LESSON PLAN

Name of Faculty	Babita Sharma
Department	Applied Science & Humanities
Semester	2nd
Subject	Environmental Science
Lesson Plan for the Duration	January-May 2025

Week		Theory
1st (27 Jan. – 03 Feb.)	UNIT-I ECOSYSTEM	Structure of Ecosystem,Biotic & Abiotic components, Food Chain & Food Web,Aquatic & Terrestrial Ecosystem.
2nd (04Feb. – 11 Feb.)		Carbon,Nitrogen,Phosphorus cycle,Global Warming-Causes,Effects,Process,GreenHouse Effect,Ozone Depletion.
3rd (12 Feb-19 Feb.)	UNIT-2 AIR & NOISE POLLUTION	Pollution & Pollutants,Natural & Manmade Sources of Air Pollution,Air Pollutants,Types,Particulate Pollutants,Effects & Control.
4th (20 Feb . –27Feb.)		Gaseous Pollution Control,Absorber,Catalytic Converter,Effects of Air Pollution due to Refrigerants.
5th (28 Feb -		Noise Pollution,Sources of Pollution,Measurement of Pollution Levels,Effects of Noise Pollution,Noise Pollution Rules 2000.
6th (07 Mar. – 15 Mar.)	UNIT-3 WATER & SOIL	Sources of Water Pollurtion,Types of Water Pollutants,Characteristics of Water Pollutants,Turbidity,Ph,Total suspended solids,Total Solids BOD & COD.
		CLASS TEST -1 3rd week of March 2025
7th (17 Mar. –22 March)	UNIT-3 WATER & SOIL POLLUTION	Waste Water Treatment,Primary Methods: Sedimentation,froath Floating,Secondary Methods: Active Sludge Treatmant,Trickling Filter,Bioreactor,Tertiary Methods: Membrane Separation Technology,Reverse Osmosis.
8th (23 March . –29		Causes,Effects & Preventive measures of Soil Pollution,Cause,Excessive use of fertilizers,Pesticides,Insecticides,Irrigation,E-Waste.
9th (30 March –.07 April)	UNIT-4 RENEWABLE SOURCES OF ENERGY	Solar Energy:Basics of solar Energy,Flate Plate Collector,Theory of Flate Plate Collector,Importance of coating,Advanced Collector,Solar Pond,Solar Water Heater,Solar Dryer,Solar Stills.
10th (08 April. – 17		Biomass:Biomass as energy source,Thermal Characteristics of biomass as fuel,Anaerobic Digestion,Biomass Production Mechanism,Utilization & Storage of Biomass.
		CLASS TEST 2 3rd WEEK OF APRIL 2025
11th (18 April. – 25	UNIT-4 RENEWABLE SOURCES OF ENERGY	Wind Energy:Current Status & Future Prospectus of Wind Energy,Wind energy in India,Environmental Benefits & Problems of Wind Energy
12th (26 April - 03 May)		New Energy Sources,Need of New Sources,Different types of Energy Sources,Applications of Hydrogen Energy,Ocean Energy,Tidal Energy Conversion,Geo Thermal Energy.
13th (04 May- 13 May.)	UNIT-5 SOLID WASTE	Solid Waste Generation-Sources & Characteristics of Municipal solid waste,E-Waste,Bio- Mrdical Waste,Mettalic Waste,Non Metallic Waste from Industries.
		HOUSE TEST 2nd WEEK OF MAY 2025
14th (14May-20 May.)	UNIT-5 SOLID WASTE MANAGEMENT,ISO 14000 &ENVIRONM	Collection & Disposal:MSW(3R,Principal,energy recovery,sanitary landfill,Hazardous,Waste Water Quality Act 2004,Air Pollution control act 1981,Water Pollution Act 1996,Structure & Role of Central & State Pollution Control Board.
(21 May-27		Concept of Carbon Credit,Carbon Footprint,Environmental ,anagment in Fabrication Industry,ISO14000: Implementatgion in Indutries,Benefits.
16th (28 May-29 May)	Revision	Revision and Doubt Clearance

