SE Mechanical Term-III

202041 Solid Mechanics

CO No.	CO Statements
C201.1	DEFINE various types of stresses and strain developed on determinate and indeterminate members
C201.2	DRAW Shear force and bending moment diagram for various types of transverse loading and support
C201.3	COMPUTE the slope & deflection, bending stresses and shear stresses on a beam
C201.4	CALCULATE torsional shear stress in shaft and buckling on the column
C201.5	APPLY the concept of principal stresses and theories of failure to determine stresses on a 2-D element.
C201.6	UTILIZE the concepts of SFD & BMD, torsion and principal stresses to solve combined loading application based problems

202042 Solid Modeling and Drafting

CO No.	CO Statements
C202.1	UNDERSTAND basic concepts of CAD system, need and scope in Product Lifecycle Management
C202.2	UTILIZE knowledge of curves and surfacing features and methods to create complex solid geometry
C202.3	CONSTRUCT solid models, assemblies using various modeling techniques & PERFORM mass property analysis, including creating and using a coordinate system
C202.4	APPLY geometric transformations to simple 2D geometries
C202.5	USE CAD model data for various CAD based engineering applications viz. production drawings, 3D printing, FEA, CFD, MBD, CAE, CAM, etc.
C202.6	USE PMI & MBD approach for communication

202043 Engineering Thermodynamics

CO No.	CO Statements
C203.1	DESCRIBE the basics of thermodynamics with heat and work interactions.
C203.2	APPLY laws of thermodynamics to steady flow and non-flow processes.
C203.3	APPLY entropy, available and non available energy for an Open and Closed System
C203.4	DETERMINE the properties of steam and their effect on performance of vapour power cycle
C203.5	ANALYSE the fuel combustion process and products of combustion.
C203.6	SELECT various instrumentations required for safe and efficient operation of steam generator

202044 Engineering Materials and Metallurgy

CO No.	CO Statements

C204.1	COMPARE crystal structures and ASSESS different lattice parameters.
C204.2	CORRELATE crystal structures and imperfections in crystals with mechanical behaviour of materials
C204.3	DIFFERENTIATE and DETERMINE mechanical properties using destructive and nondestructive testing of materials
C204.4	IDENTIFY & ESTIMATE different parameters of the system viz., phases, variables, component, grains, grain boundary, and degree of freedom. etc.
C204.5	ANALYSE effect of alloying element & heat treatment on properties of ferrous & nonferrous alloy
C204.6	SELECT appropriate materials for various applications

203156 Electrical and Electronics Engineering

CO No.	CO Statements
C205.1	APPLY programming concepts to UNDERSTAND role of Microprocessor and Microcontroller in embedded systems.
C205.2	DEVELOP interfacing of different types of sensors and other hardware devices with Atmega328 based Arduino Board
C205.3	UNDERSTAND the operation of DC motor, its speed control methods and braking
C205.4	DISTINGUISH between types of three phase induction motor and its characteristic features
C205.5	EXPLAIN about emerging technology of Electric Vehicle (EV) and its modular subsystems
C205.6	CHOOSE energy storage devices and electrical drives for EVs

202045 Geometric Dimensioning and Tolerance Lab

CO No.	CO Statements
C206.1	SELECT appropriate IS and ASME standards for drawing
C206.2	READ & ANALYSE variety of industrial drawings
C206.3	APPLY geometric and dimensional tolerance, surface finish symbols in drawing
C206.4	EVALUATE dimensional tolerance based on type of fit, etc.
C206.5	SELECT an appropriate manufacturing process using DFM, DFA, etc.

SE Mechanical Term-IV

207002 Engineering Mathematics

CO No.	CO Statements
C207.1	SOLVE higher order linear differential equations and its applications to model and analyze mass spring systems.
C207.2	APPLY Integral transform techniques such as Laplace transform and Fourier transform to solve differential equations involved in vibration theory, heat transfer and related mechanical engineering applications.
C207.3	APPLY Statistical methods like correlation, regression in analyzing and interpreting experimental data applicable to reliability engineering and probability theory in testing and quality control.

