P.C.I.E.T., CHHENDIPADA, DIST- ANGUL

THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGINEERING SEMESTER: 4TH **SECTION: MA**	**NAME OF THE FACULTY : (1) ER. TARANISEN MOHANTY (H.O.D., MECH. ENGG.), (2) ER. HIMANSU SEKHAR SAMAL (LECT. IN MECH. ENGG.)**
SEMESTER FROM : 16.01.2024 to 26.04.2024	**THEORY SUBJECT: THEORY OF MACHINES (TH-1)**
CLASS ALLOTTED /WEEK : 04 PERIODS	

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**Simple Mechanism**	**8**		
	1.1 Link ,kinematic chain, mechanism, machine	2	JANUARY	Dt. 16.01.24, 17.01.24
	1.2 Inversion, four bar link mechanism and its inversion	2		Dt. 18.01.24, 22.01.24
	1.3 Lower pair and higher pair	2		Dt. 24.01.24, 25.01.24
	1.4 Cam and followers	2		Dt. 29.01.24, 30.01.24 31.01.24
2	**Friction**	**12**		
	2.1 Friction between nut and screw for square thread, screw jack	2	FEBRUARY	Dt. 01.02.24, 05.02.24
	2.2 Bearing and its classification, Description of roller, needle roller& ball bearings.	2		Dt. 06.02.24, 07.02.24
	2.3 Torque transmission in flat pivot& conical pivot bearings.	2		Dt. 08.02.24, 12.02.24
	2.4 Flat collar bearing of single and multiple types.	2		Dt. 13.02.24, 15.02.24
	2.5 Torque transmission for single and multiple clutches	2		Dt. 19.02.24, 20.02.24
	2.6 Working of simple frictional brakes.	2		Dt. 21.02.24, 22.02.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
3	**Power Transmission**	**12**		
	3.1 Concept of power transmission	1		Dt:26.02.24
	3.2 Type of drives, belt, gear and chain drive.	1		Dt.27.0224
	3.3 Computation of velocity ratio, length of belts (open and cross)with and without slip.	2		Dt.28.02.24 , 29.02.24
	3.4 Ratio of belt tensions, centrifugal tension and initial tension.	1	MARCH	Dt.04.03.24
	3 5 Power transmitted by the belt.	1		Dt 06.03.24
	3 6 Determine belt thickness and width for given permissible stress for open and crossed belt considering centrifugal tension.	2		Dt.07.03.24 11.03.24
	3.7 V-belts and V-belts pulleys.	1		Dt.12.03.24
	3.8 Concept of crowning of pulleys.	1		Dt.13.03.24
	3.9 Gear drives and its terminology.	1		Dt.14.03.24
	3.10 Gear trains, working principle of simple, compound, reverted and epicyclic gear trains.	1		Dt.18.03.24
4	**Governors and Flywheel**	**8**		
	4.1 Function of governor	1		Dt.19.03.24
	4.2 Classification of governor	1		Dt.20.03.24
	4.3 Working of Watt, Porter, Proel and Hartnell governors.	2		Dt.21.03.24, 27.03.24
	4.4 Conceptual explanation of sensitivity, stability and isochronisms.	1		Dt.28.03.24
	4.5 Function of flywheel.	1	APRIL	Dt.02.04.24
	4.6 Comparison between flywheel &governor.	1		Dt.03.04.24
	4.7 Fluctuation of energy and coefficient of fluctuation of speed.	1		Dt.04.04.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
5	**Balancing of Machine**	**8**		
	5.1 Concept of static and dynamic balancing.	1		Dt. 08.04.24
	5.2 Static balancing of rotating parts.	1		Dt. 09.04.24
	5.3 Principles of balancing of reciprocating parts.	2		Dt. 10.04.24, 15.04.24
	5.4 Causes and effect of unbalance.	2		Dt. 16.04.24, 18.04.24
	5.5 Difference between static and dynamic balancing	2		Dt. 22.04.24, 24.04.24
6	**Vibration of Machine Parts**	**8**		
	6.1 Introduction to Vibration and related terms (Amplitude, time period and frequency, cycle)	2		Dt. 25.04.24,
	6.2 Classification of vibration.	1		Dt. 27.03.24
	6.3 Basic concept of natural, forced & damped vibration	2		Dt. 29.02.24
	6.4 Torsional and Longitudinal vibration.	2		Dt. 15.02.24
	6.5 Causes & remedies of vibration.	1		

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGINEERING SEMESTER: 4TH **SECTION:- MA**	**NAME OF THE FACULTY : (1) ER. SUBHASMITA JENA, (2) ER. DEWAN KUMAR SAHU, (3) ER. ABINASH SAHOO (LECT. IN MECH. ENGG.)**
SEMESTER FROM : 16.01.2024 to 26.04.2024	**THEORY SUBJECT: MANUFACTURING TECHNOLOGY (TH-2)**
CLASS ALLOTTED /WEEK : 04 PERIODS	

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**Tool Materials**	**4**		
	Composition of various tool materials	2	JANUARY	Dt·16·01·24, 18·01·24
	Physical properties& uses of such tool materials	2		Dt·20·01·24, 22·01·24
2	**Cutting Tools**	**6**		
	Cutting action of various and tools such as Chisel, hacksaw blade, dies and reamer	2		Dt·25·01·24, 27·01·24
	Turning tool geometry and purpose of tool angle	2		Dt·29·01·24, 30·01·24
	Machining process parameters (Speed, feed and depth of cut)	1	FEBRUARY	Dt·01·02·24
	Coolants and lubricants in machining and purpose	1		Dt 03·02·24
3	**Lathe Machine**	**8**		
	Construction and working of lathe and CNC lathe: Major components of a lathe and their function, Operations carried out in a lathe(Turning, thread cutting, taper turning, internal machining, parting off, facing, knurling), Safety measures during machining	3		Dt·05·02·24, 06·02·24 08·02·24
	Capstan lathe: Difference with respect to engine lathe, Major components and their function, Define multiple tool holders	2		Dt·10·02·24, 12·02·24
	Turret Lathe: Difference with respect to capstan lathe, Major components and their function	1		Dt·13·02·24
	Draw the tooling layout for preparation of a hexagonal bolt & bush	2		Dt·15·02·24, 17·02·24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
4	**Shaper**	**6**		
	Potential application areas of a shaper machine	1		Dt. 19.02.24
	Major components and their function	1		Dt. 20.02.24
	Explain the automatic able feed mechanism	1		Dt. 22.02.24
	Explain the construction &working of tool head	1		Dt. 24.02.24
	Explain the quick return mechanism through sketch	1		Dt. 26.02.24
	State the specification of a shaping machine.	1		Dt. 27.02.24
5	**Planning Machine**	**6**		
	Application area of a planer and its difference with respect to shaper	1		Dt. 29.02.24
	Major components and their functions	1	MARCH	Dt. 02.03.24
	The table drive mechanism	2		Dt. 04.03.24
	Working of tool and tool support	1		Dt. 07.03.24
	Clamping of work through sketch	1		Dt. 09.03.24
6	**Milling Machine**	**8**		
	Types of milling machine and operations performed by them and also same for CNC milling machine	1		Dt. 11.03.24
	Explain work holding attachment	2		Dt. 12.03.24, 14.03.24
	Construction & working of simple dividing head, universal dividing head	2		Dt. 16.03.24, 18.03.24
	Procedure of simple and compound indexing	2		Dt. 19.03.24
	Illustration of different indexing methods	1		Dt. 21.03.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
7	**Slotter**	**6**		
	Major components and their function	2		Dt. 23.03.24, 28.03.24
	Construction and working of slotter machine	2		Dt. 30.03.24
	Tools used in slotter	2	APRIL	Dt. 02.04.24
8	**Grinding**	**6**		
	Significance of grinding operations	1		Dt. 04.04.24
	Manufacturing of grinding wheels	1		Dt. 06.04.24
	Criteria for selecting of grinding wheels	2		Dt. 08.04.24
	Specification of grinding wheels with example Working of: Cylindrical Grinder,Surface Grinder, Centreless Grinder	2		Dt. 09.04.24
9	**Internal Machining operations**	**6**		
	Classification of drilling machines: Working of a)Bench drilling machine b) Pillar drilling machinec)Radial drilling machine	2		Dt. 13.04.24 Dt. 15.04.24
	BoringBasic: Principle of Boring, Different between Boring and drilling	2		Dt. 16.04.24
	Broaching: Types of Broaching(pull type, push type)Advantages of Broaching and applications	2		Dt. 18.04.24
10	**Surface Finish, Lapping**	**4**		
	Definition of Surface finish	2		Dt. 20.04.24
	Description of lapping& explain their specific cutting	2		Dt. 22.04.24, 25.04.24

