |
| 12th | Group-1 | |
| | Group-2 | Making of Job by Students by use of above Techniques |
| | Group-3 | |
| | Group-4 | |
| 13th | Group-5 | |
| | Group-1 | Making of Job by Students by use of above Techniques |
| | Group-2 | |
| | Group-3 | |
| 14th | Group-4 | |
| | Group-5 | Making of Job by Students by use of above Techniques |
| | Group-1 | |
| | Group-2 | |

HOD/OIC

Sh. Omkar Singh

W/S Instructor Carpentry

## Lesson Plan

**Name of the Faculty** : **Sh. Neel Singh**

**Semester** : **1st (N-22 Scheme)**

**Subject** : **Engineering Workshop Practice welding**

**Duration** : **14 Weeks**

**Work load per week** : **03Hrs Practical. + 03 Hrs DCS**

| Week | Group of the Discipline | Practical Topics |
|---|---|---|
| 1st | Group-3 | Demonstration of different Welding Tools |
| | Group-4 | |
| | Group-5 | |
| 2nd | Group-1 | |
| | Group-2 | |
| | Group-3 | Demonstration of different Welding Machines |
| 3rd | Group-4 | |
| | Group-5 | |
| | Group-1 | |
| 4th | Group-2 | |
| | Group-3 | Demonstration on Arc Welding |
| | Group-4 | |
| 5th | Group-5 | |
| | Group-1 | |
| | Group-2 | |
| | Group-3 | Demonstration on Gas Welding, |
| 6th | Group-4 | |
| | Group-5 | |
| | Group-1 | |
| 7th | Group-2 | |
| | Group-3 | Demonstration on MIG Welding and MAG Welding |
| | Group-4 | |

| | | |
|---|---|---|
| 8th | Group-5 | |
| | Group-1 | |
| | Group-2 | |
| 9th | Group-3 | Job Practice of Gas cutting |
| | Group-4 | |
| | Group-5 | |
| 10th | Group-1 | |
| | Group-2 | |
| | Group-3 | Job Practice of rebuilding broken parts with welding |
| 11th | Group-4 | |
| | Group-5 | |
| | Group-1 | |
| 12th | Group-2 | |
| | Group-3 | Job Practice of Making Lap Joint |
| | Group-4 | |
| | Group-5 | |
| 13th | Group-1 | |
| | Group-2 | |
| | Group-3 | Making a Job by Students use of above Techniques |
| 14th | Group-4 | |
| | Group-5 | |
| | Group-1 | |

Sh. Neel Singh
W/S Instructor Welding

OIC

**Lesson Plan/ Demonstration Plan**

**Name of the Faculty** : **Ajay Sharma**

**Semester** : **2nd (N-22 Scheme)**

**Subject** : **Engineering Workshop Practice Sheet Metal**

**Duration** : **14 Weeks**

**Work load per week** : **03Hrs Practical. + 03 Hrs DCS**

| Week | Group of the Discipline | Practical Topics |
|---|---|---|
| 1st | Group-4 | Introduction of sheet metal workshop |
| | Group-5 | |
| | Group-1 | |
| 2nd | Group-2 | |
| | Group-3 | |
| | Group-4 | Demonstration of different Sheet Metal Tools & Machines |
| 3rd | Group-5 | |
| | Group-1 | |
| | Group-2 | |
| 4th | Group-3 | |
| | Group-4 | Demonstration on Sheet Metal Operation Like sheet cutting, bending, Edging, soldering & brazing, riveting |
| | Group-5 | |
| 5th | Group-1 | |
| | Group-2 | |
| | Group-3 | |
| | Group-4 | Demonstration on Sheet metal cutting machine |
| 6th | Group-5 | |
| | Group-1 | |
| | Group-2 | |
| 7th | Group-3 | |
| | Group-4 | Demonstration of soldering & riveting |
| | Group-5 | |

| | | |
|---|---|---|
| 8th | Group-1 | |
| | Group-2 | |
| | Group-3 | |
| 9th | Group-4 | One simple job involving sheet metal operation like sheet cutting, bending, curling. |
| | Group-5 | |
| | Group-1 | |
| 10th | Group-2 | |
| | Group-3 | |
| | Group-4 | Job Practice of riveting |
| 11th | Group-5 | |
| | Group-1 | |
| | Group-2 | |
| 12th | Group-3 | |
| | Group-4 | Job Practice of soldering |
| | Group-5 | |
| | Group-1 | |
| 13th | Group-2 | |
| | Group-3 | |
| | Group-4 | Making a Job by Students use of above Techniques |
| 14th | Group-5 | |
| | Group-1 | |
| | Group-2 | |

