

**BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN
DEVIYAKURICHI, SALEM DT, TAMIL NADU - 636112.
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
REGULATION 2017
COURSE OUTCOMES AND CO - PO MAPPINGS**

SEMESTER-I

HS8151


COMMUNICATIVE ENGLISH

COURSE OUTCOMES:

C101.1	Listen and recognize main ideas from different discourses in different accents.
C101.2	Speak clearly, confidently, comprehensively, and communicate with one or many listeners using appropriate communicative strategies.
C101.3	Read different genres of text adopting various reading strategies.
C101.4	Write cohesively and coherently by using a wide range of vocabulary and organize ideas logically on a topic without grammatical errors.
C101.5	Determine the main and subordinate ideas, draw conclusions and summarize information from written material.
C101.6	Write short essays of a general kind and personal letters and emails in English.

CO – PO 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	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C101.4	-	-	-	-	-	-	-	-	-	3	-	2	-	-
C101.5	-	-	-	-	-	-	-	-	2	3	-	2	-	-
C101.6	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C101	-	-	-	-	-	-	-	-	3	3	-	2	-	-


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ENGINEERING MATHEMATICS – I

COURSE OUTCOMES:

C102.1	Diagonalize symmetric matrices and similar matrices using Eigen values and Eigen vectors
C102.2	Explain gradients, potential functions, and directional derivatives of functions of several variables
C102.3	Compute line, surface and volume integral using Gauss divergence, Green's and stoke's theorem.
C102.4	Discuss analytic functions in heat and fluid flow.
C102.5	Extend the concept of contour integrals in evaluating Real integrals.
C102.6	Discuss Laplace Transform methods to solve initial value problems for constant coefficient linear ODEs.

CO – PO MAPPING

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


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ENGINEERING PHYSICS

COURSE OUTCOMES:

C103.1	Demonstrate the properties of elasticity and measure the different moduli of elasticity.
C103.2	Examine the characteristics of waves, Laser and optical fiber.
C103.3	Illustrate different modes of heat transfer through objects.
C103.4	Explain the black body radiation, properties of matter waves and schrodinger equations.
C103.5	Classify the bravais lattices and different types of crystal structures.
C103.6	Elucidate the principles of quantum physics and its application.

CO – PO MAPPING

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


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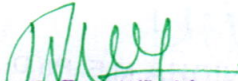
ENGINEERING CHEMISTRY

COURSE OUTCOMES:

C104.1	Explain the hardness of water, its types and estimation, boiler troubles and treatment of boiler feed water.
C104.2	Explain adsorption, types and theories of adsorption isotherm and its application in pollution abatement, theories of catalysis and applications.
C104.3	Understand the basic concepts of phase rule and its application to one and two component systems, properties, significance and applications of alloys.
C104.4	Relate the significance of solid, liquid and gaseous fuels and to calculate the calorific value of fuels.
C104.5	Illustrate the methods of harvesting energy from non-conventional energy sources.
C104.6	State the principles and methods of generation of energy in batteries, nuclear reactors, solar cells, wind mills and fuel cells.

CO – PO MAPPING

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


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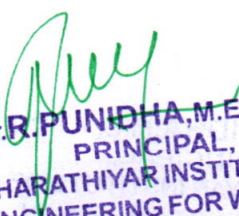
PROBLEM SOLVING AND PYTHON PROGRAMMING

COURSE OUTCOMES:

C105.1	Develop algorithmic solutions to simple computational problems.
C105.2	Demonstrate programs using simple Python statements and expressions.
C105.3	Explain control flow and functions concept in Python for solving problems.
C105.4	Use Python data structures – lists, tuples & dictionaries for representing compound data.
C105.5	Explain files, exception, modules and packages in Python for solving problems.
C105.6	Illustrate programs for word count, file copy, merge operations and exception handling.

CO – PO MAPPING

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


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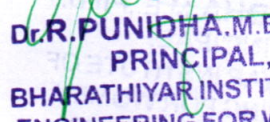
ENGINEERING GRAPHICS

COURSE OUTCOMES:

C106.1	Familiarize the fundamentals and standards of engineering graphics
C106.2	Perform free hand sketching of basic construction and machine equipments.
C106.3	Project orthographic projection of lines and plane surfaces
C106.4	Draw the projection of solids and development of solid.
C106.5	Visualize and project isometric perspective section of solids and surfaces.
C106.6	Draw the free hand sketching of simple objects.

CO – PO MAPPING

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


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**GE8161 PROBLEM SOLVING AND PYTHON PROGRAMMING
LABORATORY**

COURSE OUTCOMES:

C107.1	Develop solutions to simple computational problems using Python programs.
C107.2	Solve problems using conditionals and loops in Python.
C107.3	Develop Python programs by defining functions and calling them.
C107.4	Use Python lists, tuples and dictionaries for representing compound data.
C107.5	Develop Python programs to implement file handling.
C107.6	Develop Python programs to implement matrix operations.

CO – PO MAPPING

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


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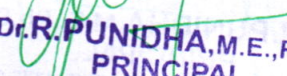
PHYSICS AND CHEMISTRY LABORATORY

COURSE OUTCOMES:

C108.1	Determine and estimate the types of alkalinity & hardness of given water sample & Evaluate moment of inertia of disc and rigidity modulus for thin wire using torsion pendulum.
C108.2	Estimate the amount of copper content present in a given sample & Appraise Young's modulus of the beam by Non - Uniform bending method.
C108.3	Determine the strength of an acid by using pH meter & Measure the wavelength of laser, particle size and basic parameters of optical fiber using semiconductor diode laser.
C108.4	Determine the strength of a pure acid and mixture of acids by using conductivity meter. & Examine the thermal conductivity of bad conductors using Lee's disc apparatus.
C108.5	Estimate the amount of iron content present in a given solution by means of potentiometric titration & Determine the wavelength of the prominent spectral lines.
C108.6	Determine the molecular weight of polymer by Ostwald viscometer & Utilize experiment kits for useful applications.

CO - PO MAPPING

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C108.1	2	-	-	-	-	1	-	2	2	2	-	1	-	-
C108.2	2	1	-	-	1	1	-	1	2	1	-	1	-	-
C108.3	2	-	-	-	1	1	-	2	1	1	-	1	-	-
C108.4	2	-	-	-	1	1	-	2	2	1	-	1	-	-
C108.5	2	-	-	-	1	1	-	2	2	1	-	1	-	-
C108.6	2	-	-	-	1	1	-	-	1	1	-	1	-	-
C108	2	1	-	-	1	1	-	2	2	1	-	1	-	-


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SEMESTER –II

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TECHNICAL ENGLISH

COURSE OUTCOMES:

C109.1	Read technical texts and write area- specific texts effortlessly
C109.2	Listen and comprehend lectures and talks in their area of specialization successfully
C109.3	Speak appropriately and effectively in varied formal and informal contexts
C109.4	Write reports and winning job applications.
C109.5	Use appropriate technologies to organize, present, and communicate information to address a range of audiences, purposes, genres
C109.6	Execute the method of participation in group discussion.

CO – PO MAPPING :

COURS E	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
C109.1	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C109.2	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C109.3	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C109.4	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C109.5	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C109.6	-	-	-	-	-	-	-	-	3	3	-	2	-	-
C109	-	-	-	-	-	-	-	-	3	3	-	2	-	-


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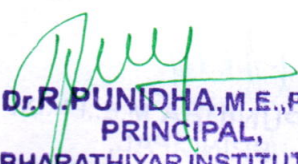
ENGINEERING MATHEMATICS – II

COURSE OUTCOMES:

C110.1	Calculate the eigen values and eigenvectors, diagonalization of a matrix, Symmetric matrices, Positive definite matrices and similar matrices
C110.2	Evaluate the line, surface and volume integrals using Gauss, Stokes and Green's theorems and their verification.
C110.3	Determine Analytic functions, conformal mapping and Bilinear transformation.
C110.4	Evaluate the Cauchy's integrals, Taylor's and Laurent's and residue theorem for evaluation for real integrals using circular and semicircular, contour
C110.5	Solve the Laurent expansions and contours problems
C110.6	Define Laplace transform, unit step function and impulse functions.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C110.1	3	2	1	-	-	-	-	-	-	-	-	-	3	-
C110.2	3	2	1	-	-	-	-	-	-	-	-	-	3	-
C110.3	3	2	1	-	-	-	-	-	-	-	-	-	3	-
C110.4	3	2	1	-	-	-	-	-	-	-	-	-	3	-
C110.5	3	2	1	-	-	-	-	-	-	-	-	-	3	-
C110.6	3	2	1	-	-	-	-	-	-	-	-	-	3	-
C110	3	2	1	-	-	-	-	-	-	-	-	-	3	-


