SRI VASAVI INSTITUTE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING

COURSE OUTCOMES
2019-20 II B.TECH I SEM

CO NUMBER	COURSE OUTCOME(CO)STATEMENT –AT THE END OF THE COURSE ,THE STUDENTS WILL BE ABLE TO	BLOOMS TAXONOMY
	METALLURGY & MATERIALS SCIENCE(C211)	
C211.1	Explain the crystallization of metals, justify the effect of alloying elements on the behaviour of metals.	Evaluate
C211.2	Sketch the equilibrium diagrams to describe the different phases of metals and alloys.	Apply
C211.3	Distinguish different types of cast irons and steels and their applications..	Analyze
C211.4	Interpret different heat treatment processes to get desired mechanical properties of metals	Apply
C211.5	Describe the structure and properties of non ferrous metals and alloys.	Understand
C211.6	Compare the unique nature of ceramics and composite materials.	Analyze
	MECHANICS OF SOLIDS (C212)	
C212.1	Discuss the stress, strain, poisons ratio and thermal stress in members including strain energy under different loadings.	Understand
C212.2	Investigate the construction of shear force diagrams and bending moment diagrams.	Create
C212.3	Examine the bending and shear stress induced in the beams.	Analyze
C212.4	Appraise slope and deflection for different support arrangements.	Evaluate
C212.5	Execute how a cylinder fails what kind of stresses induced in cylinders subjected to internal, external pressures.	Apply
C212.6	Solve shear stresses induced in circular shafts, discussing columns in stability point and with different end conditions	Apply
	THERMODYNAMICS(C213)	
C213.1	Explain the use of boundaries in open and closed system	Understand
C213.2	Derive ,discuss and apply first law of thermodynamics for problem solving	Apply
C213.3	Apply the second law of thermodynamics to thermal cycles to solve the problems	Apply
C213.4	Calculate the quality of steam by using thermodynamic diagrams	Apply
C213.5	Differentiate the properties of gas mixtures and psychromentric properties	Analyze

	of air	
C213.6	Derive and explain the efficiency of power cycles and performance of refrigeration cycles	Apply
MANAGERIAL ECONOMICS & FINANCIAL ANALYSIS(C214)		
C214.1	Explain the basic concepts and principles of managerial economics	Understand
C214.2	Explain an idea of methods and technical relationship between input and outputthe production cost concepts	Understand
C214.3	Determine the types of market and priciong methods and strategies	Understand
C214.4	Describe the types of industrial organization	Understand
C214.5	Analyze the financial statements	Analyze
C214.6	Evaluate the investment proposal in projects	Evaluate
FLUID MECHANICS & HYDRAULIC MACHINES(C215)		
C215.1	Explain the properties of fluids and measure pressure of the flowing fluid	Evaluate
C215.2	Use Euler's equation,Bernouli's equation ,Energy momentum equation and solve various fluids flow problems	Apply
C215.3	Perform dimensional analysis Explain boundaty layer theory	Analysis
C215.4	Calculate hydrodynamic forces and efficiencies	Apply
C215.5	Appraise the performance of turbines and pump under varying load conditions	Evaluate
C215.6	Design hydraulic systems like lifts which are suitable for requirements	Create
COMPUTER AIDED ENGINEERING DRAWING PRACTICE(C216)		
C216.1	Draw the projections of solids inclined both planes	Apply
C216.2	Draw the sections of solids and development of surfcaes	Apply
C216.3	Draw the intersections of solids and perspective projections	Apply
C216.4	Understand the commands used in CAD	Understand
C216.5	Model the 2D and 3D objects using CAD	Apply
C216.6	Construct solid modeling with of AUTOCAD	Create
ELECTRICAL & ELECTRONICS ENGG. LAB(C217)		
C217.1	Analyze the various electrical networks.	Analyze

C217.2	Explain the operation of DC generators,3-point starter and conduct the Swinburne's Test.	Understand
C217.3	Analyze the performance of transformer.	Analyze
C217.4	Explain the operation of 3-phase alternator and 3-phase induction motors.	Understand
C217.5	Analyze the operation of half wave, full wave rectifiers and OP-AMPs.	Analyze
C217.6	Explain the operation of single stage CE amplifier and concept of feedback amplifier.	Understand
	MECHANICS OF SOLIDS & METALLURGY LAB(C218)	
C218.1	Discuss the stress, strain, poisons ratio and thermal stress in members including strain energy under different loadings.	Understand
C218.2	Appraise slope and deflection for different support arrangements.	Evaluate
C218.3	Solve shear stresses induced in circular shafts, discussing columns in stability point and with different end conditions	Apply
C218.4	Distinguish different types of cast irons and steels and their applications..	Analyze
C218.5	Interpret different heat treatment processes to get desired mechanical properties of metals	Apply
C218.6	Describe the structure and properties of non ferrous metals and alloys.	Understand

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