C207.4	PERFORM Vector differentiation & integration, analyze the vector fields and APPLY to fluid flow problems
C207.5	SOLVE Partial differential equations such as wave equation, one and two dimensional heat flow equations

202047 Kinematics of Machinery

CO No.	CO Statements
C208.1	APPLY kinematic analysis to simple mechanisms
C208.2	ANALYZE velocity and acceleration in mechanisms by vector and graphical method
C208.3	SYNTHESIZE a four bar mechanism with analytical and graphical methods
C208.4	.APPLY fundamentals of gear theory as a prerequisite for gear design
C208.5	CONSTRUCT cam profile for given follower motion

202048 Applied Thermodynamics

CO No.	CO Statements
C209.1	DETERMINE COP of refrigeration system and ANALYZE psychrometric processes.
C209.2	DISCUSS basics of engine terminology,air standard, fuel air and actual cycles.
C209.3	IDENTIFY factors affecting the combustion performance of SI and CI engines.
C209.4	DETERMINE performance parameters of IC Engines and emission control
C209.5	EXPLAIN working of various IC Engine systems and use of alternative fuels
C209.6	CALCULATE performance of single and multi stage reciprocating compressors and DISCUSS rotary positive displacement compressors

202049 Fluid Mechanics

CO No.	CO Statements
C210.1	DETERMINE various properties of fluid
C210.2	APPLY the laws of fluid statics and concepts of buoyancy
C210.3	IDENTIFY types of fluid flow and terms associated in fluid kinematics
C210.4	APPLY principles of fluid dynamics to laminar flow
C210.5	ESTIMATE friction and minor losses in internal flows and DETERMINE boundary layer formation over an external surface
C210.6	CONSTRUCT mathematical correlation considering dimensionless parameters, also ABLE to predict the performance of prototype using model laws

202050 Manufacturing Processes

CO No.	CO Statements
C211.1	SELECT appropriate moulding, core making and melting practice and estimate pouring time, solidification rate and DESIGN riser size and location for sand casting process.
C211.2	UNDERSTAND mechanism of metal forming techniques and CALCULATE load required for flat rolling
C211.3	DEMONSTRATE press working operations and APPLY the basic principles to DESIGN dies and tools for forming and shearing operations
C211.4	CLASSIFY and EXPLAIN different welding processes and EVALUATE welding characteristics
C211.5	DIFFERENTIATE thermoplastics and thermosetting and EXPLAIN polymer processing techniques
C211.6	UNDERSTAND the principle of manufacturing of fibre-reinforce composites and metal matrix composites

202051 Machine Shop

CO No.	CO Statements
C212.1	PERFORM welding using TIG/ MIG/ Resistance/Gas welding technique
C212.2	MAKE Fibre-reinforced Composites by hand lay-up process or spray lay-up techniques
C212.3	PERFORM cylindrical/surface grinding operation and CALCULATE its machining time
C212.4	DETERMINE number of indexing movements required and acquire skills to PRODUCE a spur gear on a horizontal milling machine
C212.5	PREPARE industry visit report
C212.6	UNDERSTAND procedure of plastic processing

202052 Project Based Learning

CO No.	CO Statements
C213.1	IDENTIFY the real-world problem (possibly of interdisciplinary nature) through a rigorous literature survey and formulate / set relevant aims and objectives.
C213.2	ANALYZE the results and arrive at valid conclusions.
C213.3	PROPOSE a suitable solution based on the fundamentals of mechanical engineering by possibly integration of previously acquired knowledge.
C213.4	CONTRIBUTE to society through proposed solutions by strictly following professional ethics and safety measures
C213.5	USE of technology in proposed work and demonstrate learning in oral and written form.
C213.6	DEVELOP ability to work as an individual and as a team member.

TE Mechanical Term-V

302041 Numerical & Statistical Methods

CO No.	CO Statements

C301.1	**SOLVE** system of equations using direct and iterative numerical methods.
C301.2	**ESTIMATE** solutions for differential equations using numerical techniques.
C301.3	**DEVELOP** solution for engineering applications with numerical integration.
C301.4	**DESIGN** and **CREATE** a model using a curve fitting and regression analysis.
C301.5	**APPLY** statistical Technique for quantitative data analysis.
C301.6	**DEMONSTRATE** the data, using the concepts of probability and linear algebra

