K.M.G COLLEGE OF ARTS AND SCIENCE, GUDIYATTAM

Department of Computer Applications

2020-2021

Programme Outcomes

Upon graduation, students will be able to:

S.NO	OUTCOMES
PO1	Developing the student for roles pertaining to computer applications and IT industry
PO2	Developing the student's skills to work as software programmer, system and network administrator, web designer
PO3	Develop various real time applications using latest technologies and programming languages.
PO4	An ability to handle the skills like computer graphics, web development, trouble shooting, and both in hardware & software.
PO5	Develop practical skills to provide solutions to industry, society and business
PO6	Develop the software projects by understanding the client requirement

SEMESTER - I

Subject Name: COMMUNICATIVE ENGLISH-I

No. of Hour per week: 6

Credit: 4

Subject Code: CLE10

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
l (Regulation 2020-2021)	COMMUNICATIVE ENGLISH-I	4	 CO1 – Students can help the learners recognize and operate in various styles and registers in English. CO2-Students are heighten their awareness of correct usage of English grammar in writing and speaking. CO2 - Students can modify their speaking ability in English both in terms of fluency and comprehensibility. CO3 - Students can enable their oral presentations and receive feedback on their performance. CO4 - Students can able to increase their reading speed and comprehension of academic articles. CO5 - Students can improve their reading fluency skills through extensive reading.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	М	S	S	М
CO2	S	М	М	S	S	S
CO3	S	S	М	М	S	S
CO4	S	М	М	М	М	М
CO5	S	S	М	М	S	S

PO – Programme outcome, CO – Course outcome

S - Strong, M - Medium, L – Low (may be avoided)

Subject Name: COMMUNICATIVE ENGLISH-I

No. of Hour per week: 6

Credit: 4

Subject Code: CCA11

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
l (Regulation 2020-2021)	Programming in C	4	CO1 – Students can identify the concepts of Constants, Variables, and Data Types, Operators and Expressions. CO2 –Students to analyze the concepts of Managing Input and Output Operations, Decision Making and Branching, Decision Making and Looping CO3 – Students can able to explain the concepts of Arrays, Character Arrays and Strings, User Defined Functions. CO4 – Students can understand the concepts of Structure and Unions, Pointers. CO5 – Students can evaluate the concepts of File Management in C. CO6 – Students can explain the concepts of
			Fundamental Algorithms, Factoring Methods.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	М	S	S	М
CO2	S	М	М	S	S	S
CO3	S	S	М	М	S	S
CO4	S	М	М	М	М	М
CO5	S	S	М	М	S	S

Subject Name: PROGRAMMING IN C LAB

No. of Hour per week: 3

Subject Code: CPCA13

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
l (Regulation 2020-2021)	Programming in C Lab	2	CO1-Students can develop own individual programs. CO2-Students ability to work with textual information, Characters and Strings. CO3-Students to develop logic which will help to create programs, application in c. CO4-Students are control the sequence of the programs and give logical Outputs.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	S	S	S
CO2	S	S	М	S	S	S
CO3	S	М	М	S	S	М
CO4	S	М	М	S	М	М
CO5	S	М	М	S	S	S

Subject Name: MATHEMATICALFOUNDATIONS-1

No. of Hour per week: 7

Subject Code: CAMA15B

Credit: 3

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
l (Regulation 2020-2021)	Mathematical Foundations – I	3	 CO1 –Students can ability to apply mathematical logic to solve problems. CO2 – Students can realize the sets, relations, functions. CO3-Students can explain the discrete structures. CO4 –Students can use logical notation to define and reason about fundamental mathematical concepts such as sets, relations, and functions. CO5- Students can to solve complex problems by critical understanding, analysis and synthesis.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	Μ	М	S	S
CO2	S	S	М	М	S	S
CO3	S	М	Μ	S	S	S
CO4	S	S	М	S	S	М
CO5	S	S	S	S	Μ	М

Subject Name: PROFESSIONAL ENGLISH-1

No. of Hour per week: 6

Subject Code: CPE10C

Credit: 3

Course Outcomes:

Semester Course Name Credit	Course Outcomes
I I (Regulation 2020-2021)	 CO1 – Students can explain the basic objective of communication skills i.e. Reading, Writing, Listening and Speaking. CO2 – Students can analyze construct the strong professional vocabulary for its application through numerous modes as Comprehension, reading, writing and speaking etc. CO3 – Students ca n identify to use it at their work place for writing purposes such as Presentation, administrative communication and use it in various areas such as document, report, research paper writing. CO4 –Students will apply it at their work place for writing purposes such as Presentation/administrative communication. CO5 – Students can able to oral presentation purposes and to apply techniques for developing inter-personal communication skills.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	S	М	М	S
CO2	М	S	S	S	L	М
CO3	М	S	S	М	L	М
CO4	М	S	S	М	L	L
CO5	М	S	S	L	S	S

