

Bhavan's Vivekananda College
of Science, Humanities and Commerce
(Sainikpuri, Secunderbad, Telangana – 500094)
Autonomous College – Affiliated to Osmania University
Accredited with 'A' Grade by NAAC

B.Sc. (MECs)

Program Outcomes

PO1 Knowledge: Acquire the knowledge with facts and figures related to Mathematics, Physics, Electronics, Computer Science and Statistics and understand the basic concepts, fundamental principles and scientific theories related to various scientific phenomena and their relevance in day-to-day life.

PO2 Skills: Acquire the skills in handling scientific instruments & skills of observation and drawing logical inference from scientific experiments.

PO3 Modern Tool Usage: Apply appropriate techniques, skills, modern tools and IT tools to practice.

PO4 Creativity & Analysis: Think creatively to propose novel ideas in explaining the evidence of data and provide new solutions to the problems and analyse the given scientific data systematically and have the ability to draw conclusion.

PO5 Communication: Communicate effectively on problems, issues and solutions with community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO6 Ethics & Environment: Apply ethical principles and commit to professional ethics and responsibilities and norms in research and the functional areas, understand the issues of environmental context and sustainable development.

PO7 Individual and Team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO8 Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context of socio, economic and technological changes.

Program Specific Outcomes

PSO1: Understand the basic concepts, develop problem solving skills, improve logical thinking and develop systematic approach to tackling situations

PSO2: Design, develop electronic systems, model them using simulators and test them for practical applications.

PSO3: Understand and analyse integrated frame work environment and to develop real time applications

Course Outcomes

Mathematics:

Name of the Course	DIFFERENTIAL EQUATIONS AND GROUP THEORY
Course Code	MT121
CO1	Solve differential equations of first order & first degree.
CO2	Apply concepts of differentiation to calculate problems on Total differential equations, Simultaneous Total differential equations and differential equations of first order but not first degree.
CO3	Determine various concepts in Group theory
CO4	Prove the concepts of Group theory

Name of the Course	DIFFERENTIAL EQUATIONS AND DIFFERENTIAL CALCULUS
Course Code	MT221
CO1	Use analytical methods to find solutions higher order linear differential equations
CO2	Find solutions of non-homogenous higher order linear differential equations.
CO3	Analyze and interpret concepts of differentiation, continuity and derivability.

Name of the Course	RING THEORY&PARTIAL DIFFERENTIAL EQUATIONS
Course Code	MT321
CO1	Determine various concepts in Ring theory.
CO2	Prove the concepts of Ring theory.
CO3	Solve linear and nonlinear partial differential equations of first order.
CO4	Solve homogeneous and non-homogeneous linear partial differential equations.

Name of the Course	Theory of Equations
Course Code	SEC321
CO1	By using the concepts learnt the students are expected to solve some of the polynomial equation

Name of the Course	REAL ANALYSIS
Course Code	MT421
CO1	Determine various concepts in Sequences, Series, Sequences functions, Series of functions and Integration.
CO2	Determine various properties of Sequences, Series, Sequences functions, Series of functions and Integration.
CO3	Prove the concepts of Sequences, Series, Sequences functions, Series of functions and Integration.
CO4	Apply various tests for the convergence of Sequences, Series, Sequences functions, Series of functions and Integrability of functions.

Name of the Course	SEC LOGIC AND SETS
Course Code	SEC421
CO1	After the completion of the course students appreciate its importance in the development of computer science

Name of the Course	LINEAR ALGEBRA
Course Code	MT521
CO1	After completion of this course students appreciate its interdisciplinary nature. Learn the concepts of basis and dimension of vector space, express vector spaces in different dimensions, base concept of a vector space and properties of vectors on the base.
CO2	Find row and column space of a matrix, learn some functions defined between vector spaces, learn required conditions for a transformation in order to be a linear transformation, find kernel of a linear transformation, learn the algebraic operations between linear transformations, matrix representation of a linear transformation.
CO3	Learn how to calculate eigenvalues and eigenvectors of a linear transformation, concepts of eigenvalues and eigenvectors of a matrix.
CO4	Students learn Concepts of inner product on vector spaces, find the length of a vector in some vector spaces and the angle between two vectors, explain that two vectors are orthogonal, express that a set is orthogonal and orthonormal.

Name of the Course	VECTOR CALCULUS
Course Code	MT521A
CO1	Students realize the way Vector Calculus is used to address some of the problems of Physics. After learning this course students will learn to define concepts of point and vector and also learn to apply differences and similarities in many fields of Science.
CO2	Apply dot and cross product to determine angles between vectors, orientation of axes, areas of triangles and parallelograms in space, scalar and vector projections
CO3	Calculate directional derivatives and gradients, and learn concept of a conservative vector field, state and apply theorems that give necessary and sufficient conditions for when a vector field is conservative, definitions of curl and divergence of vector field and describe application Green's Theorem, Gauss Theorem and Stokes' Theorem and compute them.
CO4	Learn applications of these theorems in Physics and Engineering.

Name of the Course	SEC NUMBER THEORY
Course Code	SEC521
CO1	Students shall be able to understand and analyze the properties of numbers in a broader prospect

Name of the Course	GE MATHEMATICAL APTITUDE -I
Course Code	GE521
CO1	Students will be benefitted by these concepts to crack competitive examinations

Name of the Course	NUMERICAL ANALYSIS
Course Code	MT621
CO1	After learning the course students realize the importance of the subject in solving some problems of algebra and calculus, understand the theoretical and practical aspects of the use of numerical analysis. Students will be equipped with the knowledge of finding the roots of algebraic and transcendental equations.
CO2	Students will be equipped with the knowledge of calculating the interpolation, extrapolation values without actually finding the function will learn to and evaluate a derivative at a value using an appropriate numerical method. Proficient in implementing numerical methods for a variety of multidisciplinary applications. Establish the limitations, advantages and disadvantages of numerical analysis.
CO3	Derive numerical methods for interpolation, differentiation, integration and also solve linear equations.

CO4	Understand common numerical analysis and how they are used to obtain approximate solutions.
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Name of the Course	SOLID GEOMETRY
Course Code	MT621A
CO1	After completion of this course students will be able to understand the beautiful interplay between Algebra and Solid Geometry.
CO2	Students will be able to analyze and differentiate the differences in recognizing few types of conics.
CO3	Students will become familiar with different concepts in Analytical Geometry and will be able to solve different properties of various conics.

Name of the Course	SEC GRAPH THEORY
Course Code	SEC621
CO1	Students can use the concepts of graphs and their properties various fields of Science.

Name of the Course	GE MATHEMATICAL APTITUDE -II
Course Code	GE621
CO1	Students will be benefitted by these concepts to crack competitive examinations

Electronics:

Name of the Course	Circuit Analysis
Course Code	EL124
CO1	Apply the knowledge of basic circuit laws and simplify the network using reduction techniques
CO2	Analyse the circuit using Kirchhoff's laws and network theorems
CO3	Infer and Evaluate transient response and study state response of RC and RL circuits
CO4	Analyse the frequency response of circuits containing RC, RL and RLC

Name of the Course	Semiconductor Devices
Course Code	EL224
CO1	Study and analyse the behaviour of semiconductor devices
CO2	Differentiate the behaviour of BJT in CB, CE and CC configurations
CO3	Bias BJT for application in amplifier circuits
CO4	Use Zener diode, BJT, FET, UJT and SCR in simple application
CO5	Simulate PN junction Diode, Zener Diode, BJT and JFET to study their characteristics using appropriate software

Name of the Course		Analog Circuits-Course Code
Course Code		EL324
CO1	Design a dc regulated power supply	
CO2	Develop the ability to understand working of the BJT and FET	
CO3	Design amplifiers using BJT and study frequency responses	
CO4	Observe the effect of positive feedback and design different oscillators using BJTS.	
CO5	Develop the skill to build and troubleshoot analog circuits.	