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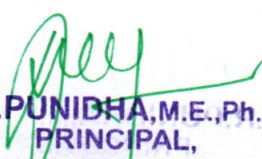
PHYSICS FOR INFORMATION SCIENCE

COURSE OUTCOMES:

C111.1	Gain knowledge on classical and quantum electron theories and energy band structures.
C111.2	Acquire knowledge on basis of semiconductor physics and its applications in various devices.
C111.3	Get knowledge on magnetic and dielectric properties of materials.
C111.4	Have the necessary understanding on the functioning of optical materials for opto electronics.
C111.5	Illustrate the basics of quantum structures and their applications in spintronics.
C111.6	Introduction to Carbon nanotubes and explain its properties and applications

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C111.1	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C111.2	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C111.3	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C111.4	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C111.5	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C111.6	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C111	2	1	-	-	-	-	-	1	1	1	-	-	1	-


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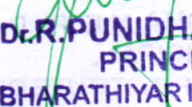
**BASIC ELECTRICAL, ELECTRONICS AND MEASUREMENT
ENGINEERING**

COURSE OUTCOMES:

C112.1	Apply the fundamental laws and network theorems to solve simple and complex linear circuits
C112.2	Explain the basic principle of electrical machines and their performance
C112.3	Describe the different energy sources, protective devices and their field applications
C112.4	Discuss the fundamentals of electronic circuit using diode, transistor and Op amps.
C112.5	Illustrate about renewable sources and common domestic loads.
C112.6	Explain the principles and operation of measuring instruments and transducer

CO – PO-MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C112.1	2	2	1	-	-	-	-	1	1	-	-	-	1	-
C112.2	2	2	-	-	-	-	-	1	1	-	-	-	1	-
C112.3	2	2	-	-	-	-	-	1	1	-	-	-	1	-
C112.4	2	2	-	-	-	-	-	1	1	-	-	-	1	-
C112.5	2	2	-	-	-	-	-	1	1	-	-	-	1	-
C112.6	2	2	1	-	-	-	-	1	1	-	-	-	1	-
C112	2	2	1	-	-	-	-	1	1	-	-	-	1	-


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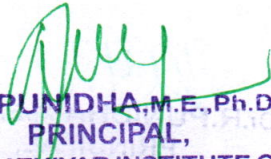
ENVIRONMENTAL SCIENCE AND ENGINEERING

COURSE OUTCOMES:

C113.1	Explain the values, threats and conservation of biodiversity and classify various ecosystems.
C113.2	Identify and implement technological and economical solution to environmental pollution.
C113.3	Develop the knowledge on various natural resources, their causes and their effects.
C113.4	Explain various environmental acts and to explain various disaster management.
C113.5	Relate population growth and environment and describes population explosion.
C113.6	Appreciate the role of IT in environment and human health.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C113.1	-	-	-	-	-	1	2	2	-	1	-	2	-	-
C113.2	-	-	-	-	-	1	2	2	-	1	-	2	-	-
C113.3	-	-	-	-	-	1	2	2	-	1	-	2	-	-
C113.4	-	-	-	-	-	1	2	2	-	1	-	2	-	-
C113.5	-	-	-	-	-	1	2	2	-	1	-	2	-	-
C113.6	-	-	-	-	-	1	2	2	-	1	-	2	-	-
C113	-	-	-	-	-	1	2	2	-	1	-	2	-	-


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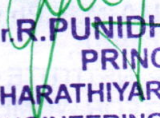
PROGRAMMING IN C

COURSE OUTCOMES:

C114.1	Describe various basic programming constructs in C
C114.2	Solve simple mathematical problems using arrays and strings.
C114.3	Illustrate the usage of functions and pointers to develop C programs.
C114.4	Ability to work with arrays of complex objects.
C114.5	Develop simple applications in C using structures and unions.
C114.6	Make use of sequential and random access operations for file handling processes.

CO –PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C114.1	3	2	-	-	-	-	-	1	1	1	-	1	3	1
C114.2	3	2	1	-	-	-	-	1	1	1	-	1	3	1
C114.3	3	2	1	-	-	-	-	1	1	1	-	1	3	1
C114.4	3	2	1	-	-	-	-	1	1	1	-	1	3	1
C114.5	3	2	1	-	-	-	-	1	1	1	-	1	3	1
C114.6	3	2	1	-	-	-	-	1	1	1	-	1	3	1
C114	3	2	1	-	-	-	-	1	1	1	-	1	3	1


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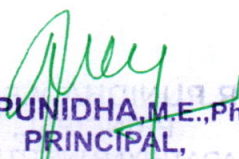
ENGINEERING PRACTICES LABORATORY

COURSE OUTCOMES:

C115.1	Apply the knowledge of pipeline connections to household fittings and industrial buildings
C115.2	Prepare the different joints in roofs, doors windows and furniture
C115.3	Perform step turning operation in a lathe
C115.4	Perform the various welding processes and know about it s applications
C115.5	Produce a funnel using sheet metal
C115.6	Elaborate on the components, Gates, Soldering practices

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C115.1	3	2	1	-	-	-	-	2	2	1	-	-	-	-
C115.2	3	2	1	-	-	-	-	2	2	1	-	-	-	-
C115.3	3	2	1	-	-	-	-	2	2	1	-	-	-	-
C115.4	3	2	1	-	-	-	-	2	2	1	-	-	-	-
C115.5	3	2	1	-	-	-	-	2	2	1	-	-	-	-
C115.6	3	2	1	-	-	-	-	2	2	1	-	-	-	-
C115	3	2	1	-	-	-	-	2	2	1	-	-	-	-


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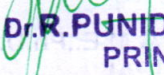
C PROGRAMMING LABORATORY

COURSE OUTCOMES:

C116.1	Develop simple programs in C using basic constructs
C116.2	Develop programs in C using arrays and strings to solve simple mathematical problems.
C116.3	Apply functions and pointers to develop C programs
C116.4	Make use of structures to implement simple applications in C.
C116.5	Apply sequential and random access file processing to develop simple applications.
C116.6	Develop applications in C using file processing

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C116.1	3	2	1	-	-	-	-	1	1	2	-	2	2	1
C116.2	3	2	1	-	-	-	-	1	1	2	-	2	2	1
C116.3	3	2	1	-	-	-	-	1	1	2	-	2	2	1
C116.4	3	2	1	-	-	-	-	1	1	2	-	2	2	1
C116.5	3	2	1	-	-	-	-	1	1	2	-	2	2	1
C116.6	3	2	1	-	-	-	-	1	1	2	-	2	2	1
C116	3	2	1	-	-	-	-	1	1	2	-	2	2	1


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SEMESTER-III

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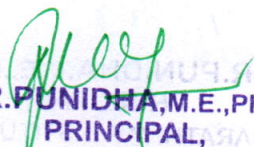
DISCRETE MATHEMATICS

COURSE OUTCOMES:

C201.1	Explain construct precise mathematical proofs
C201.2	Illustrate and use logic and set theory to formulate precise statements
C201.3	Analyze and solve counting problems on finite and discrete structures
C201.4	Use advanced Counting Techniques to formulate counting problems and solve
C201.5	Describe and manipulate sequences.
C201.6	Apply graph theory in solving computing problems

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C201.1	3	2	2	1	-	-	-	1	1	1	1	1	2	3
C201.2	3	2	2	1	-	-	-	1	1	1	1	1	2	3
C201.3	3	2	2	1	-	-	-	1	1	1	1	1	2	3
C201.4	3	2	2	1	-	-	-	1	1	1	1	1	2	3
C201.5	3	2	2	1	-	-	-	1	1	1	1	1	2	3
C201.6	3	2	2	1	-	-	-	1	1	1	1	1	2	3
C201	3	2	2	1	-	-	-	1	1	1	1	1	2	3


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CS8351 DIGITAL PRINCIPLES AND SYSTEM DESIGN

COURSE OUTCOMES:

C202.1	Apply Arithmetic operations in any number system and various techniques to simplify the Boolean function using K Map.
C202.2	Analysis combinational circuits that perform arithmetic operations & code conversions.
C202.3	Design synchronous sequential circuits for the given condition.
C202.4	Design Asynchronous sequential circuits for the given condition.
C202.5	Apply Programmable Logic towards memory management.
C202.6	Solve Verilog codes for the design of digital circuits.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
C202.1	3	3	2	1	1	-	-	-	-	-	-	-	2	1
C202.2	3	3	2	1	1	-	-	-	-	-	-	-	2	1
C202.3	3	3	2	1	1	-	-	-	-	-	-	-	2	1
C202.4	3	3	2	1	1	-	-	-	-	-	-	-	2	1
C202.5	3	3	2	1	1	-	-	-	-	-	-	-	2	1
C202.6	3	3	2	1	1	-	-	-	-	-	-	-	2	1
C202	3	3	2	1	1	-	-	-	-	-	-	-	2	1


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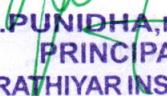
CS8391 DATA STRUCTURES

COURSE OUTCOMES:

C203.1	Describe linear data structures using array and linked list.
C203.2	Apply data structures like stacks, queues in linear data structure.
C203.3	Discuss non-linear data structures tree and its application.
C203.4	Apply various algorithms in graph.
C203.5	Solve searching, sorting and hashing techniques in data structures.
C203.6	Interpret sorting algorithms for a give problem.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C203.1	3	2	2	1	-	-	-	-	-	-	-	1	2	2
C203.2	3	2	2	1	-	-	-	-	-	-	-	1	2	2
C203.3	3	2	2	1	-	-	-	-	-	-	-	1	2	2
C203.4	3	2	2	1	-	-	-	-	-	-	-	1	2	2
C203.5	3	2	2	1	-	-	-	-	-	-	-	1	2	2
C203.6	3	2	2	1	-	-	-	-	-	-	-	1	2	2
C203	3	2	2	1	-	-	-	-	-	-	-	1	2	2

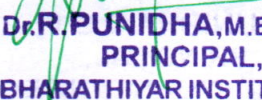

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CS8392 OBJECT ORIENTED PROGRAMMING**COURSE OUTCOMES:**

C204.1	Interpret Java programs using Object Oriented Programming principles
C204.2	Explain Java programs with the concepts inheritance and interfaces
C204.3	Contrast Java applications using exceptions and I/O streams
C204.4	Relate Java applications with threads and generics classes
C204.5	Develop interactive Java programs using swings
C204.6	Demonstrate simple Graphical User Interfaces

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C204.1	2	1	1	1	-	-	-	-	-	-	1	-	2	2
C204.2	2	1	1	1	-	-	-	-	-	-	1	-	2	2
C204.3	2	1	1	1	-	-	-	-	-	-	1	-	2	2
C204.4	2	1	1	1	-	-	-	-	-	-	1	-	2	2
C204.5	2	1	1	1	-	-	-	-	-	-	1	-	2	2
C204.6	2	1	1	1	-	-	-	-	-	-	1	-	2	2
C204	2	1	1	1	-	-	-	-	-	-	1	-	2	2


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EC8395 COMMUNICATION ENGINEERING

COURSE OUTCOMES:

C205.1	Illustrate Analog Modulation Techniques.
C205.2	Explain the concepts of Pulse Modulation Techniques.
C205.3	Illustrate digital Modulation & Transmission Techniques
C205.4	Analysis various source and error control coding techniques to identify / correct errors.
C205.5	Explain the basic principles in the generation of spread spectrum signals.
C205.6	Explain the methods of multiple access in communication systems.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C205.1	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C205.2	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C205.3	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C205.4	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C205.5	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C205.6	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C205	3	3	2	2	1	-	-	-	-	-	-	1	2	2


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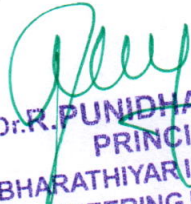
CS8381 DATA STRUCTURES LAB

COURSE OUTCOMES:

C206.1	Enumerate functions to implement linear and non-linear data structure operations
C206.2	Perform practical applications of data structures
C206.3	Design and develop appropriate linear / non-linear data structure operations for solving a given problem
C206.4	Design new solutions for programming problems or improve existing code using learned algorithms and data structures
C206.5	Apply the linear / non-linear data structure operations for a given problem based on the user needs
C206.6	Create the advanced data structure application for the linear data structures

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C206.1	2	2	1	1	-	-	-	2	2	2	2	1	2	1
C206.2	2	2	1	1	-	-	-	2	2	2	2	1	2	1
C206.3	2	2	1	1	-	-	-	2	2	2	2	1	2	1
C206.4	2	2	1	1	-	-	-	2	2	2	2	1	2	1
C206.5	2	2	1	1	-	-	-	2	2	2	2	1	2	1
C206.6	2	2	1	1	-	-	-	2	2	2	2	1	2	1
C206	2	2	1	1	-	-	-	2	2	2	2	1	2	1


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CS8383 OBJECT ORIENTED PROGRAMMING LAB

COURSE OUTCOMES:

C207.1	Develop and implement Java programs for simple applications that make use of classes
C207.2	Develop and implement Java programs with arraylist
C207.3	Design applications using file processing
C207.4	Build software development skills using java programming for real-world applications
C207.5	Apply the concepts of classes, packages, interfaces, exception handling
C207.6	Develop applications using generic programming and event handling

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C207.1	3	2	2	1	-	-	-	3	3	2	1	1	2	2
C207.2	3	2	2	1	-	-	-	3	3	2	1	1	2	2
C207.3	3	2	2	1	-	-	-	3	3	2	1	1	2	2
C207.4	3	2	2	1	-	-	-	3	3	2	1	1	3	2
C207.5	3	2	2	1	-	-	-	3	3	2	1	1	2	2
C207.6	3	2	2	1	-	-	-	3	3	2	1	1	2	2
C207	3	2	2	1	-	-	-	3	3	2	1	1	2	2


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CS8382


DIGITAL SYSTEMS LAB

COURSE OUTCOMES:

C208.1	Apply Boolean simplification techniques to construct combinational logic circuits.
C208.2	Build combinational logic circuits to perform arithmetic operations.
C208.3	Construct and implementation of combination all logic circuits using MSI devices.
C208.4	Implement sequential circuits like registers and counters.
C208.5	Design and implementation of a simple digital system.
C208.6	Simulate combinational and sequential circuits using HDL code.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C208.1	3	2	2	1	-	-	-	2	2	2	2	1	1	-
C208.2	3	2	2	1	-	-	-	2	2	2	2	1	1	-
C208.3	3	2	2	1	-	-	-	2	2	2	2	1	1	-
C208.4	3	2	2	1	-	-	-	2	2	2	2	1	1	-
C208.5	3	2	2	1	-	-	-	2	2	2	2	1	1	-
C208.6	3	2	2	1	-	-	-	2	2	2	2	1	1	-
C208	3	2	2	1	-	-	-	2	2	2	2	1	1	-


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HS8381 INTERPERSONAL SKILLS / LISTENING AND SPEAKING

COURSE OUTCOMES:

C209.1	Listen and react by giving verbal and non verbal feedback.
C209.2	To make effective contribution in Group Discussions.
C209.3	Compare and Contrast the ideas from multiple choices and summarize.
C209.4	Respond confidently in both Formal and Informal conversations.
C209.5	To Greet and to respond to Greetings.
C209.6	Apply stress and intonation while speaking to make the presentation Effective.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C209.1	3	2	1	1	1	-	-	3	2	1	1	1	2	1
C209.2	3	2	1	1	1	-	-	3	2	1	1	1	2	1
C209.3	3	2	1	1	1	-	-	3	2	1	1	1	2	1
C209.4	3	2	1	1	1	-	-	3	2	1	1	1	2	1
C209.5	3	2	1	1	1	-	-	3	2	1	1	1	2	1
C209.6	3	2	1	1	1	-	-	3	2	1	1	1	2	1
C209	3	2	1	1	1	-	-	3	2	1	1	1	2	1


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SEMESTER-IV

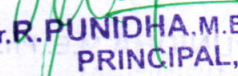
MA8402 PROBABILITY AND QUEUING THEORY

COURSE OUTCOMES:

C210.1	Explain the fundamental concepts of probability and acquire knowledge of standard distributions which can describe real life phenomena.
C210.2	Identify various distribution functions and acquire skills in handling situations involving more than one variable.
C210.3	Analyze the various classifications of Random Processes and characterize phenomena which evolve with respect to time in a probabilistic manner.
C210.4	Explain the basic characteristic features of a queuing system
C210.5	Analyze a network of queues with Poisson external arrivals, exponential service requirements and independent routing.
C210.6	Acquire skills in analyzing queuing models.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C210.1	3	3	2	2	1	-	-	-	-	-	-	1	1	1
C210.2	3	3	2	2	1	-	-	-	-	-	-	1	1	1
C210.3	3	3	2	2	1	-	-	-	-	-	-	1	1	1
C210.4	3	3	2	2	1	-	-	-	-	-	-	1	1	1
C210.5	3	3	2	2	1	-	-	-	-	-	-	1	1	1
C210.6	3	3	2	2	1	-	-	-	-	-	-	1	1	1
C210.1	3	3	2	2	1	-	-	-	-	-	-	1	1	1


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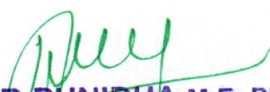
CS8491 COMPUTER ARCHITECTURE

COURSE OUTCOMES:

C211.1	Describe the basic structures of a computer system.
C211.2	Explain the various arithmetic operations for computers.
C211.3	Analyze pipelined control units and the different types of hazards in the instructions.
C211.4	Interpret the concepts of parallel processing architecture
C211.5	Summarize the fundamentals of memory system.
C211.6	Describe the concepts of I/O system

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C211.1	2	2	1	1	-	-	-	-	-	-	1	-	2	1
C211.2	2	2	1	1	-	-	-	-	-	-	1	-	2	1
C211.3	2	2	1	1	-	-	-	-	-	-	1	-	2	1
C211.4	2	2	1	1	-	-	-	-	-	-	1	-	2	1
C211.5	2	2	1	1	-	-	-	-	-	-	1	-	2	1
C211.6	2	2	1	1	-	-	-	-	-	-	1	-	2	1
C211.1	2	2	1	1	-	-	-	-	-	-	1	-	2	1


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CS8492

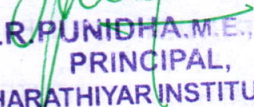
DATABASE MANAGEMENT SYSTEMS

COURSE OUTCOMES:

C212.1	Discuss the fundamental concepts of relational database and SQL
C212.2	Use ER model for Relational model mapping to perform database design Effectively
C212.3	Summarize the properties of transactions and concurrency control mechanisms
C212.4	Outline the various storage and optimization techniques
C212.5	Compare and contrast various indexing strategies in different database systems
C212.6	Explain the various advanced databases and Information Retrieval concepts

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C212.1	3	1	1	1	-	-	-	-	-	1	1	1	2	2
C212.2	3	1	1	1	-	-	-	-	-	1	1	1	2	2
C212.3	3	1	1	1	-	-	-	-	-	1	1	1	2	2
C212.4	3	1	1	1	-	-	-	-	-	1	1	1	2	2
C212.5	3	1	1	1	-	-	-	-	-	1	1	1	2	2
C212.6	3	1	1	1	-	-	-	-	-	1	1	1	2	2
C212.6	3	1	1	1	-	-	-	-	-	1	1	1	2	2


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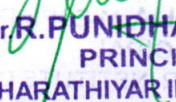
CS8451 DESIGN AND ANALYSIS OF ALGORITHMS

COURSE OUTCOMES:

C213.1	Design algorithms for various computing problems.
C213.2	Analyze the time and space complexity of algorithms.
C213.3	Critically analyze the different algorithm design techniques for a given problem.
C213.4	Modify existing algorithms to improve efficiency.
C213.5	Apply suitable design strategy for algorithms.
C213.6	Identify the limitations of algorithm power

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C213.1	3	3	2	2	-	-	-	-	2	2	-	2	3	3
C213.2	3	3	2	2	-	-	-	-	2	2	-	2	3	3
C213.3	3	3	2	2	-	-	-	-	2	2	-	2	3	3
C213.4	3	3	2	2	-	-	-	-	2	2	-	2	3	3
C213.5	3	3	2	2	-	-	-	-	2	2	-	2	3	3
C213.6	3	3	2	2	-	-	-	-	2	2	-	2	3	3
C213	3	3	2	2	-	-	-	-	2	2	-	2	3	3

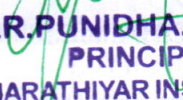

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CS8493 OPERATING SYSTEMS**COURSE OUTCOMES:**

C214.1	Explain the overall view of the computer system and operating system
C214.2	Identify various scheduling algorithm and deadlock prevention and avoidance algorithm
C214.3	Compare and contrast various memory management schemes and file system functionalities
C214.4	Discuss the performance of the various page replacement algorithms and interpret the file system implementation, sharing and protection mechanisms.
C214.5	Demonstrate administrative tasks on Linux servers and to be familiar with the basics of Mobile OS.
C214.6	Make use of various algorithms to solve computing problems

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C214.1	2	1	1	1	-	-	-	-	-	1	1	-	2	2
C214.2	2	1	1	1	-	-	-	-	-	1	1	-	2	2
C214.3	2	1	1	1	-	-	-	-	-	1	1	-	2	2
C214.4	2	1	1	1	-	-	-	-	-	1	1	-	2	2
C214.5	2	1	1	1	-	-	-	-	-	1	1	-	2	2
C214.6	2	1	1	1	-	-	-	-	-	1	1	-	2	2
C214	2	1	1	1	-	-	-	-	-	1	1	-	2	2


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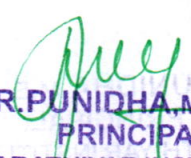
CS8494 SOFTWARE ENGINEERING

COURSE OUTCOMES:

C215.1	Identify the key activities in managing a software project and recognize different process model
C215.2	Explain the concepts of requirements engineering and Analysis Modeling.
C215.3	Outline the systematic procedures for software design and deployment.
C215.4	Compare various testing and maintenance methods
C215.5	Interpret the project schedule, estimate project cost and effort required.
C215.6	Develop a software using the software engineering principles

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C215.1	3	2	2	1	-	-	-	-	1	1	1	-	2	2
C215.2	3	2	2	1	-	-	-	-	1	1	1	-	2	2
C215.3	3	2	2	1	-	-	-	-	1	1	1	-	2	2
C215.4	3	2	2	1	-	-	-	-	1	1	1	-	2	2
C215.5	3	2	2	1	-	-	-	-	1	1	1	-	2	2
C215.6	3	2	2	1	-	-	-	-	1	1	1	-	2	2
C215	3	2	2	1	-	-	-	-	1	1	1	-	2	2


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CS8481


DATABASE MANAGEMENT SYSTEMS LABORATORY

COURSE OUTCOMES:

C216.1	Use typical data definitions and manipulation commands.
C216.2	Design applications to test Nested and Join Queries
C216.3	Implement simple applications that use Views
C216.4	Make use of ER modeling and normalization to design and implement database
C216.5	Implement applications that require a Front-end Tool
C216.6	Critically analyze the use of Tables, Views, Functions and Procedures

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C216.1	3	2	2	1	-	-	-	1	1	1	1	1	2	2
C216.2	3	2	2	1	-	-	-	1	1	1	1	1	2	2
C216.3	3	2	2	1	-	-	-	1	1	1	1	1	2	2
C216.4	3	2	2	1	-	-	-	1	1	1	1	1	2	2
C216.5	3	2	2	1	-	-	-	1	1	1	1	1	2	2
C216.6	3	2	2	1	-	-	-	1	1	1	1	1	2	2
C216	3	2	2	1	-	-	-	1	1	1	1	1	2	2



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CS8461 OPERATING SYSTEMS LABORATORY**COURSE OUTCOMES:**

C217.1	Illustrate the various CPU scheduling algorithms.
C217.2	Implement deadlock avoidance and detection algorithms.
C217.3	Implement semaphore concepts.
C217.4	Create processes and implement IPC.
C217.5	Analyze the performance of the various page replacement algorithms.
C217.6	Implement file organization and file allocation strategies.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C217.1	3	2	2	2	-	-	-	2	2	2	1	2	3	2
C217.2	3	2	2	2	-	-	-	2	2	2	1	2	3	2
C217.3	3	2	2	2	-	-	-	2	2	2	1	2	3	2
C217.4	3	2	2	2	-	-	-	2	2	2	1	2	3	2
C217.5	3	2	2	2	-	-	-	2	2	2	1	2	3	2
C217.6	3	2	2	2	-	-	-	2	2	2	1	2	3	2
C217	3	2	2	2	-	-	-	2	2	2	1	2	3	2