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGINEERING SEMESTER: 4TH
SECTION: MA

NAME OF THE FACULTY : (1) ER. KAMALAKANTA TRIPATHY, (2) ER. BIKASH RANJAN SAHU (LECT. IN MECH. ENGG.)

SEMESTER FROM : 16.01.2024 to 26.04.2024

THEORY SUBJECT : FLUID MECHANICS (TH-3)

CLASS ALLOTTED /WEEK : 04 PERIODS

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**Properties of Fluid**	**8**		
	1.1Define fluid	3	JANUARY	Dt. 16.01.24, 18.01.24, 19.01.24
	1.2 Description of fluid properties like Density, Specific weight, specific gravity, specific volume and solve simple problems.	3		Dt. 22.01.24, 25.01.24,
	1.3 Definitions and Units of Dynamic viscosity, kinematic viscosity, surface tension Capillary phenomenon	2		Dt. 29.01.24, 30.01.24
2	**Fluid Pressure and its Measurements**	**8**		
	2.1 Definitions and units of fluid pressure, pressure intensity and pressure head.	1	FEBRUARY	Dt. 01.02.24, 02.02.24
	2.2 Statement of Pascal's Law.	1		Dt. 05.02.24
	2.3 Concept of atmospheric pressure, gauge pressure, vacuum pressure and absolute pressure	2		Dt. 06.02.24, 08.02.24
	2.4 Pressure measuring instruments	1		Dt. 09.02.24
	Manometers (Simple and Differential)			
	2.4.1 Bourdon tube pressure gauge(Simple Numerical)	2		Dt. 12.02.24
	2.5 Solve simple problems on Manometer.	1		Dt. 13.02.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
3	**Hydrostatics**	**8**		
	3.1 Definition of hydrostatic pressure	1		Dt·15·02·24
	3.2 Total pressure and centre of pressure on immersed bodies(Horizontal and Vertical Bodies)	2		Dt·16·02·24, 19·02·24
	3.3 Solve Simple problems.	2		Dt·20·02·24,
	3.4 Archimedes 'principle, concept of buoyancy, meta center and meta centric height (Definition only)	2		Dt·22·02·24
	3.5 Concept of floatation	1		Dt·23·02·24,
4	**Kinematics of Flow**	**8**		
	4.1 Types of fluid flow	2		Dt·26·02·24, 27·02·24
	4.2 Continuity equation(Statement and proof for one dimensional flow)	2		Dt·29·02·24
	4.3 Bernoulli's theorem(Statement and proof)	2	MARCH.	Dt·01·03·24
	Applications and limitations of Bernoulli's theorem (Venturimeter, pitot tube)			
	4.4 Solve simple problems	2		Dt 04·03·24, 07·03·24
5	**Orifices, Notches & Weirs**	**8**		
	5.1 Define orifice	1		Dt·11·03·24
	5.2 Flow through orifice	1		Dt·12·03·24
	5.3Orifices coefficient & the relation between the orifice coefficients	2		Dt·14·03·24, 15·03·24
	5.4 Classifications of notches & weirs	1		Dt·18·03·24,
	5.5 Discharge over a rectangular notch or weir	1		Dt·19·03·24
	5.6 Discharge over a triangular notch or weir	1		Dt·21·03·24
	5.7 Simple problems on above	1		Dt·22·03·24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
6	**Flow Through Pipe**	**10**		
	6.1 Definition of pipe.	1	I	Dt. 28.03.24
	6.2 Loss of energy in pipes.	2	APRIL	Dt. 02.04.24, 04.04.24
	6.3 Head loss due to friction: Darcy's and Chezy's formula (Expression only)	2		Dt. 05.04.24, 08.04.24
	6.4 Solve Problems using Darcy's and Chezy's formula.	3		Dt. 09.04.24, 12.04.24
	6.5 Hydraulic gradient and total gradient line	2		Dt. 15.04.24
7	**7.0 Impact of Jets**	**10**		
	7.1 Impact of jet on fixed and moving vertical flat plates	4		Dt. 16.04.24, 18.04.24
	7.2 Derivation of work done on series of vanes and condition for maximum efficiency.	3		Dt. 19.04.24, 22.04.24
	7.3 Impact of jet on moving curved vanes, illustration using velocity triangles, derivation of work done, efficiency.	3		Dt. 25.04.24, 26.04.24

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGINEERING SEMESTER: 4TH **SECTION:- MA**	**NAME OF THE FACULTY : (1) ER. SATYANARAYAN MAJHI,** **(2) ER. MANAS RANJAN BEHERA (LECT. IN MECH. ENGG.)**
SEMESTER FROM : 16.01.2024 to 26.04.2024	**THEORY SUBJECT: THERMAL ENGINEERING - II (TH-4)**
CLASS ALLOTTED /WEEK : 04 PERIODS	