Name of the Course		BASIC INSTRUMENTATION SKILLS
Course Code		SE324
CO1	Having completed this course, student should be familiar to basic mechanical and electrical instruments	

Name of the Course		Operational amplifiers and Communications
Course Code		EL424
CO1	Understand basic differential amplifier and applications in linear Integrated circuits	
CO2	Learn basic function of operational amplifier, ideal and practical characteristics and their mathematical application	
CO3	Understand basic construction of active filters, comparators and their application in electronics	
CO4	Understand different types of multivibrator and wave form generator using IC 555.	
CO5	Be familiar with the fundamental concepts of analog communications, working of transmitter and receiver.	

Name of the Course		RENEWABLE ENERGY AND ENERGY HARVESTING
Course Code		SE424
CO1	Having completed this course, student should understand necessity of alternate energy sources and conservation of conventional energy.	

Name of the Course		Digital Electronics
Course Code		EL524
CO1	To use the structure of various number systems for the application in digital design	
CO2	To have the ability to analyse and design various combinational circuits.	
CO3	To have the ability to understand and design various sequential circuits	
CO4	To develop skill to build, and troubleshoot digital circuits	

Name of the Course	8085 Microprocessor
Course Code	EL524A
CO1	Learn how the computer hardware has evolved to meet the needs of processing systems
CO2	Define terms applicable to microprocessors, write programs using Assembly language
CO3	Understand the architecture and operation of Programmable Interface Devices and realize the programming & interfacing of it with 8085 microprocessor.
CO4	can work with microprocessor based equipment and be capable of participating in product development efforts, including support and development of assembly language code

Name of the Course	Consumer Electronics
Course Code	SE524
CO1	On completion of this course student will acquire knowledge on components and working principle of electronic devices used in day to day life.

Name of the Course	8051 Microcontroller
Course Code	EL624
CO1	Define terms applicable to Microcontrollers
CO2	Write Programs using Assembly language
CO3	Apply knowledge and demonstrate programming proficiency using the various addressing modes and data transfer instructions of the target microcontroller.
CO4	Evaluate assembly language programs and download the machine code that will provide solutions to real world control problems

Name of the Course	Digital System Design with VHDL
Course Code	EL624A
CO1	To learn the syntax and behaviour of VHDL language
CO2	To use development tools to design digital circuits
CO3	To simulate and debug digital systems described in VHDL
CO4	To synthesize simple digital circuits in CPLD/FPGA

Name of the Course	Digital System Design with VHDL
Course Code	EL 624A
CO1	To learn the syntax and behaviour of VHDL language
CO2	To use development tools to design digital circuits
CO3	To simulate and debug digital systems described in VHDL
CO4	To synthesize simple digital circuits in CPLD/FPGA

Name of the Course	MULTISIM
Course Code	SE624
CO1	Students will learn the usage of virtual components and instruments to make simulated measurements. They will become proficient in designing and testing any Digital and Analog circuits.

Computer Science:

Name of the Course	Programming in 'C'
Course Code	CS125
CO1	Write basic programs on their own using C.
CO2	Get equipped to use control statements, decision making and looping statements.
CO3	Use the concepts of arrays, strings and functions
CO4	Use the concepts of structure, unions, pointers and pre-processors

Name of the Course	Programming in 'C' Lab
Course Code	CS125P
CO1	Developing logic skills using control and looping statements
CO2	'C' concepts implemented with a practical approach(arrays,strings,functions,structure,union,pointers,pre processors)

Name of the Course	Programming in 'C++'
Course Code	CS225
CO1	Write basic C++ programs on their own
CO2	Get equipped to use the functions and object oriented programming concepts
CO3	Use the concepts of inheritance and polymorphism
CO4	Use the concepts of templates and exception handling

Name of the Course	Programming in 'C++' Lab
Course Code	CS225P
CO1	Developing real time applications using OOP's concepts
CO2	Practical approach is implemented using Inheritance and Polymorphism

Name of the Course	Data Structures
Course Code	CS325
CO1	Able to write different searching and sorting technique programs
CO2	Able to write programs on stacks, queues, deques, priority queues
CO3	Able to write programs on linked list, doubly linked list
CO4	Able to write programs on Binary Search Tree operations and Tree Traversal techniques

Name of the Course	Data Structures Using C++ Lab
Course Code	CS325P
CO1	Able to write programs for different searching, sorting, stacks, queues, dequeues and priority queues.
CO2	Able to write programs on linked list, doubly linked list and Binary Search Tree operations.

Name of the Course	PC Maintenance
Course Code	SE325A
CO1	Students will acquire knowledge about motherboard components & hardware components of the PC and the basic technologies used in networks
CO2	Perform basic assembling and disassembling of the computer and troubleshooting, upgrade of computer operating systems and troubleshoot using system tools and diagnostic software.

Name of the Course	Database Management Systems
Course Code	CS425
CO1	Acquire knowledge on database concepts.
CO2	Understanding the features of SQL
CO3	Understanding the concept of Database maintenance
CO4	Understand technical and management roles of database administration & data administrator

Name of the Course	Database Management Systems Lab
Course Code	CS425P
CO1	Students will be able to interact with Database using SQL (Lab).
CO2	Students will be able to write simple SQL queries

Name of the Course	Libre Office Calc and Libre Office Base
Course Code	SE425A
CO1	Get knowledge about Spreadsheet formulas and functions & Be familiarized about formatting, linking and protecting worksheets
CO2	Be able to prepare pivot tables, conditional formatting and data validation in Spreadsheet and be able to learn Table creation, Query creation, Form wizard and Report wizard in Base

Name of the Course	Programming in Java
Course Code	CS525
CO1	Students will learn fundamentals of OOPs, classes, objects.
CO2	Students will learn java programs relating to classes, arrays, strings, interfaces.
CO3	Students will learn java programs relating to the concepts of packages and multithreading.
CO4	Students will learn java programs relating to the concepts of exception handling and applets.

Name of the Course		Programming in Java Lab
Course Code		CS525P
CO1	To demonstrate looping statements, arrays, oops concepts	
CO2	To construct user-defined packages , threads and applet programs by using exception handling mechanisms.	
Name of the Course		Software Engineering (Elective-I)
Course Code		CS525A
CO1	Students will be capable to analyze Software Engineering and its specifications	
CO2	Students will learn designing Architectural styles, object oriented system analysis and its types of designs	
CO3	Students will be capable to implement Software development	
CO4	Students will learn Software testing and its quality	

Name of the Course		Software Engineering Lab (Elective-I)
Course Code		CS525AP
CO1	Students will be acquiring knowledge about implementing tools and models in software engineering	
CO2	Students will be able to design software using different types of UML models	

Name of the Course		Operating Systems (Elective-II)
Course Code		CS525B
CO1	At the end of the course students will be able to paraphrase the basic concepts of Operating Systems and its Structure	
CO2	At the end of the course students will be able to summarize the various Process Management Services of an OS and the problems that could arise due to Synchronization and their respective solutions suggested.	
CO3	At the end of the course students will be able to determine the Process Scheduling Algorithm or the Deadlock Handling Method to be used.	
CO4	At the end of the course students will be able to Discuss the process of Memory and Virtual Memory Managements.	

Name of the Course		Operating Systems Lab (Elective-II)
Course Code		CS525BP
CO1	Students will be able acquire knowledge on UNIX commands and basic programs using conditional statements	
CO2	Students will be able acquire knowledge on UNIX programs using looping statements.	

