VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

Department of Humanities & Sciences (CSE ,CSE(DS),AI&IT)

I Year I Semester – R20

Course outcomes

Mathematics-I/ A41002	
After completing this course, the student must demonstrate the knowledge and ability to	
CO1	Write the matrix representation of system of linear equations and identify the consistency of the system of equations.
CO2	Find the Eigen values and Eigen vectors of the matrix and discuss the nature of the quadratic form.
CO3	Analyze the convergence of sequence and series.
CO4	Discuss the applications of mean value theorems to the mathematical problems, Evaluation of improper integrals using Beta and Gamma functions.
CO5	Examine the extrema of functions of two variables with/ without constraints.

Chemistry/A41005	
After completing this course, the student must demonstrate the knowledge and ability to	
CO1	Acquire knowledge of atomic, molecular and electronic changes related to conductivity.
CO2	Apply the various processes of treatment of water for both domestic and industrial purpose.
CO3	Apply the knowledge of electrode potentials for the protection of metals from corrosion.
CO4	Analyze the major chemical reactions that are used in the synthesis of compounds.
CO5	Apply the knowledge of polymers in every day's life.

Chemistry Lab/A41083	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Determination of parameters like hardness, alkalinity and chloride content in water.
CO2	Estimation of rate constant of a reaction from concentration-time relationships.
CO3	Determination of physical properties like adsorption, surface tension and viscosity.
CO4	Synthesize a small drug molecule and analyze a salt sample.
CO5	Calculation of strength of compound using instrumentation techniques.

Basic Electrical Engineering/A41201	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand the fundamentals of basic circuit components and their characteristics.
CO2	Analyze basic electrical circuits with A.C excitation.
CO3	Understand the concepts of magnetic circuits and transformers.
CO4	Acquire the basic concepts of electrical motors.
CO5	Understand the concept of A.C generator and low voltage electrical installations.

Basic Electrical Engineering Lab /A41281	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Get an exposure to basic electrical laws.
CO2	Understand the response of different types of electrical circuits to different excitations.
CO3	Understand the measurement, calculation and relation between the basic electrical parameters.
CO4	Understand the performance characteristics of D.C electrical machines.
CO5	Understand the performance characteristics of A.C electrical machines.

Engineering Workshop/A41381	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understanding the tools and methods of using to fabricate engineering components
CO2	Applying the measuring techniques to verify the dimensional accuracy
CO3	Evaluating various methods and trades of workshop in the component building

English Language Skills Lab/A41081	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Reproduce speech sounds and improve fluency in language.

CO2	Understand syllables and consonant clusters for appropriate pronunciation.
CO3	Exhibit effective professional skills with rhetoric eloquence.
CO4	Deliver enthusiastic and well-practiced presentation.
CO5	Learn Task-Based Language Learning (TBLL) through various language learning activities effectively.

Programming for Problem Solving-I/A41501	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Design Algorithms and Flowcharts for real world applications using 'C'.
CO2	Know the usage of various operators in Program development.
CO3	Design programs involving decision and iteration structures.
CO4	Apply the concepts code reusability using Functions.
CO5	Analyze various searching and sorting techniques using Arrays.

Programming for Problem Solving Lab-I/A41581	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Apply the specification of syntax rules for numerical constants and variables, data types.
CO2	Know the Usage of various operators and other C constructs.
CO3	Design programs on decision and control constructs.
CO4	Develop programs on code reusability using functions.
CO5	Implement various searching and sorting techniques using arrays.