OIC

Ajay Sharma
W/S Instructor Sheet Metal

## Lesson Plan

**Name of the Faculty** : **Sh. Vijay kumar**

**Semester** : **2nd (N-22 Scheme)**

**Subject** : **Engineering Workshop Practice Fitting**

**Duration** : **14 Weeks**

**Work load per week** : **03Hrs Practical. + 03 Hrs DCS**

| Week | Group of the Discipline | Practical Topic |
|---|---|---|
| 1st | Group-2 | Demonstration of different Fitting Tools |
| | Group-3 | |
| | Group-4 | |
| 2nd | Group-5 | |
| | Group-1 | |
| | Group-2 | Demonstration of different Drilling machines and power tools |
| 3rd | Group-3 | |
| | Group-4 | |
| | Group-5 | |
| 4th | Group-1 | |
| | Group-2 | Demonstration of operations cutting and sawing |
| | Group-3 | |
| 5th | Group-4 | |
| | Group-5 | |
| | Group-1 | |
| 6th | Group-2 | Demonstration of operations chipping and filling |
| | Group-3 | |
| | Group-4 | |
| 7th | Group-5 | |
| | Group-1 | |
| | Group-2 | Demonstration of operations Drilling and Tapping on mild steel workpiece |
| 8th | Group-3 | |
| | Group-4 | |
| | Group-5 | |
| 9th | Group-1 | |
| | Group-2 | Job Practice (cutting of mild steel workpiece ) |
| | Group-3 | |
| 10th | Group-4 | |

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|---|---|---|
| 10th | Group-5 | Job Practice (cutting of mild steel workpiece ) |
| | Group-1 | |
| 11th | Group-2 | Job Practice (chipping and filing of mild steel workpiece Drilling on mild steel workpiece) |
| | Group-3 | |
| | Group-4 | |
| 12th | Group-5 | |
| | Group-1 | |
| | Group-2 | Job Practice (Tapping on mild steel workpiece) |
| 13th | Group-3 | |
| | Group-4 | |
| | Group-5 | |
| 14th | Group-1 | |
| | Group-2 | Job Practice (Tapping on mild steel workpiece) |
| | Group-3 | |

OIC

Sh. Vijay kumar

W/S Instructor Fitting

## Lesson Plan

**Name of the Faculty : Sh. Abinash thakur**

**Semester : 2nd (N-22 Scheme)**

**Subject : Engineering Workshop Practice Electrical**

**Duration : 14 Weeks**

**Work load per week : 03Hrs Practical + 03 Hrs DCS**

| Week | Group of the Discipline | Practical Topic |
|---|---|---|
| 1st | Group-5 | One lamp controlled by one switch |
| | Group-1 | |
| | Group-2 | |
| 2nd | Group-3 | |
| | Group-4 | |
| | Group-5 | Lamp circuit connection of lamp and socket by separate switches |
| 3rd | Group-1 | |
| | Group-2 | |
| | Group-3 | |
| 4th | Group-4 | |
| | Group-5 | Connection of tube light |
| | Group-1 | |
| 5th | Group-2 | |
| | Group-3 | |
| | Group-4 | |
| 6th | Group-5 | Simple lamp install bedroom lighting |
| | Group-1 | |
| | Group-2 | |
| 7th | Group-3 | |
| | Group-4 | |
| | Group-5 | Simple lamp circuit install stair case wiring |
| 8th | Group-1 | |
| | Group-2 | |
| | Group-3 | |
| 9th | Group-4 | |
| | Group-5 | Demonstration of measurement of current ,voltage,power and energy and Demonstration of tools used in electrical wiring |
| | Group-1 | |
| 10th | Group-2 | |

| | | |
|---|---|---|
| 10th | Group-3 | Demonstration of measurement of current ,voltage,power and energy and Demonstration of tools used in electrical wiring |
| | Group-4 | |
| 11th | Group-1 | Demonstration of advance power tools |
| | Group-2 | |
| | Group-3 | |
| 12th | Group-4 | |
| | Group-5 | |
| | Group-2 | Demonstration of pneumatic tools and accessories |
| 13th | Group-3 | |
| | Group-4 | |
| | Group-5 | |
| 14th | Group-1 | |
| | Group-3 | Tools for cutting and drilling |
| | Group-4 | |

Sh. Abinash thakur

W/S Instructor Electrical