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HS8461

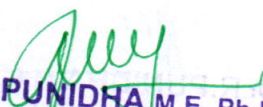
ADVANCED READING AND WRITING

COURSE OUTCOMES:

C218.1	Read and evaluate the text intelligently.
C218.2	Describe parts of speech and use appropriate connectives in writing a paragraph.
C218.3	To write effective job application letter.
C218.4	Implement speed reading techniques.
C218.5	Perform critical thinking in various professional contexts.
C218.6	To prepare descriptive and narrative writing.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C218.1	3	2	2	2	-	-	-	2	2	2	1	1	2	1
C218.2	3	2	2	2	-	-	-	2	2	2	1	1	2	1
C218.3	3	2	2	2	-	-	-	2	2	2	1	1	2	1
C218.4	3	2	2	2	-	-	-	2	2	2	1	1	2	1
C218.5	3	2	2	2	-	-	-	2	2	2	1	1	2	1
C218.6	3	2	2	2	-	-	-	2	2	2	1	1	2	1
C218	3	2	2	2	-	-	-	2	2	2	1	1	2	1


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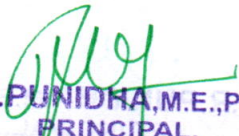
MA8551 ALGEBRA AND NUMBER THEORY

COURSE OUTCOMES:

C301.1	Summarize the notations and properties of algebraic structures such as groups, rings and fields.
C301.2	Explain the concepts of finite fields and polynomials to solve problems in advanced algebra.
C301.3	Associate the applications of divisibility theory and canonical decompositions.
C301.4	Describe the concept of Diophantine equations and congruences and exhibit the efficient use of advanced algebraic techniques in number theory.
C301.5	Extend the concepts of multiplicative functions and classical theorems.
C301.6	Associate the knowledge of integrated approach to Number theory and abstract algebra.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C301.1	2	1	1	1	-	-	-	-	-	1	1	-	1	1
C301.2	2	1	1	1	-	-	-	-	-	1	1	-	1	1
C301.3	2	1	1	1	-	-	-	-	-	1	1	-	1	1
C301.4	2	1	1	1	-	-	-	-	-	1	1	-	1	1
C301.5	2	1	1	1	-	-	-	-	-	1	1	-	1	1
C301.6	2	1	1	1	-	-	-	-	-	1	1	-	1	1
C301	2	1	1	1	-	-	-	-	-	1	1	-	1	1


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CS8591


COMPUTER NETWORKS

COURSE OUTCOMES:

C302.1	Identify various layers of network and discuss the functions of physical layer
C302.2	Discuss how data flows from one node to another node with regard to data link layer
C302.3	Explain the different services of network layer
C302.4	Compare the different transport layer protocols and their applicability based on user requirements
C302.5	Describe the working of various application layer protocols
C302.6	Evaluate the performance of network and analyze routing algorithms

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C302.1	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C302.2	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C302.3	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C302.4	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C302.5	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C302.6	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C302	2	1	1	1	-	-	-	-	1	1	1	-	2	1


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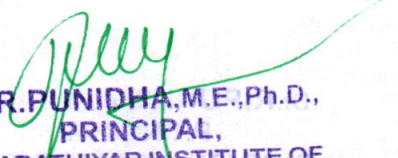
EC8691 MICROPROCESSORS AND MICROCONTROLLERS

COURSE OUTCOMES:

C303.1	Explain the architecture and instruction set of 8086 Microprocessor
C303.2	Demonstrate the programs on 8086 microprocessor.
C303.3	Illustrate the Bus structure and communication of microprocessor
C303.4	Illustrate the design aspects of I/O and memory interfacing circuits
C303.5	Explain the architecture of 8051 microcontroller.
C303.6	Discuss about the functions of various interfacing devices with Microcontroller

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C303.1	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C303.2	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C303.3	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C303.4	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C303.5	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C303.6	3	3	2	2	1	-	-	-	-	-	-	1	2	2
C303	3	3	2	2	1	-	-	-	-	-	-	1	2	2


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CS8501 THEORY OF COMPUTATION

COURSE OUTCOMES:

C304.1	Apply basic mathematical foundations and techniques for problem solving
C304.2	Explain the languages for problem definition and design Finite State Machine
C304.3	Apply grammars and design Pushdown Automata
C304.4	Apply normal forms and design Turing machine
C304.5	Derive whether a problem is decidable or not
C304.6	Analyze the complexity of the computational functions

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C304.1	3	2	2	1	-	-	-	-	-	1	1	-	2	1
C304.2	3	2	2	1	-	-	-	-	-	1	1	-	2	1
C304.3	3	2	2	1	-	-	-	-	-	1	1	-	2	1
C304.4	3	2	2	1	-	-	-	-	-	1	1	-	2	1
C304.5	3	2	2	1	-	-	-	-	-	1	1	-	2	1
C304.6	3	2	2	1	-	-	-	-	-	1	1	-	2	1
C304	3	2	2	1	-	-	-	-	-	1	1	-	2	1


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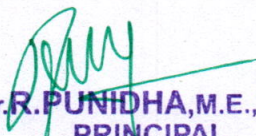
CS8592 OBJECT ORIENTED ANALYSIS AND DESIGN

COURSE OUTCOMES:

C305.1	Express the software design concepts with UML diagram.
C305.2	Construct the domain model and design model to various use case scenarios.
C305.3	Design software applications using object oriented concepts.
C305.4	Identify various scenarios based on software requirements.
C305.5	Transform UML based software design into pattern based design using design patterns.
C305.6	Explain the various testing methodologies for object oriented software.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C305.1	3	2	2	2	-	-	-	-	-	-	1	1	2	1
C305.2	3	2	2	2	-	-	-	-	-	-	1	1	2	1
C305.3	3	2	2	2	-	-	-	-	-	-	1	1	2	1
C305.4	3	2	2	2	-	-	-	-	-	-	1	1	2	1
C305.5	3	2	2	2	-	-	-	-	-	-	1	1	2	1
C305.6	3	2	2	2	-	-	-	-	-	-	1	1	2	1
C305	3	2	2	2	-	-	-	-	-	-	1	1	2	1


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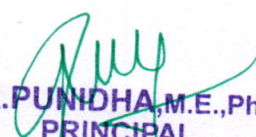
Subject Name: OMF551 (C306) / Product Design and Development

COURSE OUTCOMES:

C306.1	Describe the concepts of product development Processes and Organizations.
C306.2	Outline the principles of opportunity identification, creating, identifying, and screening ideas for new products.
C306.3	Explain the implications of product architecture on product change, product variety, component standardization, product performance, manufacturing cost, and project management.
C306.4	4Illustrate the techniques of industrial design of a product through prototyping technology
C306.5	Discuss various techniques used to reduce manufacturing cost and decrease the environmental impacts associated with products
C306.6	Explain the various design methodologies for advanced project methods

CO-PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C306.1	3	2	1	1	-	-	-	-	-	2	1	-	3	2
C306.2	3	2	1	1	-	-	-	-	-	2	1	-	3	2
C306.3	3	2	1	1	-	-	-	-	-	2	1	-	3	2
C306.4	3	2	1	1	-	-	-	-	-	2	1	-	3	2
C306.5	3	2	1	1	-	-	-	-	-	2	1	-	3	2
C306.6	3	2	1	1	-	-	-	-	-	2	1	-	3	2
C306	3	2	1	1	-	-	-	-	-	2	1	-	3	2


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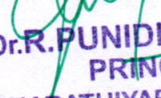
EC8681 MICROPROCESSORS AND MICROCONTROLLERS LABORATORY

COURSE OUTCOMES:

C307.1	Develop ALP for fixed and Floating Point and Arithmetic operations using 8086 microprocessor.
C307.2	Make use of different I/O interfacing with 8086 microprocessor.
C307.3	Implement different waveforms using 8086 microprocessor.
C307.4	Design serial and parallel interfacing of 8086 microprocessor
C307.5	Develop assembly language programs for various applications using 8051 microcontroller.
C307.6	Simulate and implementation of basic arithmetic and logical operations using MASM.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C307.1	3	2	2	1	-	-	-	2	1	2	1	2	2	2
C307.2	3	2	2	1	-	-	-	2	1	2	1	2	2	2
C307.3	3	2	2	1	-	-	-	2	1	2	1	2	2	2
C307.4	3	2	2	1	-	-	-	2	1	2	1	2	2	2
C307.5	3	2	2	1	-	-	-	2	1	2	1	2	2	2
C307.6	3	2	2	1	-	-	-	2	1	2	1	2	2	2
C307	3	2	2	1	-	-	-	2	1	2	1	2	2	2


