



**LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY: HYDERABAD
COURSE OUTCOMES SEMESTER II 2019-20 (COMMON TO CSE, CSD)**

INDIAN CONSTITUTION	
C21.01	To Know the background of the present constitution of India
C21.02	Understanding the working of the Union, State and Local levels of governments
C21.03	Analyze and Gaining consciousness of the fundamental rights and duties
C21.04	Evaluating the functioning and distribution of financial, Administrative, and legislative relations between the centre and states
C21.05	Creation and dissemination of information about the statutory institutions of India
C21.01	To Know the background of the present constitution of India

ENGLISH		
C22.01	Communication	<ul style="list-style-type: none"> Develop various skills to communicate through Listening, Speaking, Reading & Writing
C22.02	Lesson's Reading, Understanding & Comprehension	<ul style="list-style-type: none"> Use the study & prescribed learning material. Encourage to inculcate a habit of reading following various techniques, for general & specific details. Able to comprehend the topic or content critically, analytically and logically. Boost imagination of the situations and react appropriately.
C22.03	Vocabulary	<ul style="list-style-type: none"> Enrich vocabulary through various ways of word formation. Utility of one word substitute, homophones, homonyms, prefix and suffix. Use of appropriate words in the context.
C22.04	Grammar	<ul style="list-style-type: none"> Write grammatically correct sentences following syntax; structure concord, various forms of sentence structures, parts of speech, tenses, voice, articles & punctuations.
C22.05	Writing	<ul style="list-style-type: none"> Utility of correct structures of sentence & paragraph Learn and use various formats – letters, memo, essay, scripts, reports etc. Utilization of 7Cs along with the five stages of the writing skills.
C22.06	Writing	<ul style="list-style-type: none"> Comprehend and interpret logical & creative thinking in meaningful writings through Guided writing with verbal cues

PHYSICS	
C23.01	Apply various types of crystalline materials in advancement of technology.
C23.02	Analyze energy levels in constant and periodic potentials, duality of matter.
C23.03	Develop skills in designing the various electronic equipment.
C23.04	Distinguish the materials and can justify its application in divergent fields.

C23.05	Illustrates working of lasers and optical fibers in high speed communication.
C23.06	Understand and analyze the action of laser and principal of optical fibers.

MATHEMATICS –II

C24.01	Perceive engineering problems through Mathematics knowledge
C24.02	Classify and Solve system of linear equations with the help of Matrices and solving eigen value problems.
C24.03	Solve analytically certain first order differential equations and insight into its applications.
C24.04	Determine solution of certain higher order differential equations and exposure into its applications.
C24.05	Make use of the knowledge of Gamma, Beta and Legendre's functions.
C24.06	Utilize the concept of Laplace Transforms in improper integrals and to the ordinary differential equations.

BASIC ELECTRICAL ENGINEERING

C25.01	Get an exposure to common electrical components and their ratings
C25.02	Comprehend the usage of common electrical measuring instruments
C25.03	Analyze the Laws and theorems in DC circuits
C25.04	Analyze the voltage and currents in RL, RC and RLC Circuits.
C25.05	Test the basic properties of transformers and electrical machines.
C25.06	Analyze the performance of DC Motors and DC Generators

ENGLISH LAB

C26.02	Giving them sufficient practice in listening with comprehension
C26.03	Providing them ample opportunities to improve their public speaking skills
C26.04	Training them in the use of correct pronunciation, stress and intonation.
C26.05	Sensitizing them to use of verbal and no-verbal communication appropriate to the context
C26.06	Encouraging them to learn the art of conversation to suit formal and informal situation
C26.02	Preparing them to make presentations and face interviews

PHYSICS LAB

C27.01	Apply the basic knowledge of semiconductors and Understand the I-V characteristics of p-n junction diode, solar cell and thermistors.
C27.02	Evaluate the carrier concentration of semiconductor materials by applying Hall effect principle and dielectric constant of PZT material.
C27.03	Remember the basics of electrical properties and apply to semiconductors.
C27.04	Understand the laws of mechanics from Torsional pendulum
C27.05	Analyze the various parameters (Coercivity, Retentivity and Hysteresis) of ferromagnetic materials
C27.06	Apply the basic principles of lasers and optical fibers to determine wavelength and numerical aperture.