Name of the Course		Python
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Course Code	SE525A
CO1	Acquire Knowledge on python programming features and develop applications using conditional and looping statements
CO2	Develop applications using functions, files and exception handling, list and tuples

Name of the Course	Libre Office Calc (GE-I)
Course Code	-----
CO1	Work with multiple worksheets & workbook Protect data and Import and export from various database applications.
CO2	Analyze data and implement functions, formula and data validation methods

Name of the Course	Basics of Python (GE-II)
Course Code	----
CO1	Acquire Knowledge on python programming features and develop applications using conditional statements.
CO2	Develop applications using looping statements and functions.

Name of the Course	Computer Networks
Course Code	CS625
CO1	Students would have learnt fundamental concepts and terminology in networking and seven layers and OSI network model
CO2	Students would have learnt different interfaces along with their functionalities and know about multiplexing techniques(FDM,TDM) and Error Detection Methods and correction methods
CO3	Students would have learnt how data link layer is implemented at Local Area Networks and get familiarized with flow control and error control mechanisms at data link layer
CO4	Students would have learnt Routing Algorithms

Name of the Course	Computer Networks Lab
Course Code	CS625P
CO1	Students will be able to create basic messaging programs.
CO2	Students will be able to design simple chatting applications

Name of the Course	Web Technologies (Elective-I)
Course Code	CS625A
CO1	Students will be able to design static web pages
CO2	Students can create web pages using CSS
CO3	Students will be able to design dynamic web program
CO4	Student will be more interaction with web browsers, web servers and case study

Name of the Course	Web Technologies Lab (Elective-I)
Course Code	CS625AP
CO1	Student will be able to design static web pages using style sheets with more formatting features
CO2	Student will be able to design dynamic web pages using CSS, HTML and Scripting language

Name of the Course	GUI Programming using JAVA
Course Code	SE625A
CO1	Students will be develop programs using applets and event handling mechanisms in applets
CO2	Students will be develop programs using swing components

Name of the Course	.NET
Course Code	SE625B
CO1	Students are capable to understand .net platform, application development basics
CO2	Capable to develop Windows form based application with backend connectivity

Name of the Course	Multimedia (GE-I)
Course Code	----
CO1	Students will be able to create, edit and modify simple image files with various extensions.
CO2	Students will be able to implement filter and graphical effects for selected page

Name of the Course	E-Commerce (GE-II)
Course Code	-----
CO1	Student will be able to analyse the impact of E-Commerce on Business Models and EDI
CO2	Students will be able to analyze the Risks of Insecure Systems, Risk Management and Online Payment System

Course Matrix

Name of the Program: BSC MECS											
Name of the Course: Differential Equations and Group theory								Corse Code: MT 121			
Semester: I								Year: I			
Academic Year:17-18								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/ POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	2	2	1	1	2	3	3	2	3
CO2	3	1	1	2	2	2	1	2	3	3	3
CO3	3	2	1	2	3	1	1	2	3	1	3
CO4	3	2	2	2	3	1	2	2	3	1	3
	3	1.5	1.5	2	2.25	1.25	1.5	2.25	3	1.75	3

Name of the Program: BSC MECS											
Name of the Course: Differential Equations and Group theory								Corse Code: MT 121P			
Semester: I								Year: I			
Academic Year:17-18								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	2	2	1	1	2	3	3	2	3
CO2	3	1	1	2	2	2	1	2	3	3	3
CO3	3	2	1	2	3	1	1	2	3	1	3
CO4	3	2	2	2	3	1	2	2	3	1	3
	3	1.5	1.5	2	2.25	1.25	1.5	2.25	3	1.75	3

Name of the Program: B.Sc (CS)											
Name of the Course: Programming in 'C'								Course Code: CS125			
Semester: I								Year: I			
Academic Year: 2017-18								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	1	1	-	1	-	1	1	-	-	-
CO2	3	3	2	2	1	1	1	2	2	1	3
CO3	3	3	2	2	1	2	2	2	2	2	3
CO4	3	3	3	2	1	2	2	3	2	2	3

Name of the Program: B.Sc (CS)											
Name of the Course: Programming in 'C' Lab								Course Code: CS125P			
Semester: I								Year: I			
Academic Year: 2017-18								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	2	2	1	2	2	3	2	2	3
CO2	3	3	3	3	1	3	2	3	1	2	3

Name of the Program: B sc MECS											
Name of the Course: Circuit Analysis								Course Code:EL124			
Semester: I								Year: I Year			
Academic Year:2017-18								Batch:2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	0	3	3	1	0	1	2	3	0	0
CO2	3	2	3	3	1	0	1	1	3	1	0
CO3	3	2	2	2	1	0	1	1	2	2	0
CO4	3	3	2	3	1	0	2	1	2	2	0
AVG	3	2.34	2.5	2.75	1	0	1.25	1.25	2.5	1.67	0

Name of the Program: B sc MECS											
Name of the Course: Circuit Analysis								Course Code:EL124P			
Semester: I								Year: I Year			
Academic Year:2017-18								Batch:2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO5	3	3	2	1	1	0	2	2	0	1	0
CO6	2	3	3	2	0	2	1	2	1	2	0
Avg	2.5	3	2.5	1.5	1	2	1.5	2	1	1.5	0

Name of the Program: BSC MECS

Name of the Course: Differential Equations and Differential Calculus									Course Code: MT 221		
Semester: II									Year: I		
Academic Year:17-18									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	2	2	1	1	2	3	3	2	3
CO2	3	2	1	2	2	2	1	2	3	3	3
CO3	3	1	1	2	3	1	1	2	3	3	3
CO4	3	2	2	2	3	1	2	2	3	3	3
	3	1.5	1.5	2	2.25	1.25	1.5	2.25	3	2.75	3

Name of the Program: BSC MECS											
Name of the Course: Differential Equations and Differential Calculus									Course Code: MT 221P		
Semester: II									Year: I		
Academic Year:2017-18									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	2	2	1	1	2	3	3	2	3
CO2	3	2	1	2	2	2	1	2	3	3	3
CO3	3	1	1	2	3	1	1	2	3	3	3
CO4	3	2	2	2	3	1	2	2	3	3	3
	3	1.5	1.5	2	2.25	1.25	1.5	2.25	3	2.75	3

sName of the Program: B.Sc (CS)											
Name of the Course: Programming in C++							Course Code: CS225				
Semester: II							Year: I				
Academic Year: 2017-18							Batch: 2017-20				
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	1	2	0	1	1	2	2	2	0	2
CO2	3	2	2	2	1	1	2	3	2	0	2
CO3	3	2	2	2	1	1	1	3	0	0	3
CO4	1	1	1	1	1	1	2	2	0	0	2

Name of the Program: B.Sc (CS)											
Name of the Course: Programming in C++ Lab							Course Code: CS225P				
Semester: II							Year: I				

Academic Year: 2017-18							Batch: 2017-20				
Program Outcomes								Program Specific Outcomes			
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	2	1	1	1	2	2	2	1	3
CO2	3	3	2	1	1	1	2	2	2	1	3

Name of the Program: B sc MECS											
Name of the Course: Semiconductor Devices							Course Code:EL224				
Semester: II							Year: I Year				
Academic Year:2017-18							Batch:2017-20				
Program Outcomes								Program Specific Outcomes			
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	2	2	1	1	2	3	3	3	2
CO2	3	1	1	1	0	0	2	2	2	3	3
CO3	3	0	2	2	0	0	2	3	3	3	2
CO4	3	0	2	2	0	0	2	3	3	3	2
CO5	3	3	2	2	0	0	1	3	2	3	2
AVG	3	1.67	1.8	1.8	1	1	1.8	2.8	2.6	3	2.2