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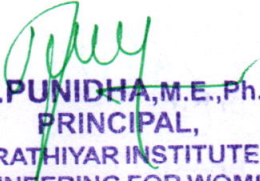
CS8582 OBJECT ORIENTED ANALYSIS AND DESIGN LABORATORY

COURSE OUTCOMES:

C308.1	Make use of object oriented and design concepts to solve a given problem specifications
C308.2	Identify and map basic software requirements in UML mapping.
C308.3	Apply design patterns to improve the software quality
C308.4	Test the compliance of the software with SRS
C308.5	Map the object oriented design to the developed code
C308.6	Apply object oriented design to develop a software

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C308.1	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C308.2	2	2	2	1	-	-	-	1	1	1	1	1	2	1
C308.3	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C308.4	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C308.5	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C308.6	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C308	3	2	2	1	-	-	-	1	1	1	1	1	2	1


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CS8581 NETWORKS LABORATORY

COURSE OUTCOMES:

C309.1	Implement various protocols using TCP and UDP
C309.2	Compare the performance of different transport layer protocols
C309.3	Use simulation tools to analyze the performance of various network protocols
C309.4	Analyze various routing algorithms
C309.5	Implement error correction codes
C309.6	Explain Network simulator (NS) and Simulate Congestion Control Algorithms using NS

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C309.1	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C309.2	2	2	2	1	-	-	-	1	1	1	1	1	2	1
C309.3	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C309.4	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C309.5	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C309.6	3	2	2	1	-	-	-	1	1	1	1	1	2	1
C309	3	2	2	1	-	-	-	1	1	1	1	1	2	1


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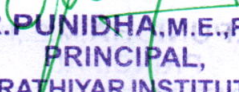
CS8651 INTERNET PROGRAMMING

COURSE OUTCOMES:

C310.1	Demonstrate simple website using HTML and CSS.
C310.2	Build dynamic web pages with validation using Java Script objects and apply different event handling mechanisms.
C310.3	Illustrate server side programs using Servlet and JSP.
C310.4	Demonstrate simple web pages in PHP and to represent data in XML format.
C310.5	Illustrate AJAX and web services to develop interactive web applications.
C310.6	Develop interactive web applications for real world problems.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C310.1	3	3	2	1	-	-	-	-	-	-	1	1	2	1
C310.2	3	3	2	1	-	-	-	-	-	-	1	1	2	1
C310.3	3	3	2	1	-	-	-	-	-	-	1	1	2	1
C310.4	3	3	2	1	-	-	-	-	-	-	1	1	2	1
C310.5	3	3	2	1	-	-	-	-	-	-	1	1	2	1
C310.6	3	3	2	1	-	-	-	-	-	-	1	1	2	1
C310	3	3	2	1	-	-	-	-	-	-	1	1	2	1


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CS8691 ARTIFICIAL INTELLIGENCE

COURSE OUTCOMES:

C311.1	List the characteristics and types of intelligent agents
C311.2	Interpret search algorithms for any AI problem
C311.3	Illustrate a problem using first order and predicate logic
C311.4	Explain the appropriate agent strategy to solve a given problem
C311.5	Develop software agents to solve a problem
C311.6	Demonstrate applications for NLP that use Artificial Intelligence

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C311.1	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C311.2	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C311.3	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C311.4	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C311.5	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C311.6	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C311	2	1	1	1	1	-	-	-	-	1	1	1	2	1


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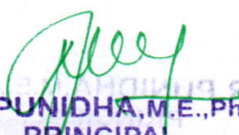
CS8601 MOBILE COMPUTING

COURSE OUTCOMES:

C312.1	Describe the basic concepts of mobile computing
C312.2	Explain the basics of mobile telecommunication systems
C312.3	Illustrate the generations of telecommunication systems in wireless networks
C312.4	Demonstrate the functionality of MAC, network layer and Identify a routing protocol for a given Ad hoc network
C312.5	Explain the functionality of Transport and Application layers
C312.6	Develop a mobile application using android/blackberry/ios/Windows SDK

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C312.1	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C312.2	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C312.3	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C312.4	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C312.5	2	1	1	1	1	-	-	-	-	1	1	1	2	1
C312.6	2	1	1	1	1		-	-	-	1	1	1	2	1
C312.1	2	1	1	1	1		-	-	-	1	1	1	2	1


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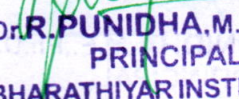
CS8602 COMPILER DESIGN

COURSE OUTCOMES:

C313.1	Illustrate a lexical analyzer for a sample language.
C313.2	Explain different parsing algorithms to develop the parsers for a given grammar.
C313.3	Describe syntax-directed translation and run-time environment.
C313.4	Explain intermediate code generation and run-time environment
C313.5	Apply code optimization techniques for programming construct
C313.6	Develop a scanner and a parser using LEX and YACC tools.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C313.1	3	2	2	1	1	-	-	-	1	1	1	-	3	2
C313.2	3	2	2	1	1	-	-	-	1	1	1	-	3	2
C313.3	3	2	2	1	1	-	-	-	1	1	1	-	3	2
C313.4	3	2	2	1	1	-	-	-	1	1	1	-	3	2
C313.5	3	2	2	1	1	-	-	-	1	1	1	-	3	2
C313.6	3	2	2	1	1	-	-	-	1	1	1	-	3	2
C313	3	2	2	1	1	-	-	-	1	1	1	-	3	2


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CS8603


DISTRIBUTED SYSTEMS

COURSE OUTCOMES:

C314.1	Elucidate the foundations and issues of distributed systems
C314.2	Explain the various synchronization issues and global state for distributed systems.
C314.3	Describe the Mutual Exclusion and Deadlock detection algorithms in distributed systems
C314.4	Describe the agreement protocols and fault tolerance mechanisms in distributed systems.
C314.5	Describe the features of peer-to-peer and distributed shared memory systems
C314.6	Describe Shared memory Mutual Exclusion

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C314.1	3	3	2	1	-	-	-	-	1	1	1	-	2	1
C314.2	3	3	2	1	-	-	-	-	1	1	1	-	2	1
C314.3	3	3	2	1	-	-	-	-	1	1	1	-	2	1
C314.4	3	3	2	1	-	-	-	-	1	1	1	-	2	1
C314.5	3	3	2	1	-	-	-	-	1	1	1	-	2	1
C314.6	3	3	2	1	-	-	-	-	1	1	1	-	2	1
C314	3	3	2	1	-	-	-	-	1	1	1	-	2	1


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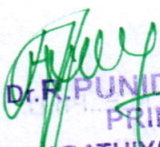
SOFTWARE TESTING

COURSE OUTCOMES:

C315.1	Design test cases suitable for a software development for different domains.
C315.2	Develop and validate a test plan.
C315.3	Prepare test planning based on the document
C315.4	Document test plans and test cases designed.
C315.5	Use automatic testing tools
C315.6	Develop and validate a test plan.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C315.1	3	2	2	1	1	-	-	1	-	-	1	1	3	2
C315.2	3	2	2	1	1	-	-	1	-	-	1	1	3	2
C315.3	3	2	2	1	1	-	-	1	-	-	1	1	3	2
C315.4	3	2	2	1	1	-	-	1	-	-	1	1	3	2
C315.5	3	2	2	1	1	-	-	1	-	-	1	1	3	2
C315.6	3	2	2	1	1	-	-	1	-	-	1	1	3	2
C315	3	2	2	1	1	-	-	1	-	-	1	1	3	2


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CS8661

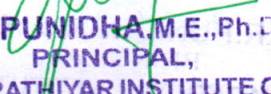
INTERNET PROGRAMMING LAB

COURSE OUTCOMES:

C316.1	Construct Web pages using HTML/XML and style sheets.
C316.2	Build dynamic web pages with validation using Java Script objects and by applying different event handling mechanisms.
C316.3	Develop dynamic web pages using server side scripting.
C316.4	Use PHP programming to develop web applications.
C316.5	Construct web applications using AJAX and web services.
C316.6	Develop server and web services to develop interactive web applications