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**Performance of I.C Engine**	**8**		
	1.1 Define mechanical efficiency, Indicated thermal efficiency, Relative Efficiency, brake thermal efficiency overall efficiency, Mean effective pressure & specific fuel consumption.	3	JANUARY	Dt. 16.01.24, 18.01.24, 19.01.24
	1.2 Define air-fuel ratio & calorific value of fuel.	2		Dt. 22.01.24, 25.01.24,
	1.3 Work out problems to determine efficiencies & specific fuel consumption.	3		Dt. 29.01.24, 30.01.24
2	**Air Compressor**	**12**		
	2.1 Explain functions of compressor & industrial use of compressor air	2	FEBRUARY	Dt. 01.02.24, 02.02.24
	2.2 Classify air compressor & principle of operation.	2		Dt. 05.02.24, 06.02.24
	2.3 Describe the parts and working principle of reciprocating Air compressor.	2		Dt. 08.02.24, 09.02.24
	2.4 Explain the terminology of reciprocating compressor such as bore, stroke, pressure ratio free air delivered &Volumetric efficiency.	2		Dt. 12.02.24, 13.02.24
	2.5 Derive the work done of single stage & two stage compressor with and without clearance.	2		Dt 15.02.24. 16.02.24
	2.6 Solve simple problems (without clearance only)	2		Dt. 19.02.24.
3	**Properties of Steam**	**12**		
	3.1 Difference between gas & vapours.	1		Dt. 20.02.24
	3.2 Formation of steam.	2		Dt. 22.02.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	3.3 Representation on P-V, T-S, H-S, & T-H diagram.	2		Dt. 23.02.24
	3.4 Definition & Properties of Steam.	1		Dt. 26.02.24
	3.5 Use of steam table & mollier chart for finding unknown properties.	3		Dt. 27.02.24, 29.02.24
	3.6 Non flow & flow process of vapour.	1	MARCH	Dt. 01.03.24
	3.7 P-V, T-S & H-S, diagram.	1		Dt. 04.03.24
	3.8 Determine the changes in properties & solve simple numerical.	1		Dt. 07.03.24
4	**Steam Generator**	**12**		
	4.1 Classification & types of Boiler.	2		Dt. 11.03.24
	4.2 Important terms for Boiler.	2		Dt. 12.03.24
	4.3 Comparison between fire tube & Water tube Boiler.	2		Dt. 14.03.24
	4.4 Description & working of common boilers (Cochran, Lancashire, Babcock & Wilcox Boiler)	2		Dt. 15.03.24
	4.5 Boiler Draught (Forced, induced & balanced)	2		Dt. 18.03.24, 19.03.24
	4.6 Boiler mountings & accessories.	2		Dt. 22.03.24, 22.03.24
5	**Steam Power Cycles**	**8**		
	5.1 Carnot cycle with vapour.	1		Dt. 28.03.24
	5.2 Derive work & efficiency of the cycle.	1	APRIL	Dt. 02.04.24
	5.3 Rankine cycle.	1		Dt. 04.04.24
	5.3.1 Representation in P-V, T-S & h-s diagram.	1		Dt. 05.04.24
	5.3.2 Derive Work & Efficiency.	1		Dt. 08.04.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	5.3.3 Effect of Various end conditions in Rankine cycle.	1		Dt. 09.04.24
	5.3.4 Reheat cycle & regenerative Cycle.	1		Dt. 12.04.24
	5.4 Solve simple numerical on Carnot vapour Cycle & Rankine Cycle.	1		Dt. 15.04.24
6	**Heat Transfer**	**8**		
	6.1 Modes of Heat Transfer (Conduction, Convection, Radiation).	2		Dt. 16.04.24
	6.2 Fourier law of heat conduction and thermal conductivity (k).	2		Dt. 18.04.24
	6.3 Newton's laws of cooling.	1		Dt. 19.04.24
	6.4 Radiation heat transfer (Stefan, Boltzmann & Kirchhoff's law) only statement, no derivation & no numerical problem.	1		Dt. 22.04.24
	6.5 Black body Radiation, Definition of Emissivity, absorptivity, & transmissibility.	2		Dt. 25.04.24, 26.04.24

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGINEERING SEMESTER: 4TH **SECTION: MB**	**NAME OF THE FACULTY : (1) ER. TARANISEN MOHANTY (H.O.D., MECH. ENGG.), (2) ER. HIMANSU SEKHAR SAMAL (LECT. IN MECH. ENGG.)**
SEMESTER FROM : 16.01.2024 to 26.04.2024	**THEORY SUBJECT: THEORY OF MACHINES (TH-1)**
CLASS ALLOTTED /WEEK : 04 PERIODS	

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**Simple Mechanism**	**8**		
	1.1 Link ,kinematic chain, mechanism, machine	2	JANUARY	Dt. 16.01.24, 17.01.24
	1.2 Inversion, four bar link mechanism and its inversion	2		Dt. 18.01.24, 22.01.24
	1.3 Lower pair and higher pair	2		Dt. 24.01.24, 25.01.24
	1.4 Cam and followers	2		Dt. 29.01.24, 30.01.24 31.01.24
2	**Friction**	**12**		
	2.1 Friction between nut and screw for square thread, screw jack	2	FEBRUARY	Dt. 01.02.24, 05.02.24
	2.2 Bearing and its classification, Description of roller, needle roller& ball bearings.	2		Dt. 06.02.24, 07.02.24
	2.3 Torque transmission in flat pivot& conical pivot bearings.	2		Dt. 08.02.24, 12.02.24
	2.4 Flat collar bearing of single and multiple types.	2		Dt. 13.02.24, 15.02.24
	2.5 Torque transmission for single and multiple clutches	2		Dt. 19.02.24, 20.02.24
	2.6 Working of simple frictional brakes.	2		Dt. 21.02.24 22.02.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
3	**Power Transmission**	**12**		
	3.1 Concept of power transmission	1		Dt. 26.02.24
	3.2 Type of drives, belt, gear and chain drive.	1		Dt. 27.02.24
	3.3 Computation of velocity ratio, length of belts (open and cross)with and without slip.	2		Dt. 28.02.24, 29.02.24
	3.4 Ratio of belt tensions, centrifugal tension and initial tension.	1	MARCH	Dt. 04.03.24
	3.5 Power transmitted by the belt.	1		Dt. 06.03.24
	3.6 Determine belt thickness and width for given permissible stress for open and crossed belt considering centrifugal tension.	2		Dt. 07.03.24, 11.03.24
	3.7 V-belts and V-belts pulleys.	1		Dt. 12.03.24
	3.8 Concept of crowning of pulleys.	1		Dt. 13.03.24
	3.9 Gear drives and its terminology.	1		Dt. 14.03.24,
	3.10 Gear trains, working principle of simple, compound, reverted and epicyclic gear trains.	1		Dt. 18.03.24
4	**Governors and Flywheel**	**8**		
	4.1 Function of governor	1		Dt. 19.03.24
	4.2 Classification of governor	1		Dt. 20.03.24
	4.3 Working of Watt, Porter, Proel and Hartnell governors.	2		Dt. 21.03.24, 27.03.24
	4.4 Conceptual explanation of sensitivity, stability and isochronisms.	1		Dt. 28.03.24
	4.5 Function of flywheel.	1	APRIL	Dt. 02.04.24
	4.6 Comparison between flywheel &governor.	1		Dt. 03.04.24
	4.7 Fluctuation of energy and coefficient of fluctuation of speed.	1		Dt. 04.04.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
5	**Balancing of Machine**	**8**		
	5.1 Concept of static and dynamic balancing.	1		Dt. 08.04.24
	5.2 Static balancing of rotating parts.	1		Dt. 09.04.24
	5.3 Principles of balancing of reciprocating parts.	2		Dt. 10.04.24, 15.04.24
	5.4 Causes and effect of unbalance.	2		Dt. 16.04.24, 18.04.24
	5.5 Difference between static and dynamic balancing	2		Dt. 22.04.24, 24.04.24
6	**Vibration of Machine Parts**	**8**		
	6.1 Introduction to Vibration and related terms (Amplitude, time period and frequency, cycle)	2		Dt. 25.04.24,
	6.2 Classification of vibration.	1		Dt. 15.02.24
	6.3 Basic concept of natural, forced & damped vibration	2		Dt. 20.02.24
	6.4 Torsional and Longitudinal vibration.	2		Dt. 22.02.24
	6.5 Causes & remedies of vibration.	1		

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGINEERING SEMESTER: 4TH **SECTION:- MB**	**NAME OF THE FACULTY : (1) ER. SUBHASMITA JENA, (2) ER. DEWAN KUMAR SAHU, (3) ER. ABINASH SAHOO (LECT. IN MECH. ENGG.)**
SEMESTER FROM : 16.01.2024 to 26.04.2024	**THEORY SUBJECT: MANUFACTURING TECHNOLOGY (TH-2)**
CLASS ALLOTTED /WEEK : 04 PERIODS	