BASIC ELECTRICAL ENGINEERING LAB

C28.01	Verification of Kirchoff's Laws, Thevenin's, Norton's and Superposition theorems.
C28.02	Study of Three Phase Supply and RL-RC circuits for single phase AC supply

C28.03	Loading of single phase and three phase transformers and observing the voltage-current relationship across primary and secondary windings
C28.04	Performance of Three phase Induction motors
C28.05	Performance of DC Machines (Motors and Generators)
ENGINEERING GRAPHICS & DESIGN	
C29.01	Learn basics of Dimensioning, Detail Drawings and Engineering Design.
C29.02	Exposure to Computer-Aided geometric design
C29.03	Demonstrate the projection of points, lines and planes then create virtual drawing by using CAD software
C29.04	Construct the solid projections & section of solids
C29.05	Development of surfaces, Development of isometric views of simple objects and reading the orthographic views of these objects
C29.06	Use the knowledge of Engineering Graphics to draw floor drawing, Simple Machine Element, Basic Electrical Drawing, Basic Networking Drawing.

(COMMON TO IT ,CSE AI&ML,ECE &MECH)

ENVIRONMENTAL SCIENCES		
C21.1	Apply environmental ethics to attain sustainable development	
C21.2	Demonstrate an attitude of concern for the environment	
C21.3	Discuss the methods of natural resources and biological diversity	
C21.4	Recognise the needs of green technologies formation's security	
C21.5	Illustrate awareness or environmental laws and regulations	
C21.6	Apply the principles of ecology and biodiversity for sustainable development	
ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE		
C22.01	To get a knowledge in Indian Philosophical Foundations.	
C22.02	To Know Indian Languages, Culture and Literature	
C22.03	To know Indian fine arts in India & Their Philosophy.	
C22.04	To make familiar with Indian Education system, Ethics and Morals	
C22.05	To explore the Science and Scientists of Medieval and Modern India	
ENGLISH		
C23.01	Communication	<ul style="list-style-type: none"> Develop various skills to communicate through Listening, Speaking, Reading & Writing
C23.02	Lesson's Reading,	<ul style="list-style-type: none"> Use the study & prescribed learning material.

	Understanding & Comprehension	<ul style="list-style-type: none"> • Encourage to inculcate a habit of reading following various techniques, for general & specific details. • Able to comprehend the topic or content critically, analytically and logically. • Boost imagination of the situations and react appropriately.
C23.03	Vocabulary	<ul style="list-style-type: none"> • Enrich vocabulary through various ways of word formation. • Utility of one word substitute, homophones, homonyms, prefix and suffix. • Use of appropriate words in the context.
C23.04	Grammar	<ul style="list-style-type: none"> • Write grammatically correct sentences following syntax; structure concord, various forms of sentence structures, parts of speech, tenses, voice, articles & punctuations.
C23.05	Writing	<ul style="list-style-type: none"> • Utility of correct structures of sentence & paragraph • Learn and use various formats – letters, memo, essay, scripts, reports etc. • Utilization of 7Cs along with the five stages of the writing skills.
C23.06	Writing	<ul style="list-style-type: none"> • Comprehend and interpret logical & creative thinking in meaningful writings through Guided writing with verbal cues

MATHEMATICS II

C24.01	Perceive engineering problems through Mathematics knowledge
C24.02	Classify and Solve system of linear equations with the help of Matrices and solving eigen value problems.
C24.03	Solve analytically certain first order differential equations and insight into its applications.
C24.04	Determine solution of certain higher order differential equations and exposure into its applications.
C24.05	Make use of the knowledge of Gamma, Beta and Legendre's functions.
C24.06	Utilize the concept of Laplace Transforms in improper integrals and to the ordinary differential equations.

CHEMISTRY

C25.01	Use the basic concept of electrochemistry and batteries and apply its principle in . batteries.
C25.02	Classify the physical and chemical parameters of quality of water and explain the process of water treatment.
C25.03	Explain the mechanism of corrosion of materials on the basis of electrochemical approach and its control methods.
C25.04	Determine the influence of chemical structure on properties of materials and their choice in engineering applications.
C25.05	Examine the properties and characteristics of different types of fuels and its composition and analyses the importance of calorific value and cracking.
C25.06	Analyse the importance of green chemistry to modify engineering materials and synthesis.

PROGRAMMING FOR PROBLEM SOLVING

C26.01	Formulate simple algorithms for arithmetic and logical problems.
C26.02	Computing Environments, Translate the algorithms to flow charts and programs (in c language).
C26.03	Test and execute the programs and correct syntax and logical errors.
C26.04	Implement conditional branching, iteration and recursion.
C26.05	Decompose a problem into functions and synthesize a complete program using divide and conquer approach.
C26.06	Use arrays, pointers structures and files to formulate algorithms and programs.