302042 Heat & Mass Transfer

CO No.	CO Statements
C302.1	**ANALYZE** & **APPLY** the modes of heat transfer equations for one dimensional thermal system.
C302.2	**DESIGN a** thermal system considering fins, thermal insulation and & Transient heat conduction
C302.3	**EVALUATE** the heat transfer rate in natural and forced convection & validate with experimentation results.
C302.4	**INTERPRET** heat transfer by radiation between objects with simple geometries, for black and grey surfaces.
C302.5	**ABILITY** to analyze the rate of mass transfer using Fick's Law of Diffusion and understands mass diffusion in different coordinate systems.
C302.6	**DESIGN & ANALYSIS** of heat transfer equipments and investigation of its performance

302043 Design of Machine Elements

CO No.	CO Statements
C303.1	**DESIGN AND ANALYZE** the cotter and knuckle Joints, levers and components subjected to eccentric loading
C303.2	**DESIGN** shafts, keys and couplings under static loading conditions
C303.3	**ANALYZE** different stresses in power screws and **APPLY** those in the procedure to design screw jack.
C303.4	**EVALUATE** dimensions of machine components under fluctuating loads.
C303.5	**EVALUATE** & **INTERPRET** the stress developed on the different type of welded and threaded joints.

C303.6	**APPLY** the design and development procedure for different types of springs.

302044 Mechatronics

CO No.	CO Statements
C304.1	Suggest transducers (sensors and actuators) for suitable application based on characteristic and working principle, merits, limitations.
C304.2	Acquire analog and digital signal data by Interfacing transducers with data acquisition system viz. NI DAQ + LabView and Customized daq (Arduion Uno and similar platform) after learning functions of the subsystem of DAQ - signal processing, sample and hold ckt, multiplexer, ADC, DAC, digital I/O.
C304.3	Implement block reduction technique to obtain single block transfer function of mechatronic system (control system) and represent mechatronic system in block diagram by Identifying key elements of given system
C304.4	Analyze stability and effect of damping factor and natural frequency of 2nd order mechanical system in time and frequency domain using transfer function developed for given system.
C304.5	Examine the effect of P, I & D (In combination and individual) controller using PID for real time systems by selecting suitable combination of PID controller and using modern tool MATLAB/simulink.
C304.6	Develop PLC ladder programming for real life systems/applications using modern tool PLC hardware and RS-Logix 500 software.

302045B Elective I Machining Science & Technology

CO No.	CO Statements
C305B.1	**DEFINE** metal cutting principles and mechanics of metal cutting and tool life.
C305B.2	**DESCRIBE** features of gear and thread manufacturing processes.
C305B.3	**SELECT** appropriate grinding wheel and demonstrate the various surface finishing processes.
C305B.4	**SELECT** appropriate jigs/fixtures and to draw the process plan for a given component
C305B.5	**SELECT** & **EVALUATE** various parameters of process planning.
C305B.6	**GENERATE** CNC program for Turning / Milling processes and generate tool path using CAM software

302046 Digital Manufacturing Laboratory

CO No.	CO Statements
C306.1	**DEVELOP** a component using conventional machines, CNC machines and Additive Manufacturing Techniques.
C306.2	**ANALYZE** cutting tool parameters for machining given job.
C306.3	**DEMONSTRATE** simulation of manufacturing process using Digital Manufacturing Tools.
C306.4	**SELECT** and **DESIGN** jigs and Fixtures for a given component.
C306.5	**DEMONESTRATE** different parameters for CNC retrofitting and reconditioning.

302047 Skill Development

CO No.	CO Statements
C307.1	**APPLY**& **DEMONSTRATE** procedure of assembly & disassembly of various machines.
C307.2	**DESIGN & DEVELOP** a working/model of machine parts or any new product.
C307.3	**EVALUATE** fault with diagnosis on the machines, machine tools and home appliances.
C307.4	**IDENTIFY** & **DEMONSTRATE** the various activities performed in an industry such as maintenance, design of components, material selection.

TE Mechanical Term-VI

302049 Artificial Intelligence &Machine Learning

CO No.	CO Statements
C308.1	**DEMONSTRATE** fundamentals of artificial intelligence and machine learning.
C308.2	**APPLY** feature extraction and selection techniques.
C308.3	**APPLY** machine learning algorithms for classification and regression problems.
C308.4	**DEVISE AND DEVELOP** a machine learning model using various steps.
C308.5	**EXPLAIN** concepts of reinforced and deep learning.
C308.6	**SIMULATE** machine learning model in mechanical engineering problems

302050 Computer Aided Engineering

CO No.	CO Statements
C309.1	**DEFINE** the use of CAE tools and **DESCRIBE** the significance of shape functions in finite element formulations.
C309.2	**APPLY** the various meshing techniques for better evaluation of approximate results
C309.3	**APPLY** material properties and boundary condition to SOLVE 1-D and 2-D element stiffness matrices to obtain nodal or elemental solution.
C309.4	**ANALYZE** and **APPLY** various numerical methods for different types of analysis.

