BHARATHIYAR INSTITUTE OF ENGINNERING FOR WOMEN

DEVIYAKURICHI, SALEM DT-636112

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

REGULATION 2021

COURSE OUTCOMES & CO-PO MAPPINGS

SEMESTER-I

SUBJECT CODE &NAME: HS3151 & PROFESSIONAL ENGLISH – I

COURSE OUTCOMES:

After the Course the Students should be able to:

C101.1	Listen, Comprehend and Correspond with others at various contexts
C101.2	Speak legibly and fluently under various life-time situations by applying proper communication modules
C101.3	Read and understand a variety of writings and technical text by analyzing the meaning and language
C101.4	Apply clear and legible writing skills in error free style in coherent manner
C101.5	Remember and use various communicative skills in precise and efficient way on technological contexts
C101.6	Form situational conversations and technical writing styles for interpersonal and effective communication

CO–PO-PSO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C101.1	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C101.2	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C101.3	-	-	-	-	-	-	-	-	2	3	-	2	-	-
C101.4	-	-	-	-	-	-	-	-	2	3	-	2	-	-
C101.5	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C101.6	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C101	-	-	-	-	-	-	-	-	3	3	-	2	-	-

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SUBJECT CODE &NAME: MA3151 & MATRICES AND CALCULUS – I

COURSE OUTCOMES:

After the Course the Students should be able to:

C102.1	Determine the Eigen values, Eigen vectors to diagonalize a matrix and reduce quadratic form to canonical form.
C102.2	Apply the concept of limits, continuity, rules of differentiation, techniques of differentiation to differentiate standard functions.
C102.3	Apply the concepts of Concavity, Convexity to determine the critical points, point of Inflection, Maxima and Minima of Single variable functions.
C102.4	Compute the derivatives of functions of two variables and apply them to calculate the maxima and minima.
C102.5	Determine integrals using techniques of integration, such as substitution, partial fractions and integration by parts.
C102.6	Apply various techniques to solve higher order differential equations with constant and variable Coefficients

CO – PO-PSO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C102.1	3	2	1	-	-	-	-	1	**1**	-	-	-	2	-
C102.2	3	2	1	-	-	-	-	1	1	-	-	-	2	-
C102.3	3	2	1	-	-	-	-	1	1	-	-	-	2	-
C102.4	3	2	1	-	-	-	-	1	1	-	-	-	2	-
C102.5	3	2	1	-	-	-	-	1	1	-	-	-	2	-
C102.6	3	2	1	-	-	-	-	1	1	-	-	-	2	-
C102	3	2	1	-	-	-	-	1	1	-	-	-	2	-

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SUBJECT CODE &NAME: PH3151 & ENGINEERING PHYSICS

COURSE OUTCOMES:

After the Course the Students should be able to:

C103.1	Demonstrate the properties of elasticity and measure the different moduli of elasticity
C103.2	Discuss the characteristics of laser and optical fiber
C103.3	Explain the concepts of ultrasonics in engineering
C103.4	Explain black body radiation, properties of matter waves and Schrodinger equation
C103.5	Classify the Bravais lattices and different types of crystal structures
C103.6	Summarize the information on growth of crystals and deformations

CO–PO-PSO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C103.1	3	2	1	-	-	-	-	-	-	-	-	-	1	-
C103.2	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C103.3	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C103.4	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C103.5	3	2	1	-	-	-	-	-	-	-	-	-	1	-
C103.6	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C103	2	1	1	-	-	-	-	1	1	1	-	-	1	-

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SUBJECT CODE & NAME: CY3151 & ENGINEERING CHEMISTRY

COURSE OUTCOMES:

After the Course the Students should be able to:

C104.1	Determine the hardness of water and explain the water treatment methods.
C104.2	Define nanochemistry and its types and process of synthesizing nano particles
C104.3	Describe the phase diagram of one component and two component system and various methods of heat treatment of steel.
C104.4	Classify the various types of fuels by their characteristics and explain the flue gas analysis by Orsat method.
C104.5	Illustrate the working of Lead acid battery, lithium ion battery and fuel cell.
C104.6	Apply Nernst equation to determine the EMF of the cell and explain various corrosion control methods.