ENGLISH LAB

C27.01	Giving them sufficient practice in listening with comprehension
C27.02	Providing them ample opportunities to improve their public speaking skills

C27.03	Training them in the use of correct pronunciation, stress and intonation.
C27.04	Sensitizing them to use of verbal and no-verbal communication appropriate to the context
C27.05	Encouraging them to learn the art of conversation to suit formal and informal situation
C27.06	Preparing them to make presentations and face interviews
CHEMISTRY LAB	
C28.01	determine the hardness of water
C28.02	Illustrate of mobility of ions in strong acids and weak acids using conductivity meter
C28.03	Calculate the electrode potential of a given solution.
C28.04	Apply the principles of Colorimetry and Electrochemistry in quantitative estimations.
C28.05	Analyze of the rate constant of a reaction.
C28.06	Outline the synthesis of drug.
PROGRAMMING FOR PROBLEM SOLVING LAB	
C29.01	Choose appropriate data type for implementing programs in C language.
C29.02	Design and implement modular programs involving input output operations, decision making and looping constructs
C29.03	Implement search and sort operations on arrays.
C29.04	Apply the concept of pointers for implementing programs on dynamic memory management and string handling.
C29.05	Design and implement programs to store data in structures and files.
WORKSHOP PRACTICE	
C210.01	Understand that human life and safety is given preference over all other things.
C210.02	Learn basic processes used in manufacturing sector.
C210.03	Understand the importance of design & of following due procedure to get efficient result, which is not only limited to academics but throughout life.
C210.04	Convert raw material into finished product.
C210.05	Describe conventional and modern manufacturing processes (which are taught through demonstration and video lectures).
C210.06	Determine trades and techniques used in Workshop and chooses the best material/ manufacturing process for the application.

Course Outcome 2019-20
SEMESTER: II
Department of Civil Engineering

INDIAN CONSTITUTION	
C21.01	To Know the background of the present constitution of India
C21.02	Understanding the working of the Union, State and Local levels of governments
C21.03	Analyze and Gaining consciousness of the fundamental rights and duties
C21.04	Evaluating the functioning and distribution of financial, Administrative, and legislative relations between the centre and states
C21.05	Creation and dissemination of information about the statutory institutions of India
ENGLISH	
C22.01	Communicate clearly, accurately and appropriately
C22.02	Read, understand and interpret a variety of written texts
C22.03	learn to communicate grammatically
C22.04	learn to write essays, formal letters and technical reports
C22.05	comprehend the different types of texts
MATHEMATICS -II	
C23.01	Ability to understand engineering problems through Mathematics knowledge.
C23.02	To get Logical thinking and creativity
C23.03	To solve system of linear equations with the help of matrices and solving eigen value problems.
C23.04	To get the command over solving certain first order differential equations and insight into its applications.
C23.05	To solve the basic problems of Gamma,beta and Legendre's function
C23.06	To get the concept of laplace Transform and its application to the ordinary differential equations.
PHYSICS	
C24.01	Apply various types of crystalline materials in advancement of technology.
C24.02	Analyze energy levels in constant and periodic potentials, duality of matter.
C24.03	Develop skills in designing the various electronic equipment.
C24.04	Distinguish the materials and can justify its application in divergent fields.
C24.05	Illustrates working of lasers and optical fibers in high speed communication.
C24.06	Understand and analyze the action of laser and principal of optical fibers
BASIC ELECTRICAL ENGINEERING	
C25.01	Get an exposure to common electrical components and their ratings
C25.02	Comprehend the usage of common electrical measuring instruments
C25.03	Analyze the Laws and theorems in DC circuits
C25.04	Analyze the voltage and currents in RL, RC and RLC Circuits.
C25.05	Test the basic properties of transformers and electrical machines.
C25.06	Analyze the performance of DC Motors and DC Generators
PHYSICS LAB	

C26.01	Experiments on semiconductors interprets in the parameters of solar cells.(Applications)
C26.02	To recognize the properties of light beam by performing experiments on Optics lasers(Knowledge)
C26.03	To compare working of various laser systems and light propagation through optical fibre (Evaluation).
C26.04	To recognize the concepts of conduction and energy gap by using PN junction diode semiconductor (Knowledge)
C26.05	Analyze the diffraction and magnetic phenomenon in measuring the wavelength of laser and hysteresis loss.
C26.06	Apply the basic principles of light to determine numerical aperture of optical fiber.
BASIC ELECTRICAL ENGINEERING LAB	
C27.01	Verification of Kirchoff's Laws, Thevenin's, Norton's and Superposition theorems.
C27.02	Study of Three Phase Supply and RL-RC circuits for single phase AC supply
C27.03	Loading of single phase and three phase transformers and observing the voltage-current relationship across primary and secondary windings
C27.04	Performance of Three phase Induction motors
C27.05	Performance of DC Machines (Motors and Generators)
ENGINEERING GRAPHICS & DESIGN	
C28.01	To know and understand the communication language used by engineers throughout the world, its standards & significance in society.
C28.02	To learn & utilize conventional and modern drafting tools for creating geometrical drawings.
C28.03	To improve visualization skills, which could be utilized for problem solving.
C28.4	To comprehend the theory of projections.
C28.05	To create basic engineering drawing using AutoCAD.