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**Tool Materials**	**4**		
	Composition of various tool materials	2	JANUARY	Dt.16.01.24, 17.01.24
	Physical properties& uses of such tool materials	2		Dt.19.01.24
2	**Cutting Tools**	**6**		
	Cutting action of various and tools such as Chisel, hacksaw blade, dies and reamer	2		Dt.22.01.24, 24.01.24
	Turning tool geometry and purpose of tool angle	2		Dt.29.01.24, 30.01.24
	Machining process parameters (Speed, feed and depth of cut)	1		Dt.31.01.24
	Coolants and lubricants in machining and purpose	1	FEBRUARY	Dt.02.02.24
3	**Lathe Machine**	**8**		
	Construction and working of lathe and CNC lathe: Major components of a lathe and their function, Operations carried out in a lathe(Turning, thread cutting, taper turning, internal machining, parting off, facing, knurling), Safety measures during machining	3		Dt.05.02.24, 06.02.24
	Capstan lathe: Difference with respect to engine lathe, Major components and their function, Define multiple tool holders	2		Dt.07.02.24, 09.02.24
	Turret Lathe: Difference with respect to capstan lathe, Major components and their function	1		Dt.12.02.24
	Draw the tooling layout for preparation of a hexagonal bolt & bush	2		Dt.13.02.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
4	**Shaper**	**6**		
	Potential application areas of a shaper machine	1		Dt.16.02.24
	Major components and their function	1		Dt.19.02.24
	Explain the automatic able feed mechanism	1		Dt.20.02.24
	Explain the construction &working of tool head	1		Dt.21.02.24
	Explain the quick return mechanism through sketch	1		Dt.23.02.24
	State the specification of a shaping machine.	1		Dt.26.02.24
5	**Planning Machine**	**6**		
	Application area of a planer and its difference with respect to shaper	1		Dt.27.02.24
	Major components and their functions	1		Dt.28.02.24
	The table drive mechanism	2	MARCH	Dt.01.03.24, 04.03.24
	Working of tool and tool support	1		Dt.06.03.24
	Clamping of work through sketch	1		Dt.11.03.24
6	**Milling Machine**	**8**		
	Types of milling machine and operations performed by them and also same for CNC milling machine	1		Dt.12.03.24
	Explain work holding attachment	2		Dt.13.03.24, 15.03.24
	Construction & working of simple dividing head, universal dividing head	2		Dt.18.03.24, 19.03.24
	Procedure of simple and compound indexing	2		Dt.20.03.24
	Illustration of different indexing methods	1		Dt.22.03.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
7	**Slotter**	**6**		
	Major components and their function	2		Dt. 27.03.24
	Construction and working of slotter machine	2	APRIL.	Dt. 02.04.24
	Tools used in slotter	2		Dt. 03.04.24
8	**Grinding**	**6**		
	Significance of grinding operations	1		Dt. 05.04.24
	Manufacturing of grinding wheels	1		Dt. 08.04.24
	Criteria for selecting of grinding wheels	2		Dt. 09.04.24
	Specification of grinding wheels with example Working of: Cylindrical Grinder,Surface Grinder, Centreless Grinder	2		Dt. 10.04.24, 12.04.24
9	**Internal Machining operations**	**6**		
	Classification of drilling machines: Working of a)Bench drilling machine b) Pillar drilling machinec)Radial drilling machine	2		Dt. 15.04.24, 16.04.24
	BoringBasic: Principle of Boring, Different between Boring and drilling	2		Dt. 19.04.24, 22.04.24
	Broaching: Types of Broaching(pull type, push type)Advantages of Broaching and applications	2		Dt. 24.04.24
10	**Surface Finish, Lapping**	**4**		
	Definition of Surface finish	2		Dt. 26.04.24
	Description of lapping& explain their specific cutting	2		

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGINEERING SEMESTER: 4TH
SECTION: MB

NAME OF THE FACULTY : (1) ER. KAMALAKANTA TRIPATHY, (2) ER. BIKASH RANJAN SAHU (LECT. IN MECH. ENGG.)

SEMESTER FROM : 16.01.2024 to 26.04.2024

THEORY SUBJECT : FLUID MECHANICS (TH-3)

CLASS ALLOTTED /WEEK : 04 PERIODS

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**Properties of Fluid**	**8**		
	1.1Define fluid	3	JANUARY	Dt. 16.01.24, 17.01.24
	1.2 Description of fluid properties like Density, Specific weight, specific gravity, specific volume and solve simple problems.	3		Dt. 20.01.24, 22.01.24
	1.3 Definitions and Units of Dynamic viscosity, kinematic viscosity, surface tension Capillary phenomenon	2		Dt. 24.01.24, 27.01.24
2	**Fluid Pressure and its Measurements**	**8**		
	2.1 Definitions and units of fluid pressure, pressure intensity and pressure head.	1		Dt. 29.01.24,
	2.2 Statement of Pascal's Law.	1		Dt. 30.01.24
	2.3 Concept of atmospheric pressure, gauge pressure, vacuum pressure and absolute pressure	2		Dt. 31.01.24
	2.4 Pressure measuring instruments	1	FEBRUARY	Dt. 03.02.24
	Manometers (Simple and Differential)			
	2.4.1 Bourdon tube pressure gauge(Simple Numerical)	2		Dt. 05.02.24, 06.02.24
	2.5 Solve simple problems on Manometer.	1		Dt. 07.02.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
3	**Hydrostatics**	**8**		
	3.1 Definition of hydrostatic pressure	1		Dt·10·02·24
	3.2 Total pressure and centre of pressure on immersed bodies(Horizontal and Vertical Bodies)	2		Dt·12·02·24, 13·02·24
	3.3 Solve Simple problems.	2		Dt·17·02·24
	3.4 Archimedes 'principle, concept of buoyancy, meta center and meta centric height (Definition only)	2		Dt. 19·02·24, 20·02·24
	3.5 Concept of floatation	1		Dt. 21·02·24
4	**Kinematics of Flow**	**8**		
	4.1 Types of fluid flow	2		Dt. 24·02·24, 26·02·24
	4.2 Continuity equation(Statement and proof for one dimensional flow)	2		Dt. 27·02·24
	4.3 Bernoulli's theorem(Statement and proof)	2		Dt. 28·02·24
	Applications and limitations of Bernoulli's theorem (Venturimeter, pitot tube)			
	4.4 Solve simple problems	2	MARCH	Dt. 02·03·24
5	**Orifices, Notches & Weirs**	**8**		
	5.1 Define orifice	1		Dt. 04·03·24
	5.2 Flow through orifice	1		Dt. 06·03·24
	5.3Orifices coefficient & the relation between the orifice coefficients	2		Dt. 09·03·24
	5.4 Classifications of notches & weirs	1		Dt. 11·03·24
	5.5 Discharge over a rectangular notch or weir	1		Dt. 13·03·24
	5.6 Discharge over a triangular notch or weir	1		Dt. 16·03·24
	5.7 Simple problems on above	1		Dt·18·03·24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
6	**Flow Through Pipe**	**10**		
	6.1 Definition of pipe.	1		Dt. 19.03.24
	6.2 Loss of energy in pipes.	2		Dt. 20.03.24
	6.3 Head loss due to friction: Darcy's and Chezy's formula (Expression only)	2		Dt. 23.03.24
	6.4 Solve Problems using Darcy's and Chezy's formula.	3		Dt. 27.03.24, 30.03.24
	6.5 Hydraulic gradient and total gradient line	2	APRIL	Dt. 02.04.24, 03.04.24
7	**7.0 Impact of Jets**	**10**		
	7.1 Impact of jet on fixed and moving vertical flat plates	4		Dt. 06.04.24, 08.04.24, 09.04.24
	7.2 Derivation of work done on series of vanes and condition for maximum efficiency.	3		Dt. 10.04.24, 13.04.24, 15.04.24
	7.3 Impact of jet on moving curved vanes, illustration using velocity triangles, derivation of work done, efficiency.	3		Dt. 16.04.24, 20.04.24, 22.04.24, 26.04.24