Name of the Program: B sc MECS											
Name of the Course: Semiconductor Devices P							Course Code:EL224P				
Semester: II							Year: I Year				
Academic Year:2017-18							Batch:2017-20				
Program Outcomes								Program Specific Outcomes			
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO6	3	2	2	1	0	0	2	2	2	3	3
CO7	3	1	1	2	0	0	3	2	3	3	3
CO8	3	2	2	2	0	0	2	3	3	3	3
Avg	3	1.67	1.67	1.67	0	0	2.34	2.34	2.67	3	3

Name of the Program: MECs											
Name of the Course: RING THEORY&PARTIAL DIFFERENTIAL EQUATIONS							Corse Code: MT 321				
Semester: III							Year: II				

Academic Year:2018-2019									Batch:2017-2020		
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	1	2	1	0	1	3	3	1	1
CO2	3	3	1	3	2	1	2	3	3	1	3
CO3	3	2	1	2	1	1	2	3	3	2	2
CO4	3	2	1	2	1	1	3	3	3	3	2
	3	2.25	1	2.25	1.25	1	2	3	3	1.75	2

Name of the Program: MECs											
Name of the Course: RING THEORY&PARTIAL DIFFERENTIAL EQUATIONS									Corse Code: MT 321P		
Semester: III									Year: II		
Academic Year:2018-2019									Batch:2017-2020		
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	1	2	1	0	1	3	3	1	1
CO2	3	3	1	3	2	1	2	3	3	1	3
CO3	3	2	1	2	1	1	2	3	3	2	2
CO4	3	2	1	2	1	1	3	3	3	3	2
	3	2.25	1	2.25	1.25	1	2	3	3	1.75	2

Name of the Program: BSC MECS											
Name of the Course: THEORY OF EQUATIONS									Corse Code: SEC 321		
Semester: III									Year: II		
Academic Year:18-19									Batch: 2017-20		
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	1	1	1	1	1	3	3	2	3

Name of the Program: B.Sc (CS)											
Name of the Course: Data Structures									Course Code: CS325		
Semester: III									Year: II		
Academic Year: 2018-19									Batch: 2017-20		
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	2	2	2	3	2	3
CO2	3	3	3	3	2	2	2	2	3	2	3
CO3	3	3	3	3	2	2	2	2	3	2	3
CO4	3	3	3	3	2	2	2	2	3	2	3

Name of the Course: Data Structures Using C++ Lab									Course Code: CS325P		
Semester: III									Year: II		
Academic Year: 2018-19									Batch: 2017-20		

COs/POs	Program Outcomes								Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	2	2	2	2	1	3
CO2	3	3	3	3	2	2	2	2	2	1	3

Name of the Program: B.Sc (CS)											
Name of the Course: PC Maintenance								Course Code: SE325A			
Semester: III								Year: II			
Academic Year: 2018-19								Batch: 2017-20			
COs/POs	Program Outcomes								Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	1	2	3	0	2	3
CO2	3	3	2	3	2	1	2	3	0	2	3

Name of the Program: B sc MECS											
Name of the Course: Analog Circuits								Course Code: EL 324			
Semester: III								Year: II Year			
Academic Year:18-19								Batch:2017-20			
COs/POs	Program Outcomes								Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	1	3	3	2	3	3
CO2	3	3	3	3		0	3	3	2	3	3
CO3	3	3	3	3	2	1	3	3	2	3	3
CO4	3	3	3	3		0	3	3	2	3	3
CO5	3	3	3	3	2	2	3	3	2	3	3
Avg	3	3	3	3	2	1.34	3	3	2	3	3

Name of the Program: B sc MECS											
Name of the Course: Analog Circuits P								Course Code: EL 324 P			
Semester: III								Year: II Year			
Academic Year:18-19								Batch:2017-20			
COs/POs	Program Outcomes								Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	2	3	1	1	2	3	3	3	3
CO2	3	3	3	1	1	3	3	3	3	3	3
Avg	3	3	2.5	2	1	2	2.5	3	3	3	3

Name of the Program: B Sc MECS

Name of the Course: BASIC INSTRUMENTATION SKILLS									Corse Code: SE 324		
Semester: III									Year: II		
Academic Year: 18-19									Batch: 2017-2020		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	2	2	0	0	0	2	3	3	1
Avg	3	3	2	2	0	0	0	2	3	3	1

Name of the Program: MECs											
Name of the Course: REAL ANALYSIS									Corse Code:MT421		
Semester: IV									Year: II		
Academic Year:2018-2019									Batch:2017-2020		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	1	1	1	1	1	3	3	1	1
CO2	3	1	1	2	1	1	2	3	3	2	1
CO3	3	1	1	2	1	2	2	3	3	2	3
CO4	3	1	1	2	1	2	2	3	3	2	2
	3	1	1	1.75	1	1.5	1.75	3	3	1.75	1.75

Name of the Program: MECs											
Name of the Course: REAL ANALYSIS									Corse Code:MT421P		
Semester: IV									Year: II		
Academic Year:2018-2019									Batch:2017-2020		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	1	1	1	1	1	3	3	1	1
CO2	3	1	1	2	1	1	2	3	3	2	1
CO3	3	1	1	2	1	2	2	3	3	2	3
CO4	3	1	1	2	1	2	2	3	3	2	2
	3	1	1	1.75	1	1.5	1.75	3	3	1.75	1.75

Name of the Program: BSC MECS											
Name of the Course: LOGIC AND SETS									Corse Code: SEC 421		
Semester: IV									Year: II		
Academic Year:18-19									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	1	2	1	1	1	3	3	2	3

Name of the Program: B.Sc (CS)

Name of the Course: Database Management Systems									Course Code: CS425		
Semester: IV									Year: II		
Academic Year: 2018-19									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	1	3	2	2	3	3	1	1	3
CO2	3	3	3	3	2	2	3	3	1	1	3
CO3	3	2	1	2	1	2	3	2	2	1	3
CO4	3	1	1	2	2	2	2	3	2	1	3

Name of the Program: B.Sc (CS)											
Name of the Course: Database Management Systems Lab									Course Code: CS425P		
Semester: IV									Year: II		
Academic Year: 2018-19									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	2	3	2	0	3
CO2	3	3	3	3	3	3	2	3	2	0	3

Name of the Program: B.Sc (CS)											
Name of the Course: Libre Office Calc and Libre Office Base									Course Code: SE425A		
Semester: IV									Year: II		
Academic Year: 2018-19									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	1	2	2	1	0	2	3	2	2	3
CO2	2	1	2	2	1	0	2	3	2	2	3

Name of the Program: B Sc MECS											
Name of the Course: Operational Amplifiers and Communications									Course Code: EL 424		
Semester: IV									Year: II year		
Academic Year: 2018-19									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	0	2	0	0	0	3	2	1	0
CO2	3	3	2	3	0	0	2	3	3	3	3
CO3	3	3	2	3	0	0	2	3	3	3	3
CO4	3	3	2	3	0	0	2	3	3	3	3
CO5	3	3	3	3	2	1	2	2	3	3	3
Avg	3	2.6	2.25	2.8	2	1	2	2.8	2.8	2.6	3

Name of the Program: B Sc MECS											
Name of the Course: Operational Amplifiers and Communications P									Corse Code: EL 424 P		
Semester: IV									Year: II year		
Academic Year:2018-19									Batch:2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	1	3	3	3	3	3
CO2	3	3	3	3	2	1	3	3	3	3	3
CO3	3	3	3	3	2	1	3	3	3	3	3
Avg	3	3	3	3	2	1	3	3	3	3	3