Babita Sharma
Lecturer Physics

LESSON PLAN		
Name of Faculty		**Nisha kumari**
Department		**Applied Science & Humanities**
Semester		**2nd**
Subject		**Mathematics - II**
Lesson Plan for the Duration		**27 Jan. 2025 to 29 May 2025**
Week	**Theory**	
1st (27Jan. - 02Feb.)	Determinants	Determinants: Elementary properties of determinants upto 3rd order, consistency of equations, Crammer's rule.
2nd (03 Feb. - 7Feb.)	Matrices	Matrix: Algebra of matrices, Inverse of a matrix, matrix
3rd(12 Feb.- 19 Feb.)	Matrices	Matrix: Matrix inverse Method to solve a system of linear equations in 3 variables.
4th (20 Feb. - 27Feb.)	Intergral Calculus	Intergration as inverse operation of differentiation.
5th (28 Feb. - 06 Mar.)	Intergral Calculus	Simple intergration by substitution, by parts and by partial fraction(for linear factors only.
6th(07 Mar. - 15 Mar.)	Intergral Calculus	Use of formulas for solving problems. When m, are positive integers.
7th (17 Mar. -22 Mar.)	Intergral Calculus	Applications for: (i) simple problems on evaluation of area bounded by a curve and axis .
8th (24 Mar. - 29 Mar.)	Intergral Calculus	Applications for: (ii)Calculation of volume of a solid formed by revolution of an area about axis.
9th (1st april.- 05April)	Co-ordinate Geometry	Co-ordinate Geometry Equations of straight lines in various standard forms (without proof), intersection of two straight lines .
10th (07April - 11April)	Co-ordinate Geometry	Angle between two lines .Parallel and perpendicular lines,Perpendicular Distance formula
11th (18 April - 25 April)	Co-ordinate Geometry	General equation of a circle and its characteristics. To find the equation of a circle given: center and radius, Three points lying on it, coordinates of end points of a diameter.
12th (26 April - 03 May)	Co-ordinate Geometry	Definition of conics(parabola,Ellipse,Hyperbola) their standard equations without proof.
13th (04 May - 13 May)	Co-ordinate Geometry	Problems on conics when their foci, directrices or vertices are given.
14th(14 May - 20 May)	Differential Equations	Solution of first order and first degree differential equation by variable separation
15th(21 May - 27 May)	Differential Equations	Solution of first order and first degree differential equation by variable separation
16th (28 May -29 May)	Revision	Revision and Doubt Clearance

Nisha kumari

Signature of HOD

Signature of Subject Teacher

Govt. Polytechnic Jandaur (H.P.)

Lesson Planning (Theory)

Branch : Civil Engg. & Electrical Engg.

Subject : Applied Physics-II

Teacher: BABITA SHARMA

Semester : Second

Session : 27th January 2025- May 2025

Class Room:

Sr. No.	Week	No. of Lectures	Chapter/ Unit Description	Detail of Contents	Reference Resources	Remarks
1	5th Jan.	4	Wave motion and its applications	Introduction of Applied Physics-II Wave motion, transverse and longitudinal waves with examples definitions of wave velocity, frequency and wave length and their relationship, Sound and light waves and their properties wave equation (y = r sin ωt) amplitude, phase, phase difference,	R1, R2, R3 and R4	
	1st Feb.	4		Principle of superposition of waves and beat formation Simple Harmonic Motion (SHM): definition, expression for displacement, velocity etc.		
	2nd Feb.	3		Definition, expression for acceleration, time period, frequency etc. Free, forced and resonant vibrations and their examples. Acoustics of buildings – reverberation, reverberation time, echo, noise		
	3rd Feb.	4		coefficient of absorption of sound, methods to control reverberation time and their applications. Ultrasonic waves – Introduction and properties, engineering and medical applications of ultrasonic Revision of whole Chapter		
2	4th Feb.	3	Optics	Basic optical laws- reflection and refraction, refractive index Images and image formation by mirrors, lens and thin lenses, lens formula Power of lens, magnification, Total internal reflection, Critical angle and conditions for total internal reflection applications of total internal reflection in optical fiber Class Test-I	R1, R2, R3 and R4	
	1st Mar.	4		Optical Instruments- simple and compound microscope astronomical telescope in normal adjustment and their magnifying powers Revision of whole Chapter		
3	2nd Mar.	4	Electrostatics	Coulomb's law, unit of charge Electric field, Electric lines of force and their properties Electric flux, Electric potential and potential difference, Gauss's law Capacitor and its working, Capacitance and its units, Capacitance of a parallel plate capacitor Series and parallel combination of capacitors (related numerical)	R1, R2, R3 and R4	
	3rd Mar.	3		dielectric and its effect on capacitance, dielectric break down Revision of whole Chapter		
4	4th March	4	Current Electricity	Electric Current and its units, Direct and alternating current Resistance and its units, Specific resistance, Conductance, Specific conductance, Series and parallel combination of resistances Factors affecting resistance of a wire, carbon resistances and colour coding, Ohm's law and its verification, Kirchhoff's laws. Concept of terminal potential difference and Electro motive force (EMF)	R1, R2, R3 and R4	
	1st April	3		Heating effect of current, Electric power, Electric energy and its units (related numerical problems), Advantages of Electric Energy over other forms of energy.		
5	2nd April	4	Electromagnetism	Types of magnetic materials: dia, para and ferromagnetic with their properties Magnetic field and its units, magnetic intensity, magnetic lines of force, magnetic flux and units, magnetization Class Test-II Lorentz force (force on moving charge in magnetic field), Force on current carrying conductor Moving coil galvanometer; principle, construction and working Conversion of a galvanometer into ammeter and voltmeter.	R1, R2, R3 and R4	
	3rd April	2		Revision of whole Chapter		