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGINEERING SEMESTER: 4TH **SECTION:- MB**	**NAME OF THE FACULTY : (1) ER. SATYANARAYAN MAJHI,** **(2) ER. MANAS RANJAN BEHERA (LECT. IN MECH. ENGG.)**
SEMESTER FROM : 16.01.2024 to 26.04.2024	**THEORY SUBJECT: THERMAL ENGINEERING - II (TH-4)**
CLASS ALLOTTED /WEEK : 04 PERIODS	

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Performance of I.C Engine	**8**		
1	1.1 Define mechanical efficiency, Indicated thermal efficiency, Relative Efficiency, brake thermal efficiency overall efficiency, Mean effective pressure & specific fuel consumption.	3	JANUARY	Dt. 16.01.24, 17.01.24 18.01.24
	1.2 Define air-fuel ratio & calorific value of fuel.	2		Dt. 22.01.24, 24.01.24
	1.3 Work out problems to determine efficiencies & specific fuel consumption.	3		Dt. 25.01.24, 29.01.24
	Air Compressor	**12**		
2	2.1 Explain functions of compressor & industrial use of compressor air	2		Dt. 30.01.24, 31.01.24
	2.2 Classify air compressor & principle of operation.	2	FEBRUARY	Dt. 01.02.24
	2.3 Describe the parts and working principle of reciprocating Air compressor.	2		Dt. 05.02.24
	2.4 Explain the terminology of reciprocating compressor such as bore, stroke, pressure ratio free air delivered &Volumetric efficiency.	2		Dt. 06.02.24. 07.02.24
	2.5 Derive the work done of single stage & two stage compressor with and without clearance.	2		Dt. 08.02.24
	2.6 Solve simple problems (without clearance only)	2		Dt. 12.02.24
3	**Properties of Steam**	**12**		
	3.1 Difference between gas & vapours.	1		Dt. 13.02.24
	3.2 Formation of steam.	2		Dt. 15.02.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	3.3 Representation on P-V, T-S, H-S, & T-H diagram.	2		Dt 15.02.24
	3.4 Definition & Properties of Steam.	1		Dt.19.02.24
	3.5 Use of steam table & mollier chart for finding unknown properties.	3		Dt 20.02.24, 21.02.24
	3.6 Non flow & flow process of vapour.	1		Dt. 22.02.24
	3.7 P-V, T-S & H-S, diagram.	1		Dt. 26.02.24
	3.8 Determine the changes in properties & solve simple numerical.	1		Dt. 27.02.24
4	**Steam Generator**	**12**		
	4.1 Classification & types of Boiler.	2		Dt.28.02.24, 29.02.24
	4.2 Important terms for Boiler.	2	MARCH.	Dt.04.03.24, 06.03.24
	4.3 Comparison between fire tube & Water tube Boiler.	2		Dt. 07.03.24
	4.4 Description & working of common boilers (Cochran, Lancashire, Babcock & Wilcox Boiler)	2		Dt. 11.03.24, 12.03.24
	4.5 Boiler Draught (Forced, induced & balanced)	2		Dt.13.03.24, 14.03.24
	4.6 Boiler mountings & accessories.	2		Dt. 18.03.24, 19.03.24
5	**Steam Power Cycles**	**8**		
	5.1 Carnot cycle with vapour.	1		Dt. 20.03 24
	5.2 Derive work & efficiency of the cycle.	1		Dt. 21.03.24
	5.3 Rankine cycle.	1		Dt 27.03.24
	5.3.1 Representation in P-V, T-S & h-s diagram.	1		Dt. 28.03.24
	5.3.2 Derive Work & Efficiency.	1	APRIL	Dt. 02.04.24

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	5.3.3 Effect of Various end conditions in Rankine cycle.	1		Dt. 03.04.24
	5.3.4 Reheat cycle & regenerative Cycle.	1		Dt. 04.04.24
	5.4 Solve simple numerical on Carnot vapour Cycle & Rankine Cycle.	1		Dt. 08.04.24
6	**Heat Transfer**	**8**		
	6.1 Modes of Heat Transfer (Conduction, Convection, Radiation).	2		Dt. 09.04.24, 10.04.24
	6.2 Fourier law of heat conduction and thermal conductivity (k).	2		Dt. 15.04.24
	6.3 Newton's laws of cooling.	1		Dt. 16.04.24
	6.4 Radiation heat transfer (Stefan, Boltzmann & Kirchhoff's law) only statement, no derivation & no numerical problem.	1		Dt. 18.04.24,
	6.5 Black body Radiation, Definition of Emissivity, absorptivity, & transmissibility.	2		Dt. 22.04.24, 24.04.24, 25.04.24.

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MA1**

NAME OF THE FACULTY : (1) ER. TARANISEN MOHANTY (H.O.D., MECH. ENGG.), (2) ER. PRADEEP KUMAR SAHOO (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: THEORY OF MACHINES & MEASUREMENTS LAB (PR-1)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

SL No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter).	JANUARY	02	Dt.19.01.24, 22.01.24
2	Study & demonstration of static balancing apparatus.		01	Dt. 29.01.24, Rev. Dt- 12.04.24
3	Study & demonstration of journal bearing apparatus.	FEBRUARY	01	Dt.02.02.24, Rev, Dt.15.04.24
4	Study of different types of Cam and followers		01	Dt.05.02.24
5	Study & demonstration of epicyclic gear train		02	Dt.09.02.24, 12.02.24
6	Determination of the thickness of ground M.S flat to an accuracy of 0.02mm using Vernier Caliper.		02	Dt.16.02.24, 19.02.24
7	Determination of diameter of a cylindrical component to an accuracy of 0.01mm using micrometer.		01	Dt.23.02.24 Rev. Dt.19.04.24
8	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using Vernier height gauge.		01	Dt.26.02.24, Rev. Dt.22.04.24 26.04.24
9	Determine the thickness of ground MS plates using slip gauges	MARCH	05	Dt.01.03.24, 04.03.24 11.03.24, 15.03.24, 18.03.24
10	Determination of angel of Machined surfaces of components using sin bar with slip gauges	APRIL,	03	Dt.22.03.24, 05.04.24, 08.04.24

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BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MA1**

NAME OF THE FACULTY : (1) ER. SUBHASMITA JENA, (2) ER. LAKIN KUMAR SAHOO, (3) ER. HIMANSU SEKHAR SAMAL (LECT. IN MECH. ENGG.), (4) ER. PRADEEP KUMAR SAHOO (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: MECHANICAL ENGINEERING LAB-II (PR-2)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	Study of 2-S, 4-S petrol & diesel engine models	JANUARY	02	Dt. 16.01.24, 17.01.24
2	Determine the brake thermal efficiency of single cylinder petrol engine.		03	Dt. 24.01.24, 30.01.24 31.01.24
3	Determine the brake thermal efficiency of single cylinder diesel engine.	FEBRUARY	03	Dt. 06.02.24, 07.02.24 13.02.24
4	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test		03	Dt. 20.02.24, 21.02.24 27.02.24
5	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test	MARCH	04	Dt. 28.02.24, 06.03.24 12.03.24, 13.03.24
6	Study of pressure measuring devices (manometer, Bourdon tube pressure gauge		03	Dt. 19.03.24, 20.03.24 27.03.24
7	Verification of Bernoulli's theorem	APRIL	02	Dt. 02.04.24, 03.04.24
8	Determination of Cd from venturimeter		02	Dt. 09.04.24, 10.04.24
9	Determination of Cc, Cv, Cd from orifice meter		01	Dt. 16.04.24
10	Determine of Darcy's coefficient from flow through pipe		01	Dt. 24.04.24

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BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MA1**