CO–PO-PSO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C104.1	2	1	-	-	-	1	1	-	-	-	-	-	-	-
C104.2	2	1	1	-	-	1	1	-	-	-	-	-	1	-
C104.3	2	1	-	-	-	-	-	-	-	-	-	-	-	-
C104.4	2	1	-	-	-	1	1	-	-	-	-	-	1	-
C104.5	2	1	-	-	-	1	1	-	-	-	-	-	1	-
C104.6	2	1	1	-	-	1	1	-	-	-	-	-	1	-
C104	2	1	1	-	-	1	1	-	-	-	-	-	1	-

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SUBJECT CODE & NAME: GE3151 & PROBLEM SOLVING AND PYTHON PROGRAMMING

COURSE OUTCOMES:

After the Course the Students should be able to:

C105.1	Explain Components of a Computer System, types of programming languages, types of software with examples and purpose.
C105.2	Perform problem analysis, use algorithms and prepare flow charts, pseudo code for solving simple problems.
C105.3	Use Conditional, iteration constructs of python programming and apply to solve simple problems
C105.4	Use Functions, recursive function, String functions in python programming and apply to perform linear and binary search
C105.5	Explain the various operations for manipulating Tuples, Dictionaries and Use List toper form simple and sorting operations
C105.6	Explain file handling operations, exception handling, modules and packages and illustrate programs for word count, file copy, merge operations and exception handling.

CO – PO-PSO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C105.1	2	1	-	-	-	-	-	-	-	-	-	-	2	1
C105.2	2	1	-	-	-	-	-	-	-	-	-	-	2	1
C105.3	3	2	1	-	-	-	-	-	-	-	-	-	2	1
C105.4	3	2	1	-	-	-	-	-	-	-	-	-	2	1
C105.5	3	2	1	-	-	-	-	-	-	-	-	-	2	1
C105.6	3	2	1	-	-	-	-	-	-	-	-	-	2	1
C105	3	2	1	-	-	-	-	-	-	-	-	-	2	1

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SUBJECT CODE & NAME: GE3171 & PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY

COURSE OUTCOMES:

After the Course the Students should be able to:

C106.1	Develop simple Python programs using conditional and iterative constructs
C106.2	Develop simple Python programs using built-in functions and user-defined functions
C106.3	Develop a Python program using recursion to implement linear and binary search
C106.4	Develop a Python program using list to implement selection and insertion sort
C106.5	Develop Python programs to implement matrix operations
C106.6	Develop a Python program to implement file handling

CO – PO-PSO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C106.1	3	2	1	-	1	-	-	-	-	-	-	-	2	1
C106.2	3	2	1	-	1	-	-	-	-	-	-	-	2	1
C106.3	3	2	1	-	1	-	-	-	-	-	-	-	2	1
C106.4	3	2	1	-	1	-	-	-	-	-	-	-	2	1
C106.5	3	2	1	-	1	-	-	-	-	-	-	-	2	1
C106.6	3	2	1	-	1	-	-	-	-	-	-	-	2	1
C106	3	2	1	-	1	-	-	-	-	-	-	-	2	1

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SUBJECT CODE & NAME : BS3171 & PHYSICS AND CHEMISTRY LABORATORY

COURSE OUTCOMES:

After the Course the Students should be able to:

C107.1	Calculate rigidity modulus and Young's modulus of a given material.
C107.2	Examine the size of a given particle, parameters of optical fiber and compute the thickness of a given thin wire.
C107.3	Discover the velocity of ultrasound, compressibility of a given liquid and band gap of a given semiconductor diode.
C107.4	Estimate the Chemical quality parameter of a water sample.
C107.5	Estimate the strength of acid by conductometric and pH metric titration.
C107.6	Estimate the amount of iron content in a given solution using potentiometer

CO – PO-PSO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C107.1	3	2	1	-	-	-	-	1	1	1	-	-	1	-
C107.2	3	2	1	-	-	-	-	1	1	1	-	-	1	-
C107.3	3	2	1	-	-	-	-	1	1	1	-	-	1	-
C107.4	3	2	1	-	-	-	-	1	1	1	-	-	1	-
C107.5	3	2	1	-	-	-	-	1	1	1	-	-	1	-
C107.6	3	2	1	-	-	-	-	1	1	1	-	-	1	-
C107	3	2	1	-	-	-	-	1	1	1	-	-	1	-

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