6	4th April	4	Semiconductor Physics	Energy bands in solids Types of materials (insulator, semi-conductor, conductor) intrinsic and extrinsic semiconductors. p-n junction, junction diode,V-I characteristics Diode as rectifier – half wave and full wave rectifier (centre taped). House Test	R1, R2, R3 and R4	
	5th April	2		Photocells, Solar cells; working principle and engineering applications		
7	1st May	1	Modern Physics	Lasers: Energy levels ionization and excitation potentials; spontaneous and stimulated emission population inversion, pumping methods, optical feedback Types of lasers; Ruby	R1, R2, R3 and R4	
	2nd May	4		He-Ne and semiconductor, laser characteristics engineering and medical applications of lasers. Fiber Optics: Introduction to optical fibers		
	3rd May	3		light propagation, acceptance angle and numerical aperture		
	4th May	3		fiber types, applications in; telecommunication, medical and sensors Revision of whole Chapter		

REFERENCE RESOURCES

- Applied -Physics-II by R.A. Banwat {R1}
- Modern ABC of Physics-II {R3}
- Dinesh Publication (A.P.-II) {R2}
- True Education (A.P.-II) {R4}

Signature of Teacher with Date

Signature of H.O.D. with Date

LESSON PLAN

Program Name	
Course/Subject Name	**Engineering Mechanics**
Course/Subject Code	**ES106 & ES 112**
Course/Subject Coordinator Name	**Er. Amish Rehalia**

Evaluation scheme

S.No.	**Subject Name**	**Study scheme (Hrs/Week)**	**Marks in evaluation scheme**			
			Internal Assessment		**External Assessment**	
			Theory	**Practical**	**Theory**	**Practical**
1.	**Engineering Mechanics Theory & Engineering Mechanics lab**	**TH [3+1(DCS) + 2+2 (Lab)]**	**40**	**40**	**60**	**60**
Reference books			(i)D.S. Bedi, Engineering Mechanics, Khanna Publications, New Delhi (2008)			
			(ii) Khurmi, R.S., Applied Mechanics, S. Chand & Co. New Delhi.			
			(iii) Bansal R K, A text book of Engineering Mechanics, Laxmi Publications.			
			(iv) Ramamrutham, Engineering Mechanics, S. Chand & Co. New Delhi.			
			(v)Amish Rehalia, Munish Kumar True Edu Publications Himachal Pradesh.			

Course Outcomes: After the completion of the course the student will be able to

CO1	Identify the force systems for given conditions by applying the basics of mechanics.
CO2	Determine unknown force(s) of different engineering systems.
CO3	Apply the principles of friction in various conditions for useful purposes
CO4	Find the centroid and centre of gravity of various components in engineering systems.