NAME OF THE FACULTY : (1) ER. GOURI SANKAR PRADHAN, (2) ER. KAMALAKANTA TRIPATHY (LECT. IN MECH. ENGG), (3) MR. BHIMASEN ROUT, (4) MR. KRUSHNA CHANDRA SAHU (INSTRUCTOR)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT : WORKSHOP PRACTICE-III (PR-3)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
(I)	**MACHINING PRACTICES**	JANUARY	02	Dt·17·01·24, 20·01·24
1	Job in evolving drilling, boring		03	Dt·24·01·24, 27·01·24 31·01·24
2	Internal/External threading on Turning jobs	FEBRUARY	03	Dt· 03·01·24, 07·01·24 10·01·24
3	Job in evolving use of Capstan and turret lathe (Taper Turning & Chamfering)		03	Dt· 17·01·24, 21·01·24 24·01·24
4	All gear lathe, CNC Lathe Trainer Practice Job involving all turning process on MS Rod & aluminum rod for jobs using CNC Lathe trainer.	MARCH	04	Dt·28·01·24. 02·03·24 06·03·24, 09·03·24
(II)	**METAL MACHINING**		05	Dt·13·03·24. 16·03·24 20·03·24, 23·03·24, 27·02·24
5	Shaper- Preparation of V Block on CI or MS Blocks	APRIL.	04	Dt·30·03·24, 03·04·24 06·04·24. 10·04·24,
6	Milling Machine- Preparation of Spur gear on CI or MS round		03	Dt·13·04·24, 20·04·24 24·04·24

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BRANCH:- MECHANICAL ENGINEERING **SEMESTER: 4TH** **SECTION:- MA1**

NAME OF THE FACULTY:- (1) ER. SAMIR PRASAD SAHU, (2) ER. RASABIHARI SAHU (LECT. IN MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT : TECHNICALSEMINAR (PR-4)**

CLASS ALLOTTED /WEEK-: 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01	Introduction about Technical Seminar	JANUARY	01	Dt. 19.01.24
02.	Selection of Topic in the area of Mech Engg.	FEBRUARY	02.	Dt 02.02.24, 09.02.24
03.	Preparation of power point presentation by the students.		02.	Dt. 16.02.24. 23.02.24
04.	Preparation of Seminar report by the students.	MARCH	03	Dt. 01.03.24, 15.03.24 16.03.24
05.	Seminar Presentations of all Students	APRIL	01.	Dt. 05.04.24
06.	Submission of Seminar report for Evaluation.		03.	Dt.12.04.24, 19.04.24 26.04.24

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BRANCH:- MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION :MA1**

NAME OF THE FACULTY : (1) ER. LAKIN KUMAR SAHOO, (2) ER. ABINASH SAHOO (LECT. IN MECH. ENGG.), (3) ER. BISHNU CHARANA BEHERA (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES**

CLASS ALLOTTED /WEEK :- 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01.	Library study & Technical Quiz	JANUARY	02	Dt. 18.01.24 25.01.24
02	Seminar on Different Technical Topics.	FEBRUARY	02	Dt. 01.02.24, 08.02.24
03	Seminar on Different Environment issues.		03	Dt. 15.02.24, 22.02.24 29.02.24
04	Personality Development Class	MARCH	04	Dt. 07.03.24, 14.03.24 21.03.24, 28.03.24
05	Cultural Activities.	APRIL	03	Dt. 04.04.24, 18.04.24 25.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MA2**

NAME OF THE FACULTY : (1) ER. TARANISEN MOHANTY (H.O.D., MECH. ENGG.), (2) ER. HIMANSU SEKHAR SAMAL (LECT. IN MECH. ENGG.), (3) ER. PRADEEP KUMAR SAHOO, (4) ER. BISHNU CHARANA BEHERA (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: THEORY OF MACHINES & MEASUREMENTS LAB (PR-1)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter).	JANUARY	02.	Dt. 16.01.24, 17.01.24
2	Study & demonstration of static balancing apparatus.		02	Dt. 24.01.24, 30.01.24
3	Study & demonstration of journal bearing apparatus.	FEBRUARY	03	Dt. 31.01.24, 06.02.24 07.02.24
4	Study of different types of Cam and followers		02	Dt. 13.02.24, 20.02.24
5	Study & demonstration of epicyclic gear train		02	Dt. 21.02.24, 27.02.24
6	Determination of the thickness of ground M.S flat to an accuracy of 0.02mm using Vernier Caliper.	MARCH	03	Dt. 28.02.24, 06.03.24 12.03.24
7	Determination of diameter of a cylindrical component to an accuracy of 0.01mm using micrometer.		03	Dt. 13.03.24, 19.03.24 20.03.24
8	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using Vernier height gauge.	APRIL.	03	Dt. 27.03.24, 02.04.24 03.04.24
9	Determine the thickness of ground MS plates using slip gauges		02	Dt. 09.04.24, 10.04.24
10	Determination of angel of Machined surfaces of components using sin bar with slip gauges		02	Dt. 16.04.24, 24.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MA2**

NAME OF THE FACULTY : (1) ER. SUBHASMITA JENA, (2) ER. LAKIN KUMAR SAHOO (LECT. IN MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: MECHANICAL ENGINEERING LAB-II (PR-2)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	Study of 2-S, 4-S petrol & diesel engine models	JANUARY	03	Dt. 19.01.24, 22.01.24 29.01.24
2	Determine the brake thermal efficiency of single cy inder petrol engine.	FEBRUARY	03	Dt. 02.02.24, 05.02.24 09.02.24
3	Determine the brake thermal efficiency of single cy inder diesel engine.		03	Dt. 12.02.24, 16.02.24 19.02.24
4	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test		03	Dt. 23.02.24, 26.02.24 01.03.24
5	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test	MARCH	03	Dt. 04.03.24, 11.03.24 15.03.24
6	Study of pressure measuring devices (manometer, Bcurdon tube pressure gauge		02	Dt. 18.03.24, 22.03.24
7	Verification of Bernoulli's theorem	APRIL	02	Dt. 05.04.24, 08.04.24
8	Determination of Cd from venturimeter		02	Dt. 12.04.24, 15.04.24
9	Determination of Cc, Cv, Cd from orifice meter		02	Dt. 19.04.24, 22.04.24
10	Determine of Darcy's coefficient from flow through pipe		01	Dt. 26.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MA2**

NAME OF THE FACULTY : (1) ER. GOURI SANKAR PRADHAN, (2) ER. KAMALAKANTA TRIPATHY (LECT. IN MECH. ENGG), (3) MR. EHIMASEN ROUT, (4) MR. KRUSHNA CHANDRA SAHU (INSTRUCTOR)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: WORKSHOP PRACTICE-III (PR-3)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
(I)	**MACHINING PRACTICES**			
1	Job in evolving drilling, boring	JANUARY	15	Dt. 27.01.24 Dt. 17.01.24, 20.01.24, 24.01.24
2	Internal/External threading on Turning jobs		15	Dt. 31.01.24, 03.02.24 Dt. 07.02.24, 10.02.24
3	Job in evolving use of Capstan and turret lathe (Taper Turning & Chamfering)	FEBRUARY	15	Dt. 17.02.24, 21.02.24 Dt. 24.02.24, 28.02.24
4	All gear lathe, CNC Lathe Trainer Practice Job involving all turning process on MS Rod & aluminum rod for jobs using CNC Lathe trainer.	MARCH	15	Dt. 02.03.24, 06.03.24 Dt. 09.03.24, 13.03.24
(II)	**METAL MACHINING**			
5	Shaper- Preparation of V Block on CI or MS Blocks		15	Dt. 16.03.24, 20.03.24, Dt. 23.03.24, 27.03.24 30.03.24
6	Milling Machine- Preparation of Spur gear on CI or MS round	APRIL	15	Dt. 03.04.24, 06.04.24 10.04.24, 13.04.24, 20.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:- MECHANICAL ENGINEERING | SEMESTER: 4TH | SECTION:- MA2