Name of the Program: B Sc MECS											
Name of the Course: RENEWABLE ENERGY AND ENERGY HARVESTING									Corse Code: SE 424		
Semester: IV									Year: II		
Academic Year: 2018-19									Batch: 2017-2020		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	0	1	1	3	2	0	2	3	3	0
Avg	3	0	1	1	3	2	0	2	3	3	0

Name of the Program: B.Sc (CS)											
Name of the Course: Programming in Java									Course Code: CS525		
Semester: V									Year: III		
Academic Year: 2019-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	2	2	2	2	3	1	1	2
CO2	3	3	3	3	2	2	2	2	2	1	3
CO3	2	3	3	3	2	2	2	2	2	1	3
CO4	3	3	3	3	2	2	3	3	2	1	3

Name of the Program: B.Sc (CS)											
Name of the Course: Programming in Java Lab									Course Code: CS525P		
Semester: V									Year: III		
Academic Year: 2019-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	2	3	2	2	2	2	2	1	3
CO2	3	3	2	3	2	2	2	2	2	1	3

Name of the Program: B.Sc (CS)											
Name of the Course: Operating Systems (Elective-II)									Course Code: CS525A		
Semester: V									Year: III		
Academic Year: 2019-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	2	2	1	2	3	0	1	2
CO2	3	3	2	3	3	2	2	3	2	1	3
CO3	3	3	2	2	2	2	2	2	1	1	2
CO4	2	2	2	2	2	1	1	2	0	1	2

Name of the Program: B.Sc (CS)											
Name of the Course: Operating Systems Lab (Elective-II)									Course Code: CS525AP		
Semester: V									Year: III		
Academic Year: 2019-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	2	2	1	0	1	2	2	0	2
CO2	2	3	2	2	2	1	2	3	2	0	2

Name of the Program: B.Sc (CS)											
Name of the Course: Python									Course Code: SE525A		
Semester: V									Year: III		
Academic Year: 2019-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	2	2	2	2	2	3
CO2	3	3	3	3	3	2	2	2	2	2	3
	3	3	3	3	3	2	2	2	2	2	3

Name of the Program: B.Sc (CS)											
Name of the Course: Libre Office Calc (GE - I)									Course Code:		
Semester: V									Year: III		
Academic Year: 2019-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	1	2	2	1	0	2	3	2	2	3
CO2	2	1	2	2	1	0	2	3	2	2	3

Name of the Program: B.Sc (CS)											
Name of the Course: Basics of Python (GE-II)									Course Code:		
Semester: V									Year: III		
Academic Year: 2019-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	2	2	2	2	2	3
CO2	3	3	3	3	3	2	2	2	2	2	3

Name of the Program: B Sc MECs											
Name of the Course: Digital Electronics									Course Code:EL524		
Semester: V									Year: III Year		
Academic Year:2019-20									Batch:2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	0	0	0	1	0	0	0	1	1	0
CO2	3	2	2	3	1	0	1	2	2	3	1
CO3	3	2	2	3	1	0	1	2	2	3	1
CO4	3	3	3	3	1	2	1	2	2	3	2
Avg	3	2.34	2.34	3	1	2	1	2	1.75	2.5	1.34

Name of the Program: B Sc MECs											
Name of the Course: Digital Electronics P									Course Code:EL524 P		
Semester: V									Year: III Year		
Academic Year:2019-20									Batch:2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	1	2	2	2	3	3	2
CO2	3	2	3	3	2	3	3	3	3	3	2
Avg	3	2	3	2.5	1.5	2.5	2.5	2.5	3	3	2

Name of the Program: B Sc MECs											
Name of the Course: 8085 Microprocessor									Course Code:EL524A		
Semester: V									Year: III year		
Academic Year:2019-20									Batch:2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3		2	2	2	2	2	3	3	3	3
CO2	3		3	3	2	2	1	2	3	3	3
CO3	3	3	2	3	2	2	3	3	3	3	3
CO4	3	3	2	3	2	2	3	3	3	3	3
Avg	3	3	2.25	2.75	2	2	2.25	2.75	3	3	3

Name of the Program: B Sc MECs											
Name of the Course: 8085 Microprocessor P								Corse Code:EL524A P			
Semester: V								Year: III year			
Academic Year:2019-20								Batch:2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	1	1	3	3	3	3	3
CO2	3	3	3	3	1	1	3	3	3	3	3
Avg	3	3	3	3	1	1	3	3	3	3	3

Name of the Program: BSc MECs											
Name of the Course: Consumer Electronics								Corse Code:SE524			
Semester: V								Year: III Year			
Academic Year:2019-20								Batch:2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	0	2	2	1	2	2	2	1

Name of the Program: B Sc MECS											
Name of the Course: RENEWABLE ENERGY AND ENERGY HARVESTING								Corse Code: GE524			
Semester: IV								Year: II			
Academic Year: 2019								Batch: 2017-2020			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	0	1	1	3	2		2	3	3	0

Name of the Program: MECs											
Name of the Course: LINEAR ALGEBRA								Corse Code:MT521			
Semester: V								Year: III			
Academic Year:2019-2020								Batch:2017-2020			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	1	1	1	0	1	3	3	1	3
CO2	3	2	1	2	1	0	2	3	3	2	3
CO3	3	3	2	2	1	1	2	3	3	2	3
CO4	3	1	1	1	1	0	1	3	3	1	2
	3	1.75	1.25	1.5	1	1	1.5	3	3	1.5	2.75

Name of the Program: MECs											
Name of the Course: LINEAR ALGEBRA									Corse Code:MT521P		
Semester: V									Year: III		
Academic Year:2019-2020									Batch:2017-2020		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	1	1	1	0	1	3	3	1	3
CO2	3	2	1	2	1	0	2	3	3	2	3
CO3	3	3	2	2	1	1	2	3	3	2	3
CO4	3	1	1	1	1	0	1	3	3	1	2
	3	1.75	1.25	1.5	1	1	1.5	3	3	1.5	2.75

Name of the Program: BSC MECS											
Name of the Course: VECTORS CALCULUS									Corse Code:MT521 A		
Semester: V									Year: III		
Academic Year:19-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	2	2	1	1	2	1	3	2	3
CO2	3	2	1	2	2	2	1	2	3	3	3
CO3	3	1	1	1	1	1	1	2	3	2	3
CO4	3	2	2	2	1	1	2	3	3	3	3
	3	1.5	1.5	1.75	1.25	1.25	1.5	2	3	2.5	3

Name of the Program: BSC MECS											
Name of the Course: VECTORS CALCULUS									Corse Code:MT521 AP		
Semester: V									Year: III		
Academic Year:19-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	2	2	1	1	2	1	3	2	3
CO2	3	2	1	2	2	2	1	2	3	3	3
CO3	3	1	1	1	1	1	1	2	3	2	3
CO4	3	2	2	2	1	1	2	3	3	3	3
	3	1.5	1.5	1.75	1.25	1.25	1.5	2	3	2.5	3

Name of the Program: BSC MECS											
Name of the Course: NUMBER THEORY									Corse Code: SEC 521		
Semester: V									Year: III		
Academic Year:19-20									Batch: 2017-20		
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	2	1	1	1	3	3	1	3

Name of the Program: BSC MECS											
Name of the Course: GENERIC ELECTIVE -I								Corse Code: GE 521			
Semester: V								Year: III			
Academic Year:19-20								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	1	1	1	3	3	1	3