L. No.	Topic Covered	Proposed Date	Actual Date	Remarks
1	**Unit – I Basics of mechanics and force system** Significance and relevance of Mechanics, Applied mechanics, Statics, Dynamics.	27/01/2025 28/01/2025		
2	Space, time, mass, particle, flexible body and rigid body. Scalar and vector quantity, Units of measurement (SI units)	31/01/2025		
3	Force – unit, representation as a vector and by Bow's notation, characteristics and effects of a force, Principle of transmissibility of force.	01/02/2025 03/02/2025		
4	Force system and its classification	04/02/2025		
5	Resolution of a force - Orthogonal components of a force, moment of a force, Varignon's Theorem.	07/02/2025 10/02/2025		
6	Composition of forces – Resultant, analytical method for determination of resultant for concur- rent, non-concurrent and parallel co-planar force systems	11/02/2025 14/02/2025		
7	Law of triangle, parallelogram and polygon of forces.	15/02/2025		
8	**Unit– II Equilibrium:** Equilibrium and Equilibrant, Free body and Free body diagram, Analytical and graphical meth	17/02/2025 18/02/2025		
9	Lami's Theorem – statement and explanation, Application for various engineering	21/02/2025 22/02/2025		
10	Types of beam, supports (simple, hinged, roller and fixed) and loads acting on beam (vertical point load, uniformly distributed load),	24/02/2025		
11	Beam reaction for cantilever, simply supported beam with or without overhang – subjected to combination of Point load and uniformly distributed load	25/02/2025 28/02/2025		
12	Beam reaction graphically for simply supported beam subjected to vertical point loads	**01/03/2025**		
13	Beam reaction for cantilever, simply supported beam with or without overhang – subjected to combination of Point load and uniformly distributed load	**03/03/2025**		
14	**Unit– III Friction**: Friction and its relevance in engineering,	**04/03/2025**		
15	Types and laws of friction, limiting equilibrium, limiting friction, co-efficient of friction,	**04/03/2025** **07/03/2025**		

16	Angle of friction, angle of repose, relation between co-efficient of friction and angle of friction	10/03/2025		
17	Equilibrium of bodies on level surface subjected to force parallel and inclined to plane.	**11/03/2025**		
18	Equilibrium of bodies on inclined plane subjected to force parallel to the plane only.	**15/03/2025**		
19	Equilibrium of bodies on level surface subjected to force parallel and inclined to plane. Equilibrium of bodies on inclined plane subjected to force parallel to the plane only.	17/03/2025 18/03/2025		
20	Equilibrium of bodies on level surface subjected to force parallel and inclined to plane. Equilibrium of bodies on inclined plane subjected to force parallel to the plane only.	**21/03/2025** **22/03/2025**		
21	NUMERICAL PROBLEMS ON CHAPTER 1(REVISION)	**24/03/2025**		
22	NUMERICAL PROBLEMS ON CHAPTER 2(REVISION)	**25/03/2025**		
23	NUMERICAL PROBLEMS ON CHAPTER 3(REVISION)	**28/03/2025**		
24	**Unit– IV Centroid and center of gravity**	**01/04/2025**		
25	Centroid of geometrical plane figures (square, rectangle, triangle)	**04/04/2025**		
26	Centroid of geometrical plane figures (square, rectangle, triangle, circle, semi CIRCLE)	**05/04/2025**		
27	Centroid of composite figures composed of not more than two geometrical figures.	**07/04/2025**		
28	Centroid of composite figures composed of not more than two geometrical figures.	**08/04/2025**		
29	Centroid of composite figures composed of not more than two geometrical figures. Centre of Gravity of simple solids (Cube cuboid, cone, cylinder, sphere, hemisphere)	**11/04/2025**		
30	Centroid of composite figures composed of not more than two geometrical figures. Centre of Gravity of simple solids (Cube cuboid, cone, cylinder, sphere, hemisphere)	**19/04/2025**		
31	Centroid of composite figures composed of not more than two geometrical figures. Centre of Gravity of simple solids (Cube cuboid, cone, cylinder, sphere, hemisphere)	**21/04/2025**		
32	Centre ofGravity of composite solids composed of not more than two simple solids.	**22/04/2025**		

33	NUMERICAL PROBLEMS ON CHAPTER 4(REVISION)	**25/04/2025**		
34	NUMERICAL PROBLEMS ON CHAPTER 4(REVISION)	**26/04/2025**		
35	**Unit – V Simple lifting machine** Simple lifting machine, load, effort, mechanical advantage, , and non	**28/04/2025**		
36	Applications and advantages. Velocity ratio, efficiency of machines	**02/05/2025**		
37	law of machine. Ideal machine, friction in machine,	**03/05/2025**		
38	maximum Mechanical advantage and efficiency,	**05/05/2025**		
39	non-reversible machines, conditions for reversibility.	**06/05/2025**		
40	Velocity ratios of Simple axle and wheel,	**09/05/2025**		
41	Velocity ratios of Differential axle and wheel	**13/05/2025**		
42	Velocity ratios of worm and worm wheel	**16/05/2025**		
43	Velocity ratios of simple screw jack	**17/05/2025**		
44	NUMERICAL PROBLEMS ON CHAPTER 5(REVISION)	**19/05/2025**		
45	NUMERICAL PROBLEMS ON CHAPTER 5(REVISION)	**20/05/2025**		
46	NUMERICAL PROBLEMS ON CHAPTER 6(REVISION)	**23/05/2025**		
47	NUMERICAL PROBLEMS ON CHAPTER 6(REVISION)	**24/05/2025**		
48	NUMERICAL PROBLEMS ON CHAPTER 6(REVISION)	**26/05/2025**		
49	NUMERICAL PROBLEMS ON CHAPTER 6(REVISION)	**27/05/2025**		