C309.5	**EVALUATE** and **SOLVE** non-linear and dynamic analysis problems by analyzing the results obtained from analytical and computational method.
C309.6	**GENERATE** the results in the form of contour plot by the USE of CAE tools.

302051 Design of Transmission Systems

CO No.	CO Statements
C310.1	**APPLY** the principle of Spur & Helical gear design for industrial application and PREPARE a manufacturing drawing with the concepts of GD&T.
C310.2	**EXPLAIN** and **DESIGN** Bevel & Worm gear considering design parameters as per design standards.
C310.3	**SELECT**&**DESIGN** Rolling and Sliding Contact Bearings from manufacturer's catalogue for a typical application considering suitable design parameters.
C310.4	**DEFINE** and **DESIGN** various types of Clutches, Brakes, used in automobile.
C310.5	**APPLY** various concept to **DESIGN** Machine Tool Gear box, for different applications
C310.6	**ELABORATE** various modes of operation, degree of hybridization and allied terms associated with hybrid electric vehicles.

302052A Elective II Composite Materials

CO No.	CO Statements
C311A.1	**DEFINE & COMPARE** composites with traditional materials.
C311A.2	**IDENTIFY & ESTIMATE** different parameters of the Polymer Matrix Composite
C311A.3	**CATEGORISE** and **APPLY** Metal Matrix Process from possessions landscape.
C311A.4	**DETERMINE** volume/weight fraction and strength of Composites.
C311A.5	**SELECT** appropriate testing and inspection method for composite materials.
C311A.6	**SELECT** composites materials for various applications.

302052B Elective II Surface Engineering

CO No.	CO Statements
C311B.1	**DEFINE** the basic's principle & mechanism of surface degradation.
C311B.2	**ANALYSE & SELECT** correct corrosion prevention techniques for a different service condition.
C311B.3	**DEMONSTRATE** the role of surface engineering of materials to modify/improve the surface properties
C311B.4	**SELECT** the suitable surface heat treatments to improve the surface properties.
C311B.5	**APPLY** the surface modification technique to modify surface properties.
C311B.6	**ANALYSE** & **EVALUTE** various surface coating defects using various testing/characterization method.

302053 Measurement Laboratory

CO No.	CO Statements
C312.1	**EVALUATE** causes of errors in Vernier calipers, micrometers by performing experiments in standard metrological conditions, noting deviations at actual and by plotting cause and effect diagram, to reduce uncertainty in measurement.
C312.2	**ANALYZE** strain measurement parameters by taking modulus of elasticity in consideration to acknowledge its usage in failure detection and force variations.
C312.3	**EXAMINE** surface Textures, surface finish using equipment's like Talysurf and analyze surface finish requirements of metrological equipment's like gauges, jaws of vernier calipers, micrometers, magnifying glasses of height gauge and more, to optimize surface finish accuracy requirements and cost of measurement.
C312.4	**MEASURE** the dimensional accuracy using Comparator and limit gauges and appraise their usage in actual measurement or comparison with standards set to reduce measurement lead time.
C312.5	**PERFORM** Testing of Flow rate, speed and temperature measurements and their effect on performance in machines and mechanisms like hydraulic or pneumatic trainers, lathe machine etc. to increase repeatability and reproducibility
C312.6	**COMPILE** the information of opportunities of entrepreneurships/business in various sectors of metrology like calibrations, testing, coordinate and laser metrology etc in an industry visit report

302054 Fluid Power &Control Laboratory

CO No.	CO Statements
C313.1	**DEFINE** working principle of components used in hydraulic and pneumatic systems.
C313.2	**IDENTIFY & EXPLAIN** various applications of hydraulic and pneumatic systems.
C313.3	**SELECT** an appropriate component required for hydraulic and pneumatic systems using manufactures' catalogues
C313.4	**SIMULATE & ANALYSE** various hydraulic and pneumatic systems for industrial/mobile applications
C313.5	**DESIGN** a hydraulic and pneumatic system for the industrial applications
C313.6	**DESIGN & DEMONESTRATE** various IoT, PLC based controlling system using hydraulics and pneumatics.