Name of the Program: BSC MECS											
Name of the Course: NUMERICAL ANALYSIS								Corse Code: MT 621			
Semester: VI								Year: III			
Academic Year:19-20								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	2	1	1	2	1	3	2	3
CO2	3	2	1	2	2	2	2	2	3	2	3
CO3	3	2	1	1	1	1	2	2	3	2	3
CO4	3	2	2	2	1	1	2	3	3	2	3
	3	2	1.5	1.75	1.25	1.25	2	2	3	2	3

Name of the Program: BSC MECS											
Name of the Course: NUMERICAL ANALYSIS								Corse Code: MT 621P			
Semester: VI								Year: III			
Academic Year:19-20								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	2	1	1	2	1	3	3	3
CO2	3	2	1	2	2	2	2	2	3	3	3
CO3	3	2	1	1	1	1	2	2	3	3	3
CO4	3	2	2	2	1	1	2	3	3	3	3
	3	2	1.5	1.75	1.25	1.25	2	2	3	3	3

Name of the Program: MECs											
Name of the Course: SOLID GEOMETRY								Corse Code:MT621/A			
Semester: VI								Year: III			
Academic Year:2019-2020								Batch:2017-2020			
	Program Outcomes								Program Specific Outcomes		
CO/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	1	3	1	1	2	3	3	1	2

CO2	3	2	1	3	1	1	2	3	3	1	2
CO3	3	2	1	3	1	1	2	3	3	1	2

Name of the Program: MECs											
Name of the Course: SOLID GEOMETRY								Course Code: MT621/AP			
Semester: VI								Year: III			
Academic Year: 2019-2020								Batch: 2017-2020			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	1	3	1	1	2	3	3	1	2
CO2	3	2	1	3	1	1	2	3	3	1	2
CO3	3	2	1	3	1	1	2	3	3	1	2
	3	1.67	1	3	1	1	2	3	3	1	2

Name of the Program: BSC MECS											
Name of the Course: GRAPH THEORY								Course Code: SEC 621			
Semester: VI								Year: III			
Academic Year: 19-20								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	2	2	1	1	1	2	3	2	3

Name of the Program: BSC MECS											
Name of the Course: GENERIC ELECTIVE -II								Course Code: GE 621			
Semester: VI								Year: III			
Academic Year: 19-20								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	1	3	2	2	1	1	3	3	2	3

Name of the Program: B.Sc (CS)											
Name of the Course: Computer Networks								Course Code: CS625			
Semester: VI								Year: III			
Academic Year: 2019-20								Batch: 2017-20			
	Program Outcomes								Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	1	1	1	1	2	2	1	3
CO2	3	2	2	1	1	2	1	2	2	1	1
CO3	3	2	2	2	2	1	1	1	2	2	2
CO4	3	2	2	2	2	2	2	2	2	2	2

Name of the Program: B.Sc (CS)											
Name of the Course: Computer Networks Lab								Course Code: CS625P			
Semester: VI								Year: III			

Academic Year: 2019-20								Batch: 2017-20			
Program Outcomes								Program Specific Outcomes			
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	1	1	1	1	1	1	1	3
CO2	2	2	1	1	1	1	1	1	1	1	3
Name of the Program: B.Sc (CS)											
Name of the Course: Web Technologies (Elective-I)								Course Code: CS625A			
Semester: VI								Year: III			
Academic Year: 2019-20								Batch: 2017-20			
Program Outcomes								Program Specific Outcomes			
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	2	3	1	1	2	3	0	0	2
CO2	3	3	2	3	2	1	3	3	0	0	3
CO3	3	3	2	3	2	1	3	3	2	0	3
CO4	3	2	3	2	2	1	2	2	0	0	3

Name of the Program: B.Sc (CS)											
Name of the Course: Web Technologies Lab (Elective-I)								Course Code: CS625AP			
Semester: VI								Year: III			
Academic Year: 2019-20								Batch: 2017-20			
Program Outcomes								Program Specific Outcomes			
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	2	3	3	1	0	3
CO2	3	3	3	3	3	2	3	3	0	0	3

Name of the Program: B.Sc (CS)											
Name of the Course: GUI Programming using JAVA								Course Code: SE625A			
Semester: VI								Year: III			
Academic Year: 2019-20								Batch: 2017-20			
Program Outcomes								Program Specific Outcomes			
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	2	2	2	2	1	3
CO2	3	3	3	3	2	2	2	2	2	1	3

Name of the Program: B.Sc (CS)											
Name of the Course: .NET								Course Code: SE625B			
Semester: VI								Year: III			
Academic Year: 2019-20								Batch: 2017-20			
Program Outcomes								Program Specific Outcomes			
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	1	2	3	2	2	1	2	2	1	0	2
CO2	2	2	3	3	2	1	2	2	1	0	3

Name of the Program: B.Sc (CS)											
Name of the Course: Multimedia (GE - I)								Course Code:			
Semester: VI								Year: III			

Academic Year: 2019-20							Batch: 2017-20				
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	2	2	1	1	2	2	1	1	3
CO2	2	3	2	3	1	1	3	3	1	1	3

Name of the Program: B.Sc (CS)											
Name of the Course: E-Commerce (GE-II)							Course Code:				
Semester: VI							Year: III				
Academic Year: 2019-20							Batch: 2017-20				
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	1	1	2	2	1	1	2	0	0	1
CO2	2	1	2	2	1	1	1	2	0	0	2

Name of the Program: BSc MECs											
Name of the Course: 8051Microcontroller							Corse Code:624				
Semester: VI							Year: III Year				
Academic Year:2019-20							Batch:2017-20				
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	0	0	2	2	0	1	2	3	1	0
CO2	3	0	3	3	1	0	2	2	3	3	1
CO3	3	0	3	3	1	0	2	2	3	2	1
CO4	3	3	3	3	3	2	3	3	3	3	2
Avg	3	3	3	2.75	1.75	2	2	2.25	3	2.25	1.333333

Name of the Program: BSc MECs											
Name of the Course: 8051Microcontroller P							Corse Code:624 P				
Semester: VI							Year: III Year				
Academic Year:2019-20							Batch:2017-20				
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	1	1	3	3	3	3	3
CO2	3	3	3	3	1	1	3	3	3	3	3
Avg	3	3	3	3	1	1	3	3	3	3	3

Name of the Program: B Sc MECs											
Name of the Course: Digital System Design with VHDL							Corse Code:624A				
Semester: VI							Year: III Year				

Academic Year:2019-20							Batch:2017-20				
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	2	1	2	1	3	1
CO2	3	3	3	2	1	3	2	2	2	3	1
CO3	2	3	3	2	1	2	1	2	1	3	1
CO4	3	2	3	2	0	1	1	1	1	3	0
Avg	2.75	2.5	3	2.25	1.34	2	1.25	1.75	1.25	3	1

Name of the Program: B Sc MECs											
Name of the Course: Digital System Design with VHDL P							Corse Code:624A P				
Semester: VI							Year: III Year				
Academic Year:2019-20							Batch:2017-20				
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	3	2
Avg	3	2.5	3	2.5	2.5	3	3	3	3	3	2.5

Name of the Program: BSc MECs											
Name of the Course: Schematic Capture with Multisim							Corse Code:SE624				
Semester: VI							Year: III Year				
Academic Year:2019-20							Batch:2017-20				
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	2	0	2	2	3	2

Name of the Program: B Sc MPCS											
Name of the Course: BIOPHYSICS							Corse Code: GE 623				
Semester: VI							Year: III				
Academic Year: 2019							Batch: 2017-2020				
Program Outcomes									Program Specific Outcomes		
COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	0	0	1	0	1	1	1	3	3	0
CO2	3	0	0	1	0	1	1	1	3	3	0