Assignments:

Assignment serial	Contents of syllabus covered	Proposed date	Actual date	Remarks
A-1	Basics of mechanics and force system & Equilibrium and Equilibrant.			
A-2	Friction and its relevance in engineering.			
A-3	Centroid and centre of gravity, Simple lifting machine.			

House Test/Class Test:

House/Class Test	Contents of syllabus covered	Proposed date	Actual date	Remarks
CT-I	30% of the syllabus	3rd week of March 2025		
CT-II	Next 30% of the syllabus	3rd week of April 2025		
House Test	80% of the syllabus	2nd week of May2025		

Lab Plan:

Prac.. No.	Name of Practical	Actual date		Remarks
		G-1	G-2	
1	To study various equipment's related to Engineering Mechanics.			
2	To find the M.A., V.R., Efficiency and law of machine for Differential Axle and Wheel.			
3	To find the M.A., V.R., Efficiency and law of machine for Simple Screw Jack.			
4	Derive Law of machine using Worm and worm wheel.			
5	Determine resultant of concurrent force system applying Law of Polygon of forces using forcetable.			
6	Determine resultant of concurrent force system graphically.			
7	Determine resultant of parallel force system graphically.			
8	Verify Lami's theorem.			
9	Study forces in various members of Jib crane.			
10	Determine support reactions for simply supported beam.			
11	Obtain support reactions of beam using graphical method.			
12	Determine coefficient of friction for motion on horizontal and inclined plane.			
13	Determine centroid of geometrical plane figure			

(Signature of Teacher) (Signature of HOD)

LESSON PLAN

Branch	Civil Engineering
Course Title	Engineering Workshop Practice
Course Code	ES103
Number Of Credits	1.5 (L : 0 , DCS : 3 , P : 3)
Course Category	ES

Evaluation Scheme

Sr. No.	Subject Name	Study Scheme Hrs/Week	Marks Evaluation Scheme			
1	Engineering Workshop Practice		Internal Assessment		External Assessment	
			Theory	Practical	Theory	Practical
		06 Hrs/week		40		60
2	Reference Books	S.K. Hajara Chaudhary , Media Promoters and publishers				
		K.Venkat Reddy, B.S. Publication Hyderabad				

Course Outcome:

CO1	Acquire skills in basic engineering practice to identify, select and use various marking, measuring, and holding, striking and cutting tools & equipment's and machines
CO2	Understand job drawing and complete jobs as per specifications in allotted time.
CO3	CO3 Inspect the job for the desired dimensions and shape.
CO4	Operate, control different machines and equipment's adopting safety practices

Lab Plan: Fitting (Civil Engineering.)

Sr. No.	Name of Practical	Month 2024-2025	Proposed Week	Remarks
I	**Demonstration** of different fitting tools and drilling machines and power tools	January 2025	Week - 1	
		February 2025	Week - II	
		February 2025	Week - III	
		February 2025	Week - IV	
II	**Demonstration** of different operations like chipping, filing, drilling, tapping, sawing, cutting etc.	March 2025	Week - V	
		March 2025	Week - VI	
		March 2025	Week - VII	
		March 2025	Week - VIII	
III	**One** simple fitting job involving practice of chipping, filing, drilling, tapping, cutting etc.	April 2025	Week - IX	
		April 2025	Week - X	
		April 2025	Week – XI	
		April 2025	Week - XII	
		May 2025	Week - XIII	
		May 2025	Week – XIV	

Lab Plan : Sheet Metal (Civil Engineering.)