NAME OF THE FACULTY:- (1) ER.SAMIR PRASAD SAHU, (2) ER. RASABIHARI SAHU (LECT. IN MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 | PRACTICAL SUBJECT : TECHNICALSEMINAR (PR-4)

CLASS ALLOTTED /WEEK-: 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01	Introduction about Technical seminar	JANUARY	01	Dt. 19.01.24
02	selection of TOPIC in the area of Mech Engg.	FEBRUARY	02	Dt. 02.02.24, 09.02.24
03	preparation of power point presentation by the students		02	Dt. 16.02.24, 23.02.24
04	preparation of seminar report by the students	MARCH	03	Dt. 01.03.24, 15.03.24 16.03.24
05	seminar presentations of all students	APRIL	01	Dt. 05.04.24
06	submission of seminar report for Evaluation		03	Dt. 12.04.24, 19.04.24 26.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:- MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION :MA2**

NAME OF THE FACULTY : (1) ER. LAKIN KUMAR SAHOO, (2) ER. ABINASH SAHOO (LECT. IN MECH. ENGG.), (3) ER. BISHNU CHARANA BEHERA (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES**

CLASS ALLOTTED /WEEK :- 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01	Library study & Technical Quiz	JANUARY	02	Dt. 18.01.24 25.01.24
02	Seminar on Different Technical Topics	FEBRUARY	02	Dt. 01.02.24, 08.02.24
03	Seminar on Different Environment issues		03	Dt. 15.02.24, 22.02.24 29.02.24
04	personality Development class	MARCH	04	Dt. 07.03.24, 14.03.24 21.03.24, 28.03.24
05	Cultural Activities	APRIL	03	Dt. 04.04.24, 18.04.24 25.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MB1**

NAME OF THE FACULTY : (1) ER. ER. HIMANSU SEKHAR SAMAL (LECT. IN MECH. ENGG.), (2) ER. PRADEEP KUMAR SAHOO (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: THEORY OF MACHINES & MEASUREMENTS LAB (PR-1)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter).	JANUARY	03	Dt. 17.01.24, 19.01.24 24.01.24
2	Study & demonstration of static balancing apparatus.	FEBRUARY	02	Dt. 31.01.24, 02.02.24
3	Study & demonstration of journal bearing apparatus.		02	Dt. 07.02.24, 09.02.24
4	Study of different types of Cam and followers		02	Dt. 16.02.24, 21.02.24
5	Study & demonstration of epicyclic gear train		02	Dt. 23.02.24, 28.02.24
6	Determination of the thickness of ground M.S flat to an accuracy of 0.02mm using Vernier Caliper.	MARCH	03	Dt. 01.03.24, 06.03.24 13.03.24,
7	Determination of diameter of a cylindrical component to an accuracy of 0.01mm using micrometer.		04	Dt. 15.03.24, 20.03.24 22.03.24, 27.03.24
8	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using Vernier height gauge.	APRIL	03	Dt. 03.04.24, 05.04.24 10.04.24,
9	Determine the thickness of ground MS plates using slip gauges		02	Dt. 12.04.24, 19.04.24
10	Determination of angel of Machined surfaces of components using sin bar with slip gauges		02	Dt. 24.04.24, 26.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MB1**

NAME OF THE FACULTY : (1) ER. SUBHASMITA JENA, (2) ER. DEWAN KUMAR SAHU, (3) ER. LAKIN KUMAR SAHOO, (4) ER. MANAS RANJAN BEHERA (LECT. IN MECH. ENGG.), (5) ER. PRADEEP KUMAR SAHOO (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: MECHANICAL ENGINEERING LAB-II (PR-2)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	Study of 2-S, 4-S petrol & diesel engine models	JANUARY	03	Dt. 18.01.24, 19.01.24, 25.01.24
2	Determine the brake thermal efficiency of single cylinder petrol engine.	FEBRUARY	03	Dt. 01.02.24, 02.02.24 . 08.02.24
3	Determine the brake thermal efficiency of single cylinder diesel engine.		03	Dt. 09.02.24, 15.02.24 16.02.24
4	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test		03	Dt. 22.02.24, 23.02.24 29.02.24
5	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test	MARCH	03	Dt. 01.03.24, 07.03.24 14.03.24,
6	Study of pressure measuring devices (manometer, Bourdon tube pressure gauge		03	Dt. 15.03.24, 21.03.24 22.03.24
7	Verification of Bernoulli's theorem	APRIL	02	Dt. 28.03.24, 04.03.24
8	Determination of Cd from venturimeter		02	Dt. 05.04.24, 12.04.24
9	Determination of Cc, Cv, Cd from orifice meter		02	Dt. 18.04.24, 19.04.24
10	Determine of Darcy's coefficient from flow through pipe		02	Dt. 25.04.24, 26.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MB1**

NAME OF THE FACULTY : (1) ER. HIMANSU SEKHAR SAMAL, (2) ER. KAMALAKANTA TRIPATHY (LECT. IN MECH. ENGG.), (3) ER. GOBINDA BARIK (T.A., MECH. ENGG.), (4) MR. BHIMASEN ROUT, (5) MR. KRUSHNA CHANDRA SAHU (INSTRUCTOR)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: WORKSHOP PRACTICE-III (PR-3)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
(I)	**MACHINING PRACTICES**	JANUARY	02	Dt. 16.03.24, 22.03.24
1	Job in evolving drilling, boring		02	Dt. 29.03.24, 30.03.24
2	Internal/External threading on Turning jobs	FEBRUARY	04	Dt. 05.02.24, 06.02.24 12.02.24, 13.02.24
3	Job in evolving use of Capstan and turret lathe (Taper Turning & Chamfering)		04	Dt. 19.02.24, 20.02.24 26.02.24, 27.02.24
4	All gear lathe, CNC Lathe Trainer Practice Job involving all turning process on MS Rod & aluminum rod for jobs using CNC Lathe trainer.	MARCH	04	Dt. 04.03.24, 11.03.24 12.03.24, 18.03.24, 19.03.24
(II)	**METAL MACHINING**	APRIL	02	Dt. 02.04.24, 08.04.24
5	Shaper- Preparation of V Block on CI or MS Blocks		02	Dt. 09.04.24, 15.04.24
6	Milling Machine- Preparation of Spur gear on CI or MS round		03	Dt. 16.04.24, 22.04.24 23.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:- MECHANICAL ENGINEERING **SEMESTER: 4TH** **SECTION:- MB1**

NAME OF THE FACULTY:- (1) ER. SAMIR PRASAD SAHU, (2) ER. RASABIHARI SAHU (LECT. IN MECH. ENGG.), (3) ER. BISHNU CHARANA BEHERA (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT : TECHNICALSEMINAR (PR-4)**

CLASS ALLOTTED /WEEK-: 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01	Introduction about Technical Seminar	JAN.	02	Dt. 18.01.24, 25.01.24
02	Selection of topic in the area of Mech. Engg.	FEB.	02	Dt. 02.02.24, 08.02.24
03	Preparation of power point Presentation by the Students.		03	Dt. 15.02.24, 22.02.24 29.02.24
04	Preparation of Seminar Report by the Students	MARCH.	04	Dt. 07.03.24, 14.03.24, 21.03.24, 28.03.24
05.	Seminar Presentation of all Students.	APRIL	02	Dt. 04.04.24, 18.04.24
06	Submission of Seminar Report for Evaluation		01	Dt. 25.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:- MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION :MB1**