Program Targets

Sno	SEM	Course/POs	Program Outcomes								Program Specific Outcomes		
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
1	1	En	0.3	0	0	0.5	3	2.5	3	3	1.5	0	0
2	1	SL	0	0	0	0.4	3	1.4	2.9	2.8	0.4	0	0.2
3	1	EVS	1	1	1.5	2	1	3	2	2.5	2	0	2
4	1	M	3	1.5	1.5	2	2.3	1.3	1.5	2.3	3	2.5	3
5	1	M P	3	1.5	1.5	2	2.3	1.3	1.5	2.3	3	2.5	3
6	1	Cs	2.8	2.5	2	2	1	1.7	1.5	2	2	1.7	3
7	1	Cs P	3	3	2.5	2.5	1	2.5	2	3	1.5	2	3
8	1	Electronics	3	1.7	1.8	1.8	1	1	1.8	2.8	2.6	3	2.2
9	1	Electronics P	3	1.7	1.7	1.7	0	0	2.3	2.3	2.7	3	3
10	2	En	0.5	0	0	0	2.3	2	2.3	2.3	1	0	0
11	2	SL	0.1	0	0	0.3	3	1.5	2.9	2.8	1.2	0	0
12	2	GS	0	0	0	1	2	2	2	2	2	0	2
13	2	M	3	1.5	1.5	2	2.3	1.3	1.5	2.3	3	2	3
14	2	M P	3	1.5	1.5	2	2.3	1.3	1.5	2.3	3	2	3
15	2	Cs	2.3	1.5	1.8	1.7	1	1	1.8	2.5	2	0	2.3
16	2	Cs P	3	3	2	1	1	1	2	2	2	1	3
17	2	Electronics	3	1.7	1.8	1.8	1	1	1.8	2.8	2.6	3	2.2
18	2	Electronics P	3	1.7	1.7	1.7	0	0	2.3	2.3	2.7	3	3
19	3	En	0	0	0	0.8	3	2	3	3	1.2	0	0
20	3	SL	0	0	0	0	3	1.3	2.9	2.8	0.4	0	0.1
21	3	M	3	2.3	1	2.3	1.3	1	2	3	3	1.5	2
22	3	M P	3	2.3	1	2.3	1.3	1	2	3	3	1.5	2
23	3	SEC	3	2	1	1	1	1	1	3	3	2	3
24	3	Cs	3	3	3	3	2	2	2	2	3	0	3
25	3	Cs P	3	3	3	3	2	2	2	2	2	1	3
26	3	SEC	3	2.5	2.5	3	2	1	2	3	0	2	3
27	3	Electronics	3	3	3	3	2	1.3	3	3	2	3	3
28	3	Electronics P	3	3	2.5	2	1	2	2.5	3	3	3	3
29	3	SEC	3	3	2	2	0	0	0	2	3	3	1
30	4	En	0	0	0	0.2	3	2.2	3	3	0.6	0	0
31	4	SL	0	0	0	0.1	3	1.3	2.9	2.8	0.6	0	0
32	4	M	3	1	1	1.8	1	1.5	1.8	3	3	1	1.8
33	4	M P	3	1	1	1.8	1	1.5	1.8	3	3	1	1.8
34	4	SEC	3	1	1	2	1	1	1	3	3	2	3
35	4	Cs	3	2	1.5	2.5	1.8	2	2.8	2.8	1.5	1	3
36	4	Cs P	3	3	3	3	3	3	2	3	2	0	3
37	4	SEC	2	1	2	2	1	0	2	3	2	2	3

38	4	Electronics	3	2.6	2.3	2.8	2	1	2	2.8	2.8	2.6	3
39	4	Electronics P	3	3	3	3	2	1	3	3	3	3	3
40	4	SEC	3	0	1	1	3	2	0	2	3	3	0
41	5	M	3	1.8	1.3	1.5	1	1	1.5	3	3	1.5	2.8
42	5	M P	3	1.8	1.3	1.5	1	1	1.5	3	3	1.5	2.8
43	5	M	3	1.3	1.3	1.7	1.3	1.3	1.3	1.7	3	2	3
44	5	M P	3	1.3	1.3	1.7	1.3	1.3	1.3	1.7	3	2	3
45	5	SEC	3	2	3	2	1	1	1	3	3	2	3
46	5	GE	3	2	2	2	1	1	1	3	3	2	3
47	5	Cs	2.8	2.8	2.8	2.8	2	2	2.3	2.5	1.8	1	2.8
48	5	Cs P	3	3	2	3	2	2	2	2	2	1	3
49	5	Cs	2.5	2.5	1.8	2.3	2.3	1.5	1.8	2.5	1.5	0	2.3
50	5	Cs P	2	2.5	2	2	1.5	0	1.5	2.5	2	0	2
51	5	SEC	2.5	2	2.5	2.5	2	2	2	2.5	2	2	3
52	5	GE	3	3	3	3	3	2	2	2	2	2	3
53	5	Electronics	3	2.3	2.3	3	1	2	1	2	1.8	2.5	1.3
54	5	Electronics P	3	2	3	2.5	1.5	2.5	2.5	2.5	3	3	2
55	5	Electronics	3	3	2.3	2.8	2	2	2.3	2.8	3	3	3
56	5	Electronics P	3	3	3	3	1	1	3	3	3	3	3
57	5	SEC	3	2	2	0	2	2	1	2	2	2	1
58	5	GE	3	0	1	1	3	2	0	2	3	3	0
59	6	M	3	2	1.5	1.8	1.3	1.3	2	2	3	2	3
60	6	M P	3	2	1.5	1.8	1.3	1.3	2	2	3	2	3
61	6	M	3	1.7	1	3	1	1	2	3	3	1	2
62	6	M P	3	1.7	1	3	1	1	2	3	3	1	2
63	6	SEC	3	1	3	2	2	1	1	3	3	2	3
64	6	GE	3	1	2	2	1	1	1	2	3	2	3
65	6	Cs	3	2	2	1.5	1.5	1.5	1.3	1.8	2	1.5	2
66	6	Cs P	2	2	1	1	1	1	1	1	0	1	3
67	6	Cs	3	2.8	2.3	2.8	1.8	1	2.5	2.8	2	0	2.8
68	6	Cs P	3	3	3	3	3	2	3	3	1	0	3
69	6	SEC	$\frac{2.2}{5}$	2.5	3	$\frac{2.7}{5}$	2	0	2	2	1.5	1	2.75
70	6	GE	2	1.75	$\frac{1.7}{5}$	$\frac{2.2}{5}$	$\frac{1.2}{5}$	0	1.75	2.25	1	1	2.25
71	6	Electronics	3	3	3	2.8	1.8	2	2	2.3	3	2.3	1.3
72	6	Electronics P	3	3	3	3	1	1	3	3	3	3	3
73	6	Electronics	2.8	2.5	3	2.3	1.3	2	1.3	1.8	1.3	3	1
74	6	Electronics P	3	2.5	3	2.5	2.5	3	3	3	3	3	2.5
75	6	SEC	3	2	3	3	2	2	0	2	2	3	2
76	6	GE	3	0	0	1	0	1	1	1	3	3	0

		Total	193	143.1	139	153	128	104	146.4	193.2	169.4	119.5	175.8
		Program Outcome Targets	2.5	1.9	1.8	2	1.7	1.4	1.9	2.5	2.2	1.6	2.3