302055 Internship/Mini

CO No.	CO Statements
C314.1	**DEMONSTRATE** professional competence through industry internship.
C314.2	**APPLY** knowledge gained through internships to complete academic activities in a professional manner

C314.3	**CHOOSE** appropriate technology and tools to solve given problem.
C314.4	**DEMONSTRATE** abilities of a responsible professional and use ethical practices in day to day life.
C314.5	**DEVELOP** network and social circle, and **DEVELOPING** relationships with industry people.
C314.6	**ANALYZE** various career opportunities and **DECIDE** career goals.

BE Mechanical Term-VII

402041 Hydraulics and Pneumatics

CO No.	CO Statements
C401.1	Determine the performance characteristics of hydraulic Pump, Hydraulic motors, actuators and other components and Apply ISO symbols of hydraulic and Pneumatic components based on interpretation with actual components.
C401.2	Analyze standard Circuits of hydraulic and Pneumatic systems by simulating circuits using simulation software - Fluid Sim and Perform hand-on different hydraulic and pneumatic circuits for its functioning as per requirements, using advanced trainer kits .
C401.3	Selection of appropriate components required for hydraulic and pneumatic systems using manufactures catalog.
C401.4	Analyse hydraulic and pneumatic systems for industrial/mobile applications
C401.5	Design a Fluid power system according to the requirements.
C401.6	Develop fluid power circuits based for various applications .

402042 CAD CAM Automation

CO No.	CO Statements
C402.1	Analyze and design real world components
C402.2	Formulate and solve industrial problems using FEA.
C402.3	Generate machine simulation using appropriate simulation software.
C402.4	Select suitable rapid manufacturing method for complex components.
C402.5	Describe industrial relevance of robotics and automation.

402043 Dynamics of Machinery

CO No.	CO Statements
C403.1	Apply balancing techniques for static and dynamic balancing of multi cylinder inline and radial engines.
C403.2	Calculate natural frequency for single DOF undamped & damped free vibratory systems.
C403.3	Calculate the response to forced vibrations due to harmonic excitation, base

	excitation and excitation due to unbalanced forces.
C403.4	Estimate natural frequencies, mode shapes for 2 DOF undamped free longitudinal and torsional vibratory systems.
C403.5	Analyze methods for vibration control for industrial/real life problems with the help of different vibration measuring instruments.
C403.6	Analyze noise with the help of noise measurement instruments and apply noise reduction techniques for industry and day today life problems.

402044A Elective-I Finite Element Analysis

CO No.	CO Statements
C404A.1	Solve mechanical engineering problems using different numerical techniques
C404A.2	Determine 1-D and 2-D element stiffness matrices, load vectors to find displacements and stresses for structural, thermal and modal systems.
C404A.3	Compare analytical and FEA software results.
C404A.4	Demonstrate the workings of a finite element code for linear stress, displacement, temperature and modal analysis.
C404A.5	Solve complex problems in solid mechanics and heat transfer using FEA software
C404A.6	Interpret the results of finite element analyses based on modeling (physics assumptions) errors, discretization (mesh density and refinement toward convergence)errors, and numerical (round-off) errors.

402044C Elective-I Heating and ventilation air conditioning

CO No.	CO Statements
C404C.1	Determine the performance parameters of trans-critical & ejector refrigeration systems
C404C.2	Estimate thermal performance of compressor, evaporator, condenser and cooling tower.
C404C.3	Describe refrigerant piping design, capacity & safety controls and balancing of vapour Compressor system.
C404C.4	Explain importance of indoor and outdoor design conditions, IAQ, ventilation and air distribution system.
C404C.5	Estimate heat transmission through building walls using CLTD and decrement factor &time lag methods with energy-efficient and cost-effective measures for building envelope.
C404C.6	Explain working of types of desiccant, evaporative, thermal storage, radiant cooling, clean room and heat pump air-conditioning systems.

402045A Elective-II Automobile Engineering

CO No.	CO Statements
C405.1	Compare drive train and chassis of different automobile systems.
C405.2	Select wheels, axles and steering systems for different automobiles.
C405.3	Compare and select the proper suspension system and braking system for vehicle different

	automobiles
C405.4	Analyze performance and safety of vehicles
C405.5	Select battery, Electric system and accessories and diagnose the fault in automobile vehicles
C405.6	Indentify challenges and scope of EVs , HEVs and solar vehicle.