NAME OF THE FACULTY : (1) ER. KAMALAKANTA TRIPATHY, (2) ER. BIKASH RANJAN SAHU (LECT. IN MECH. ENGG.), (3) ER. BISHNU CHARANA BEHERA (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES**

CLASS ALLOTTED /WEEK :- 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01.	Library study & Technical Quiz	JANUARY	01	Dt. 18.01.24
02	Seminar on different Technical Topics.	FEBRUARY	02	Dt. 02.02.24, 09.02.24
03	Seminar on different Environment issues.		02.	Dt. 16.02.24, 23.02.24
04.	Personality development class	MARCH	03	Dt. 01.03.24, 15.03.24 22.03.24
05	Cultural Activities.	APRIL	04	Dt. 05.04.24, 12.04.24 19.04.24, 26.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MB2**

NAME OF THE FACULTY : (1) ER. TARANISEN MOHANTY (H.O.D., MECH. ENGG.), (2) ER. PRADEEP KUMAR SAHOO (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: THEORY OF MACHINES & MEASUREMENTS LAB (PR-1)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter).	JANUARY	02.	Dt. 18.01.24, 20.01.24
2	Study & demonstration of static balancing apparatus.		02	Dt. 25.01.24, 27.01.24
3	Study & demonstration of journal bearing apparatus.	FEBRUARY	03	Dt. 01.02.24, 03.02.24 08.02.24
4	Study of different types of Cam and followers		02	Dt. 10.02.24, 15.02.24
5	Study & demonstration of epicyclic gear train		02	Dt. 17.02.24, 22.02.24
6	Determination of the thickness of ground M.S flat to an accuracy of 0.02mm using Vernier Caliper.		02	Dt. 24.02.24, 29.02.24
7	Determination of diameter of a cylindrical component to an accuracy of 0.01mm using micrometer.	MARCH	04	Dt. 02.03.24, 07.03.24 09.03.24, 14.03.24
8	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using Vernier height gauge.		04	Dt. 16.03.24 21.03.24 23.03.24, 28.03.24
9	Determine the thickness of ground MS plates using slip gauges	APRIL	04	Dt. 30.03.24, 04.04.24 06.04.24, 13.04.24
10	Determination of angel of Machined surfaces of components using sin bar with slip gauges		03	Dt. 18.04.24, 20.04.24 25.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MB2**

NAME OF THE FACULTY : (1) ER. LAKIN KUMAR SAHOO, (2) ER. DEWAN KUMAR SAHU, (3) ER. SAMIR PRASAD SAHU, (4) ER. BIKASH RANJAN SAHU (LECT. IN MECH. ENGG.), (5) ER. BISHNU CHARANA BEHERA (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: MECHANICAL ENGINEERING LAB-II (PR-2)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	Study of 2-S, 4-S petrol & diesel engine models	JANUARY	03	Dt. 17.01.24, 20.01.24 24.01.24
2	Determine the brake thermal efficiency of single cylinder petrol engine.		03	Dt. 27.01.24, 31.01.24 Dt. 03.02.24
3	Determine the brake thermal efficiency of single cylinder diesel engine.	FEBRUARY	03	Dt. 07.02.24, 10.02.24 17.02.24
4	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test		03	Dt 21.02.24, 24.02.24 28.02.24
5	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test	MARCH	03	Dt. 02.03.24, 06.03.24 09.03.24,
6	Study of pressure measuring devices (manometer, Bourdon tube pressure gauge		03	Dt. 13.03.24, 16.03.24 20.03.24
7	Verification of Bernoulli's theorem		03	Dt. 23.03.24, 27.03.24 30.03.24
8	Determination of Cd from venturimeter	APRIL	02	Dt 03.04.24, 06.04.24
9	Determination of Cc, Cv, Cd from orifice meter		02	Dt. 10.04.24, 13.04.24
10	Determine of Darcy's coefficient from flow through pipe		02	Dt. 20.04.24, 24.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION:- MB2**

NAME OF THE FACULTY : (1) ER. HIMANSU SEKHAR SAMAL, (2) ER. KAMALAKANTA TRIPATHY (LECT. IN MECH. ENGG.), (3) ER. GOBINDA BARIK (T.A., MECH. ENGG.), (4) MR. BHIMASEN ROUT, (5) MR. KRUSHNA CHANDRA SAHU (INSTRUCTOR)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: WORKSHOP PRACTICE-III (PR-3)**

CLASS ALLOTTED /WEEK :- 06 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
(I)	**MACHINING PRACTICES**	JANUARY	02	Dt. 16.01.24, 22.01.24
1	Job in evolving drilling, boring		03	Dt. 29.01.24, 30.01.24 05.02.24
2	Internal/External threading on Turning jobs	FEBRUARY	03	Dt. 06.02.24, 12.02.24 13.02.24
3	Job in evolving use of Capstan and turret lathe (Taper Turning & Chamfering)		04	Dt. 13.02.24, 19.02.24 20.02.24, 26.02.24
4	All gear lathe, CNC Lathe Trainer Practice Job involving all turning process on MS Rod & aluminum rod for jobs using CNC Lathe trainer.	MARCH	04	Dt. 27.02.24, 04.03.24 11.03.24, 12.03.24
(II)	**METAL MACHINING**		02	Dt. 18.03.24, 19.03.24
5	Shaper- Preparation of V Block on CI or MS Blocks	APRIL	03	Dt. 02.04.24, 08.04.24 09.04.24
6	Milling Machine- Preparation of Spur gear on CI or MS round		04	Dt. 15.04.24, 16.04.24 22.04.24, 23.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:- MECHANICAL ENGINEERING | SEMESTER: 4TH | SECTION:- MB2

NAME OF THE FACULTY:- (1) ER. SAMIR PRASAD SAHU, (2) ER. RASABIHARI SAHU (LECT. IN MECH. ENGG.), (3) ER. BISHNU CHARANA BEHERA (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 | PRACTICAL SUBJECT : TECHNICALSEMINAR (PR-4)

CLASS ALLOTTED /WEEK-: 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01	Introduction about Technical Seminar	JAN	02	Dt. 18.01.24, 25.01.24
02	Selection of topic in the area of Mech. Engg.	FEB	02	Dt. 02.02.24, 08.02.24
03	Preparation of power point presentation by the students		03	Dt. 15.02.24, 22.02.24 29.02.24
04	Preparation of seminar Report by the students	MARCH	04	Dt. 07.03.24, 14.03.24, 21.03.24, 28.03.24
05	Seminar presentation of all students	APRIL	02	Dt. 04.04.24, 18.04.24
06	Submission of seminar Report for Evaluation		01	Dt. 25.04.24

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:- MECHANICAL ENGG. **SEMESTER: 4TH** **SECTION :- MB2**

NAME OF THE FACULTY : (1) ER. KAMALAKANTA TRIPATHY, (2) ER. BIKASH RANJAN SAHU (LECT. IN MECH. ENGG.), (3) ER. BISHNU CHARANA BEHERA (T.A., MECH. ENGG.)

SEMESTER FROM DT. 16.01.2024 TO 26.04.2024 **PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES**

CLASS ALLOTTED /WEEK :- 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01	Library study & Technical Quiz	JANUARY	01	Dt. 18.01.24
02	Seminar on different Technt Topics	FEB	02	Dt. 02.02.24 , 09.02.24
03	seminar on different Environment issues.		02	Dt. 16.02.24 , 23.02.24
04	personality development class	MARCH	03	Dt. 01.03.24, 15.03.24 22.03.24
05	cultural Activities	APRIL	04	Dt. 05.04.24, 12.04.24 19.04.24, 26.04.24

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