Program Attainments

Sno	SEM	Course/POs	Program Outcomes								Program Specific Outcomes		
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
1	1	Eng	0.3	0	0	0.5	3	2.5	3	3	1.5	0	0
2	1	SL	0	0	0	0.4	3	1.4	2.9	2.8	0.4	0	0.2
3	1	EVS	1	1	1.5	2	1	3	2	2.5	2	0	2
4	1	M	2	1	1	1.3	1.5	0.8	1	1.5	2	1.7	2
5	1	M P	3	1.5	1.5	2	2.3	1.3	1.5	2.3	3	2.5	3
6	1	Cs	0.9	0.8	0.7	0.7	0.3	0.6	0.5	0.7	0.7	0.6	1
7	1	Cs P	3	3	2.5	2.5	1	2.5	2	3	1.5	2	3
8	1	Electronics	3	1.7	1.8	1.8	1	1	1.8	2.8	2.6	3	2.2
9	1	Electronics P	3	1.7	1.7	1.7	0	0	2.3	2.3	2.7	3	3
10	2	Eng	0.5	0	0	0	2.3	2	2.3	2.3	1	0	0
11	2	SL	0.1	0	0	0.3	3	1.5	2.9	2.8	1.2	0	0
12	2	GS	0	0	0	1	2	2	2	2	2	0	2
13	2	M	3	1.5	1.5	2	2.3	1.3	1.5	2.3	3	2	3
14	2	M P	3	1.5	1.5	2	2.3	1.3	1.5	2.3	3	2	3
15	2	Cs	2.3	1.5	1.8	1.7	1	1	1.8	2.5	2	0	2.3
16	2	Cs P	3	3	2	1	1	1	2	2	2	1	3
17	2	Electronics	3	1.7	1.8	1.8	1	1	1.8	2.8	2.6	3	2.2
18	2	Electronics P	3	1.7	1.7	1.7	0	0	2.3	2.3	2.7	3	3
19	3	Eng	0	0	0	0.8	3	2	3	3	1.2	0	0
20	3	SL	0	0	0	0	3	1.3	2.9	2.8	0.4	0	0.1
21	3	M	1	0.8	0.3	0.8	0.4	0.3	0.7	1	1	0.5	0.7
22	3	M P	3	2.3	1	2.3	1.3	1	2	3	3	1.5	2
23	3	SEC	3	2	1	1	1	1	1	3	3	2	3
24	3	Electronics	2	2	2	2	1.3	0.9	2	2	1.3	2	2
25	3	Electronics P	3	3	2.5	2	1	2	2.5	3	3	3	3
26	3	SEC	3	3	2	2	0	0	0	2	3	3	1
27	3	Cs	3	3	3	3	2	2	2	2	3	0	3
28	3	Cs P	3	3	3	3	2	2	2	2	2	1	3
29	3	SEC	3	2.5	2.5	3	2	1	2	3	0	2	3
30	4	Eng	0	0	0	0.2	3	2.2	3	3	0.6	0	0
31	4	SL	0	0	0	0.1	3	1.3	2.9	2.8	0.6	0	0

32	4	M	1	0.3	0.3	0.6	0.3	0.5	0.6	1	1	0.3	0.6
33	4	M P	3	1	1	1.8	1	1.5	1.8	3	3	1	1.8
34	4	SEC	3	1	1	2	1	1	1	3	3	2	3
35	4	Cs	3	2	1.5	2.5	1.8	2	2.8	2.8	1.5	1	3
36	4	Cs P	3	3	3	3	3	3	2	3	2	0	3
37	4	SEC	2	1	2	2	1	0	2	3	2	2	3
38	4	Electronics	3	2.6	2.3	2.8	2	1	2	2.8	2.8	2.6	3
39	4	Electronics P	3	3	3	3	2	1	3	3	3	3	3
40	4	SEC	3	0	1	1	3	2	0	2	3	3	0
41	5	M	1	0.6	0.4	0.5	0.3	0.3	0.5	1	1	0.5	0.9
42	5	M P	3	1.8	1.3	1.5	1	1	1.5	3	3	1.5	2.8
43	5	M	3	1.3	1.3	1.7	1.3	1.3	1.3	1.7	3	2	3
44	5	M P	3	1.3	1.3	1.7	1.3	1.3	1.3	1.7	3	2	3
45	5	SEC	3	2	3	2	1	1	1	3	3	2	3
46	5	GE	3	2	3	2	1	1	1	3	3	3	3
47	5	Electronics	1	1	0.8	0.9	0.7	0.7	0.8	0.9	1	1	1
48	5	Electronics P	3	3	3	3	1	1	3	3	3	3	3
49	5	Electronics	2	1.6	1.6	2	0.7	1.3	0.7	1.3	1.2	1.7	0.9
50	5	Electronics P	3	2	3	2.5	1.5	2.5	2.5	2.5	3	3	2
51	5	SEC	2	1.3	1.3	0	1.3	1.3	0.7	1.3	1.3	1.3	0.7
52	5	GE	3	0	1	1	3	2	0	2	3	3	0
53	5	Cs	2.8	2.8	2.8	2.8	2	2	2.3	2.5	1.8	1	2.8
54	5	Cs P	3	3	2	3	2	2	2	2	2	1	3
55	5	Cs	2.5	2.5	1.8	2.3	2.3	1.5	1.8	2.5	1.5	0	2.3
56	5	Cs P	2	2.5	2	2	1.5	0	1.5	2.5	2	0	2
57	5	SEC	2.5	2	2.5	2.5	2	2	2	2.5	2	2	3
58	5	GE	3	3	3	3	3	2	2	2	2	2	3
59	6	M	2	1.3	1	1.2	0.8	0.8	1.3	1.3	2	1.3	2
60	6	M P	3	2	1.5	1.8	1.3	1.3	2	2	3	2	3
61	6	M	2	1.1	0.7	2	0.7	0.7	1.3	2	2	0.7	1.3
62	6	M P	2	1.1	0.7	2	0.7	0.7	1.3	2	2	0.7	1.3
63	6	SEC	3	1	3	2	2	1	1	3	3	2	3
64	6	GE	3	1	2	2	1	1	1	2	3	2	3
65	6	Cs	3	2	2	1.5	1.5	1.5	1.3	1.8	2	1.5	2
66	6	Cs P	2	2	1	1	1	1	1	1	0	1	3
67	6	Cs	3	2.8	2.3	2.8	1.8	1	2.5	2.8	2	0	2.8
68	6	Cs P	3	3	3	3	3	2	3	3	1	0	3
69	6	SEC	2.25	2.5	3	2.75	2	0	2	2	1.5	1	2.75
70	6	GE	2	1.75	1.75	2.25	1.25	0	1.75	2.25	1	1	2.25

71	6	Electronics	2	2	2	1.8	1.2	1.3	1.3	1.5	2	1.5	0.9
72	6	Electronics P	3	3	3	3	1	1	3	3	3	3	3
73	6	Electronics	2.8	2.5	3	2.3	1.3	2	1.3	1.8	1.3	3	1
74	6	Electronics P	3	2.5	3	2.5	2.5	3	3	3	3	3	2.5
75	6	SEC	3	2	3	3	2	2	0	2	2	3	2
76	6	GE	3	0	0	1	0	1	1	1	3	3	0
Total			171.8	127.4	126	137.1	117.3	93.9	133.3	174.2	150.2	105.7	157.9
Program Outcome Attainment			2.2	1.7	1.6	1.8	1.5	1.2	1.7	2.3	2	1.4	2.1

GAP

	Program Outcomes								Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
PROGRAM OUTCOME TARGETS	2.5	1.9	1.8	2	1.7	1.4	1.9	2.5	2.2	1.6	2.3
PROGRAM OUTCOME ATTAINMENTS	2.2	1.7	1.6	1.8	1.5	1.2	1.7	2.3	2	1.4	2.1
gap	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.2