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C316.1	3	3	3	-	-	-	-	2	2	2	2	1	2	1
C316.2	3	3	3	-	-	-	-	2	2	2	2	1	2	1
C316.3	3	3	3	-	-	-	-	2	2	2	2	1	2	1
C316.4	3	3	3	-	-	-	-	2	2	2	2	1	2	1
C316.5	3	3	3	-	-	-	-	2	2	2	2	1	2	1
C316.6	3	3	3	-	-	-	-	2	2	2	2	1	2	1
C316	3	3	3	-	-	-	-	2	2	2	2	1	2	1



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CS8662 MOBILE APPLICATION DEVELOPMENT LAB**COURSE OUTCOMES:**

C317.1	Illustrate mobile applications using GUI and Layouts.
C317.2	Demonstrate mobile applications using Event Listener.
C317.3	Experiment with mobile applications using Databases.
C317.4	Make use of mobile applications using RSS Feed, Internal/External Storage, SMS, Multithreading and GPS.
C317.5	Build own mobile app for simple needs.
C317.6	Model various mobile applications using different application development frameworks.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C317.1	3	2	2	2	-	-	-	2	2	1	1	1	2	2
C317.2	3	2	2	2	-	-	-	2	2	1	1	1	2	2
C317.3	3	2	2	2	-	-	-	2	2	1	1	1	2	2
C317.4	3	2	2	2	-	-	-	2	2	1	1	1	2	2
C317.5	3	2	2	2	-	-	-	2	2	1	1	1	2	2
C317.6	3	2	2	2	-	-	-	2	2	1	1	1	2	2
C317	3	2	2	2	-	-	-	2	2	1	1	1	2	2


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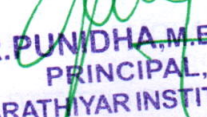
CS8661 MINI PROJECT

COURSE OUTCOMES:

C318.1	Choose problems with technical importance and societal contribution
C318.2	Identify and survey the relevant literature for getting exposed to related solutions
C318.3	Build project plans with feasible requirements
C318.4	Analyse, design and develop adaptable and reusable solutions
C318.5	Implement and test solutions to trace against the user requirements
C318.6	Deploy the solutions for better manageability and provide scope for improvability

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C318.1	3	2	2	1	2	2	2	2	1	1	1	1	2	2
C318.2	3	2	2	1	2	2	2	2	1	1	1	1	2	2
C318.3	3	2	2	1	2	2	2	2	1	1	1	1	2	2
C318.4	3	2	2	1	2	2	2	2	1	1	1	1	2	2
C318.5	3	2	2	1	2	2	2	2	1	1	1	1	2	2
C318.6	3	2	2	1	2	2	2	2	1	1	1	1	2	2
C318	3	2	2	1	2	2	2	2	1	1	1	1	2	2


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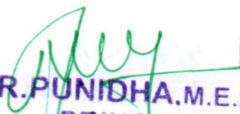
HS8581 PROFESSIONAL COMMUNICATION

COURSE OUTCOMES:

C319.1	To classify the content material and make effective presentations
C319.2	Employ adequate soft skills to successfully execute the job on hand.
C319.3	To respond favorably to the values of others opinion and manage difficult situations in group discussions wisely.
C319.4	To execute various skills in grooming for any profession.
C319.5	To display the body language in a very pleasant manner and react to even tough situations with ease.
C319.6	To perform intelligently during job interviews and be successful.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C319.1	2	2	2	2	-	-	-	1	2	2	1	1	2	1
C319.2	2	2	2	2	-	-	-	1	2	2	1	1	2	1
C319.3	2	2	2	2	-	-	-	1	2	2	1	1	2	1
C319.4	2	2	2	2	-	-	-	1	2	2	1	1	2	1
C319.5	2	2	2	2	-	-	-	1	2	2	1	1	2	1
C319.6	2	2	2	2	-	-	-	1	2	2	1	1	2	1
C319	2	2	2	2	-	-	-	1	2	2	1	1	2	1


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SEMESTER –VII


MG8591 PRINCIPLES OF MANAGEMENT

COURSE OUTCOMES:

C401.1	Discuss the evolution of management thoughts and the challenges of managerial activities in a global business environment.
C401.2	Explain the types of Planning and Decision making methodologies in Organizations..
C401.3	Summarize various types of Organization structure and associated Human Resources activities for man-power utilization.
C401.4	Explain about motivation theories, behavior, leadership theories and communication for effective directing.
C401.5	Explain various Controlling techniques to maintain standards in Organizations.
C401.6	Associate managerial functions and knowledge on international aspect for Organizational growth

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C401.1	2	2	2	1	-	-	-	2	2	2	1	1	2	1
C401.2	2	2	2	1	-	-	-	2	2	2	1	1	2	1
C401.3	2	2	2	1	-	-	-	2	2	2	1	1	2	1
C401.4	2	2	2	1	-	-	-	2	2	2	1	1	2	1
C401.5	2	2	2	1	-	-	-	2	2	2	1	1	2	1
C401.6	2	2	2	1	-	-	-	2	2	2	1	1	2	1
C401	2	2	2	1	-	-	-	2	2	2	1	1	2	1


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CS8792 CRYPTOGRAPHY AND NETWORK SECURITY

COURSE OUTCOMES:

C402.1	Describe the fundamentals of networks security, security architecture, threats and vulnerabilities
C402.2	Discuss the mathematical support for both symmetric and asymmetric key cryptography
C402.3	Make use of symmetric key cryptographic algorithms to perform cryptographic operations
C402.4	Solve cryptographic operations using public key cryptographic algorithms
C402.5	Apply the various Authentication schemes to simulate different applications.
C402.6	Explain various Security practices and System security standards

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C402.1	3	2	1	1	1	2	1	2	-	-	1	1	3	2
C402.2	3	2	1	1	1	2	1	2	-	-	1	1	3	2
C402.3	3	2	1	1	1	2	1	2	-	-	1	1	3	2
C402.4	3	2	1	1	1	2	1	2	-	-	1	1	3	2
C402.5	3	2	1	1	1	2	1	2	-	-	1	1	3	2
C402.6	3	2	1	1	1	2	1	2	-	-	1	1	3	2
C402	3	2	1	1	1	2	1	2	-	-	1	1	3	2


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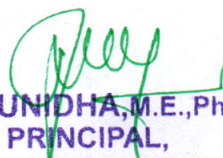
CS8791 CLOUD COMPUTING

COURSE OUTCOMES:

C403.1	Articulate the main concepts, key technologies, strengths and limitations of cloud computing.
C403.2	Explain the key and enabling technologies that help in the development of cloud.
C403.3	Make use of NIST cloud computing architecture to solve architecture design challenges
C403.4	Explain the core issues of cloud computing such as resource management and security.
C403.5	Install and use current cloud technologies.
C403.6	Illustrate and choose the appropriate technologies, algorithms and approaches for implementation and use of cloud.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C403.1	3	2	2	1	1	-	-	-	1	1	1	-	2	2
C403.2	3	2	2	1	1	-	-	-	1	1	1	-	2	2
C403.3	3	2	2	1	1	-	-	-	1	1	1	-	2	2
C403.4	3	2	2	1	1	-	-	-	1	1	1	-	2	2
C403.5	3	2	2	1	1	-	-	-	1	1	1	-	2	2
C403.6	3	2	2	1	1	-	-	-	1	1	1	-	2	2
C403	3	2	2	1	1	-	-	-	1	1	1	-	2	2


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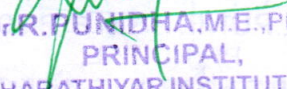
DISASTER MANAGEMENT

COURSE OUTCOMES:

C404.1	Differentiate the types of disasters, causes and their impact on environment and society
C404.2	Assess vulnerability and various methods of risk reduction measures as well as mitigation.
C404.3	Draw the hazard and vulnerability profile of India, Scenarios in the Indian context.
C404.4	Know the Disaster damage assessment and management.
C404.5	Awareness of institutional processes in the country and to develop rudimentary ability to respond to their surroundings with potential disaster response in areas where they live.
C404.6	Complete preparedness, response and recovery in order to reduce the impact of disasters.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C404.1	3	3	2	2	-	-	2	2	2	2	1	-	2	1
C404.2	3	3	2	2	-	-	2	2	2	2	1	-	2	1
C404.3	3	3	2	2	-	-	2	2	2	2	1	-	2	1
C404.4	3	3	2	2	-	-	2	2	2	2	1	-	2	1
C404.5	3	3	2	2	-	-	2	2	2	2	1	-	2	1
C404.6	3	3	2	2	-	-	2	2	2	2	1	-	2	1
C404	3	3	2	2	-	-	2	2	2	2	1	-	2	1