402045B Elective-II Operational Research

CO No.	CO Statements
C406.1	Analyze the given situation , develop LPP model and optimize the LPP and Decision Theory to solve the problems
C406.2	Apply and Analyze the concept of transportation models to optimize available resources. Analyze the assignment and develop optimizes solution for assigning the jobs.
C406.3	Decide optimal strategies in conflicting situations and analyze and analyze when to replace the machines or items depending on cost, maintenance and failure possibility
C406.4	Implement the project management techniques, Analyze and develop model to minimizes the project time with minimum recourses by using project management technique, situation and find optimum solution, and simulate the inventory and sequencing model
C406.5	Analyze the situation and develop queuing models and analyze and arrange different job to different machines depending on process time so as to minimize the process time
C406.6	Analyze the integer programming by using cutting plane and branch and bound method, Develop Dynamic Programming model for shortest route problem

402045C Elective-II Energy Audit Management

CO No.	CO Statements
C407.1	Compare energy scenario of India and World.
C407.2	Carry out Energy Audit of the Residence / Institute/ Organization.
C407.3	Evaluate the project using financial techniques
C407.4	Evaluate energy conservation opportunities in Thermal Utilities.
C407.5	Evaluate energy conservation opportunities in Electrical Utilities
C407.6	Identify the feasibility of Cogeneration and WHR

402046 Project-I

CO No.	CO Statements
C408.1	Analyze literature review to find gap and formulate the problem statement
C408.2	Identify objectives and methodology of project undertaken
C408.3	Estimate cost of project and prepare work plan
C408.4	Design and develop solution for problem defined using various tools and machines in a team.

BE Mechanical Term-VIII

402047 Energy Engineering

CO No.	CO Statements
C409.1	Analyze the improved Rankine Cycle and Cogeneration Cycle for Thermal Power Plant.
C409.2	Analyze the steam condensers and identify the environmental impacts of thermal power plant and controlling methods.
C409.3	Select the location for Hydroelectric Power Plant and demonstrate nuclear power plant
C409.4	Analyze the performance of diesel power plant, gas power plant and gas turbine power cycle
C409.5	Select appropriate Non-Conventional Power Plant for specific application.
C409.6	Estimate cost of electricity consumption in household and Industrial application.

402048 Mechanical System Design

CO No.	CO Statements
C410.1	Analyze the differences between components level and system level design.
C410.2	Design various mechanical systems like pressure vessels, machine tool gear boxes, material handling systems, IC Engine system etc. for the specifications stated/formulated
C410.3	Apply optimum design principles on mechanical components.
C410.4	Design a product from system level components.

402049B Elective-III Industrial Engineering

CO No.	CO Statements
C411.1	Apply the Industrial Engineering concept
C411.2	Understand, analyze and implement different concepts involved in method study.
C411.3	Design and Develop different aspects of work system and facilities.
C411.4	Understand and Apply Industrial safety standards, financial management practices.
C411.5	Undertake project work based on modeling & simulation area.
C411.1	Apply the Industrial Engineering concept

402050A Elective-IV Advanced Manufacturing Engineering

CO No.	CO Statements
C412.1	Classify and analyze special forming processes
C412.2	Analyze and identify applicability of advanced joining processes
C412.3	Understand and analyze the basic mechanisms of hybrid non-conventional machining techniques
C412.4	Select appropriate micro and nano fabrication techniques for engineering applications
C412.5	Understand and apply various additive manufacturing technology for product development
C412.6	Understand material characterization techniques to analyze effects of chemical composition, composition variation, crystal structure, etc.

402050C Elective-IV Product development and Design

CO No.	CO Statements
C413.1	Understand essential factors for product design
C413.2	Design product as per customer needs and satisfaction
C413.3	Understand Processes and concepts during product development
C413.4	Understand methods and processes of Forward and Reverse engineering
C413.5	Carry various design processes as DFA, DFMEA, design for safety
C413.6	Understand the product life cycle and product data management

402051 Project-II

CO No.	CO Statements
C415.1	Fabricate/manufacturer experimental setup
C415.2	Simulate and analyze the experimental results and its validation
C415.3	Prepare project report with plagiarism check.

C415.4	Present and publish the project work