Sr. No.	Name of Practical	Month 2024-2025	Proposed Week	Remarks
I	**Demonstration** of different sheet metal tools / machines.	January 2025	Week - 1	
		February 2025	Week - II	
		February 2025	Week - III	
		February 2025	Week - IV	
II	**Demonstration** of different sheet metal operations like sheet cutting, bending, edging, end curling, lancing, soldering, brazing, and riveting	March 2025	Week - V	
		March 2025	Week - VI	
		March 2025	Week - VII	
		March 2025	Week - VIII	
III	**One** simple job involving sheet metal operations and soldering and riveting.	April 2025	Week - IX	
		April 2025	Week - X	
		April 2025	Week – XI	
		April 2025	Week - XII	
		May 2025	Week - XIII	
		May 2025	Week – XIV	

W/shop Instructor **Foreman Instructor** **Workshop supdt.**

Lab Plan : Electrical House Wiring (Civil Engineering)

Sr. No.	Name of Practical	Month 2024-2025	Proposed Week	Remarks
I	**Demonstration** of advance power tools, pneumatic tools, electrical wiring tools and accessories.	January 2025	Week - 1	
II	**Tools** for Cutting and drilling.	February 2025	Week - II	
		February 2025	Week - III	
		February 2025	Week - IV	
III	**Demonstration** of measurement of Current, Voltage, Power and Energy.	March 2025	Week - V	
IV	**Practice** on simple lamp circuits: One lamp controlled by one switch by surface conduit wiring,	March 2025	Week - VI	
V	**Lamp** circuits- connection of lamp and socket by separate switches,	March 2025	Week - VII	
		March 2025	Week - VIII	
VI	**Connection** of Fluorescent lamp/tube light	April 2025	Week - IX	
VII	**Simple** lamp circuits-in- stall bedroom lighting.	April 2025	Week - X	
VIII	**Simple** lamp circuits- install stair case wiring.	April 2025	Week – XI	
		April 2025	Week - XII	
		May 2025	Week - XIII	
		May 2025	Week – XIV	

W/shop Instructor **Foreman Instructor** **Workshop supdt.**

Lab Plan : Carpentry (Civil Engineering

Sr No.	Name of Practical	Month 2024-2025	Proposed Week	Remarks
I	**Demonstration** of different wood working tools / machines.	January 2025	Week - 1	
		February 2025	Week - II	
		February 2025	Week - III	
		February 2025	Week - IV	
II	**Demonstration** of different wood working processes, like plaining, marking, chiseling, grooving, turning of wood etc	March 2025	Week - V	
		March 2025	Week - VI	
		March 2025	Week - VII	
		March 2025	Week - VIII	
III	**One** simple job involving any one joint like mortise and tenon dovetail, bridle, half lap etc.	April 2025	Week - IX	
		April 2025	Week - X	
		April 2025	Week – XI	
		April 2025	Week - XII	
		May 2025	Week - XIII	
		May 2025	Week – XIV	

W/shop Instructor **Foreman Instructor** **Workshop supd**

Lab Plan : Welding (Civil Engineering)

Sr. No.	Name of Practical	Month 2024-2025	Proposed Week	Remarks
I	**Demonstration** of different welding tools / machines.	January 2025	Week - 1	
		February 2025	Week - II	
		February 2025	Week - III	
		February 2025	Week - IV	
II	**Demonstration** on Arc Welding, Gas Welding, MIG, MAG welding, gas cutting and rebuilding of broken parts with welding.	March 2025	Week - V	
		March 2025	Week - VI	
		March 2025	Week - VII	
		March 2025	Week - VIII	
III	**One** simple job involving butt and lap joint.	April 2025	Week - IX	
		April 2025	Week - X	
		April 2025	Week – XI	
		April 2025	Week - XII	
		May 2025	Week - XIII	
		May 2025	Week – XIV	

W/shop Instructor **Foreman Instructor** **Workshop supdt.**

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Lab Plan : Smithy shop (Civil Engineering)

Sr. No.	Name of Practical	Month 2024-2025	Proposed Week	Remarks
I	**Demonstration** and explanation of tools and equipment used. Safety measure to be observed in smithy shop.	January 2025	Week - 1	
		February 2025	Week - II	
		February 2025	Week - III	
		February 2025	Week - IV	
II III	**Demonstration** of bending operation. Up-setting operation. **Description** and specification of anvils, swag blocks, hammer etc.	March 2025	Week - V	
		March 2025	Week - VI	
		March 2025	Week - VII	
		March 2025	Week - VIII	
IV V	**Demonstration** and description of tongs, fullers, To forge a L - hook	April 2025	Week - IX	
		April 2025	Week - X	
		April 2025	Week – XI	
		April 2025	Week - XII	
		May 2025	Week - XIII	
		May 2025	Week – XIV	

W/shop Instructor **Foreman Instructor** **Workshop supdt.**

HOD
App. Sc. & hum.