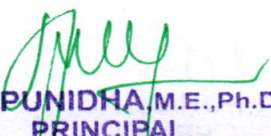

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IT8073 SERVICE ORIENTED ARCHITECTURE**COURSE OUTCOMES:**

C405.1	Express the fundamental concepts of XML technologies
C405.2	Identify the characteristics and benefits of SOA
C405.3	Discuss the service descriptions of web service and its standards
C405.4	Make use of web service extensions to develop solutions
C405.5	Explain the SOA delivery strategies with regard to service oriented analysis and design
C405.6	Case study

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C405.1	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C405.2	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C405.3	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C405.4	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C405.5	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C405.6	2	1	1	1	-	-	-	-	1	1	1	-	2	1
C405	2	1	1	1	-	-	-	-	1	1	1	-	2	1


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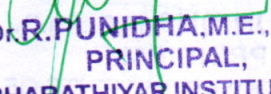
MEDICAL ELECTRONICS

COURSE OUTCOMES:

C406.1	Know the human body electro- physiological parameters and recording of bio-potentials
C406.2	Comprehend the non-electrical physiological parameters and their measurement body temperature, blood pressure, pulse, blood cell count, blood flow meter
C406.3	Interpret the various assist devices used in the hospitals viz. pacemakers, defibrillators, dialyzers and ventilators
C406.4	Comprehend physical medicine methods of ultrasonic, shortwave, microwave surgical diathermies , and bio-telemetry principles and methods
C406.5	Discuss about the recent trends in medical instrumentation
C406.6	Explain the applications of medical instrumentation

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C406.1	3	2	2	1	-	-	-	2	2	1	1	1	2	1
C406.2	3	2	2	1	-	-	-	2	2	1	1	1	2	1
C406.3	3	2	2	1	-	-	-	2	2	1	1	1	2	1
C406.4	3	2	2	1	-	-	-	2	2	1	1	1	2	1
C406.5	3	2	2	1	-	-	-	2	2	1	1	1	2	1
C406.6	3	2	2	1	-	-	-	2	2	1	1	1	2	1
C406.1	3	2	2	1	-	-	-	2	2	1	1	1	2	1


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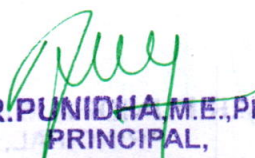
CS8711 CLOUD COMPUTING LABORATORY

COURSE OUTCOMES:

C407.1	Configure various virtualization tools such as Virtual Box, VMware workstation.
C407.2	Design and deploy a web application in a PaaS environment link layer
C407.3	Learn how to simulate a cloud environment to implement new schedulers
C407.4	Demonstrate generic cloud environment that can be used as a private cloud
C407.5	Manipulate large data sets in a parallel environment.
C407.6	Apply Hadoop single node cluster and run simple applications

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C407.1	2	1	1	1	-	-	-	1	1	1	1	1	2	2
C407.2	2	1	1	1	-	-	-	1	1	1	1	1	2	2
C407.3	2	1	1	1	-	-	-	1	1	1	1	1	2	2
C407.4	2	1	1	1	-	-	-	1	1	1	1	1	2	2
C407.5	2	1	1	1	-	-	-	1	1	1	1	1	2	2
C407.6	2	1	1	1	-	-	-	1	1	1	1	1	2	2
C407	2	1	1	1	-	-	-	1	1	1	1	1	2	2


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IT8761 SECURITY LABORATORY

COURSE OUTCOMES:

C408.1	Develop code for classical Encryption Techniques to solve the problems.
C408.2	Build cryptosystems by applying symmetric and public key encryption algorithms.
C408.3	Construct code for authentication algorithms.
C408.4	Develop a signature scheme using Digital signature standard.
C408.5	Demonstrate the network security system using open source tools
C408.6	Develop code for classical Encryption Techniques to solve the problems.

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C408.1	3	2	2	-	1	-	-	2	2	2	2	2	2	1
C408.2	3	2	2	-	1	-	-	2	2	2	2	2	2	1
C408.3	3	2	2	-	1	-	-	2	2	2	2	2	2	1
C408.4	3	2	2	-	1	-	-	2	2	2	2	2	2	1
C408.5	3	2	2	-	1	-	-	2	2	2	2	2	2	1
C408.6	3	2	2	-	1	-	-	2	2	2	2	2	2	1
C408	3	2	2	-	1	-	-	2	2	2	2	2	2	1


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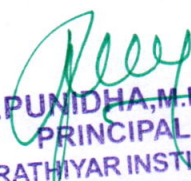
CS8080 INFORMATION RETRIEVAL TECHNIQUES

COURSE OUTCOMES:

C409.1	Interpret open source search engine framework and explore its capabilities
C409.2	Apply appropriate method of classification or clustering.
C409.3	Design and implement innovative features in a search engine.
C409.4	Design and implement a recommender system.
C409.5	Demonstrate an open source search engine framework and explore its capabilities
C409.6	Demonstrate the entire process flow of a search engine

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C409.1	3	2	1	1	-	-	-	-	1	1	1	1	2	1
C409.2	3	2	1	1	-	-	-	-	1	1	1	1	2	1
C409.3	3	2	1	1	-	-	-	-	1	1	1	1	2	1
C409.4	3	2	1	1	-	-	-	-	1	1	1	1	2	1
C409.5	3	2	1	1	-	-	-	-	1	1	1	1	2	1
C409.6	3	2	1	1	-	-	-	-	1	1	1	1	2	1
C410	3	2	1	1	-	-	-	-	1	1	1	1	2	1


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SUB CODE / SUBJECT NAME: EC8093/DIGITAL IMAGE PROCESSING

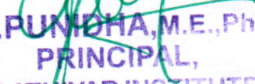
YEAR / SEM: IV/VIII

COURSE OUTCOMES:

After the course, the students should be able to

COURSE CODE	COURSE OUTCOMES
C410.1	Review the fundamental concepts of a digital image processing system
C410.2	Analyze images in the frequency domain using various transforms .
C410.3	Evaluate the techniques for image enhancement and image restoration .
C410.4	Categorize various compression techniques .
C410.5	Interpret Image compression standards
C410.6	Interpret image segmentation and representation techniques.

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C410.1	3	2	1	-	-	2	2	1	-	-	-	-	2	2
C410.2	3	2	1	-	-	2	2	1	-	-	-	-	2	2
C410.3	3	2	1	-	-	2	2	1	-	-	-	-	2	2
C410.4	3	2	1	-	-	2	2	1	-	-	-	-	2	2
C410.5	3	2	1	-	-	2	2	1	-	-	-	-	2	2
C410.6	3	2	1	-	-	2	2	1	-	-	-	-	2	2
C410	3	2	1	-	-	2	2	1	-	-	-	-	2	2


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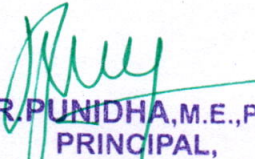
CS8811 PROJECT WORK

COURSE OUTCOMES:

C411.1	Identify technically and economically feasible problems of social relevance
C411.2	Plan and build the project team with assigned responsibilities
C411.3	Identify and survey the relevant literature for getting exposed to related solutions
C411.4	Analyse, design and develop adaptable and reusable solutions of minimal complexity by using modern tools
C411.5	Implement and test solutions to trace against the user requirements
C411.6	Deploy and support the solutions for better manageability of the solutions and provide scope for improvability

CO – PO MAPPING:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C411.1	3	2	2	2	2	2	2	2	2	2	1	1	2	2
C411.2	3	2	2	2	2	2	2	2	2	2	1	1	2	2
C411.3	3	2	2	2	2	2	2	2	2	2	1	1	2	2
C411.4	3	2	2	2	2	2	2	2	2	2	1	1	2	2
C411.5	3	2	2	2	2	2	2	2	2	2	1	1	2	2
C411.6	3	2	2	2	2	2	2	2	2	2	1	1	2	2
C411	3	2	2	2	2	2	2	2	2	2	1	1	2	2


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