Subject Name: ENVIRONMENTAL STUDIES

No. of Hour per week: 2

Subject Code: CES10

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
	Environmental studies	2	CO1 – Students can able analyze Eco system in their environment.
I			CO2 –Students can Recognize the importance of natural resources.
(Regulation 2020-2021)			CO3 – Students can adopting sustainability as practice in life, society and industry.
			CO4 – Students can use scientific reasoning to understand environment problems.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	S	М	М	S
CO2	S	S	S	S	S	М
CO3	S	S	S	S	М	S
CO4	М	S	S	S	S	S

SEMESTER – II

Subject Name: COMMUNICATIVE ENGLISH-I

No. of Hour per week: 6

Credit: 4

Subject Code: CLE20

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
	Communicative English II	4	CO1 - Students will read university texts and expand
			their vocabulary.
			CO2 - Students will read for intensive information
			retrieval and interpretation required by university
			studies.
			CO3 - Students will develop abilities as critical
			thinkers, readers and writers.
11			CO4 - Students will attain and enhance competence in
(Regulation			the four modes of literacy: writing, speaking, reading
			& listening.
2020-2021)			CO5 - Students will write 3 summaries in which they
			will communicate appropriately, accurately and
			effectively what has been read.
			CO6 - Students will achieve these outcomes through
			the development of the following skills: focused
			reading skills work and exams; discussions of longer
			articles; and summary writing including the drafting
			process.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	М	S	S
CO2	М	S	S	S	S	М
CO3	S	S	М	S	S	S
CO4	S	S	S	S	М	S
CO5	М	S	S	S	S	М
CO6	S	S	S	S	S	S

Subject Name: COMMUNICATIVE ENGLISH-I

No. of Hour per week: 5

Credit: 4

Subject Code: CCA21

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
	C++ & Data Structure	4	CO1 – The students can able to develop the concepts
			of object oriented programming and constructor and
			destructor.
			CO2 – The students can able to illustrate the concepts
			of inheritance and apply it for real time problems.
11			CO3 – The students can to analyze the concepts of
(Regulation			Stacks and Queue using array and pointers.
			CO4 – The students can to describe, implement and
2020-2021)			recognize data structures including stacks, queues,
			linked lists, Binary trees traversal and graphs.
			CO5 – The students can obtain the knowledge of
			Recursion, Binary Search.
			CO6 – The students can able to understand the
			concepts of Sorting and Searching Algorithms.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	S	S	S	М
CO2	М	М	М	S	S	М
CO3	S	М	S	S	М	S
CO4	М	S	М	S	М	S
CO5	S	S	S	М	S	S
CO6	S	М	М	S	М	S

Subject Name: C++ and Data Structures Lab

No. of Hour per week: 2

Subject Code: CPCA23

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
II (Regulation 2020-2021)	C++ and Data Structures Lab	2	 CO1 – The student's ability to Creating and Deleting the Objects with the concepts of Constructors and Destructors. CO2 – The students can able to implement the Polymorphism concepts and Operator Overloading. CO3 – The students can ability to implement basic Data Structures such as Arrays, Linked Lists, Stacks, Queues, Doubly Linked List and Infix to Postfix Conversion. CO4 – The students can able to apply Algorithm for solving problems like Sorting and Searching.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	S	М	М
CO2	S	М	М	Μ	S	S
CO3	S	М	М	М	М	S
CO4	S	М	М	S	М	S
CO5	S	S	S	М	М	S

Subject Name: Value Education

No. of Hour per week: 2

Subject Code: CGA20

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
II (Regulation 2020-2021)	Value Education	2	 CO1 – To realize the importance of value based living. CO2 – To enable the students to understand the purpose of their life. CO3 – To enable the Students to gain the leadership qualities. CO4 – To emerge the Students to become responsible citizens. CO5 – The Students will become value based professionals. CO6 - Students contribution to build a healthy nation

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	М	М	S	S
CO2	S	М	М	М	S	S
CO3	М	М	М	L	S	S
CO4	S	S	S	S	S	М
CO5	S	S	S	S	S	S

Subject Name: Soft skill

No. of Hour per week: 2

Subject Code: CSS20

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
II (Regulation 2020-2021)	Soft skill	1	CO1 – The students can able to gain confidence in their speaking skills. CO2- The students will be to understand English language thoroughly.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	S	S
CO2	S	М	S	М	S	М

SEMESTER – III

Subject Name: PROGRAMMING IN JAVA

No. of Hour per week: 3

Credit: 4

Subject Code: CCA31

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
	Programming in Java	4	CO1 – Students can analyze the basic concepts object
			CO2 – Students can able to illustrate writing programs
			skills in using multithreading.
			CO3 – Students can identify the user interface design
111			techniques.
(Regulation			CO4 – Students can construct reusable programs using
			the concepts of inheritance, polymorphism, interfaces
2020-2021)			and packages.
			CO5 – Students can apply the concepts Exception
			handling to develop efficient and error free codes.
			CO6 – Students can create event driven GUI and web
			related applications which reflect the real word
			scenarios.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	М	М	М	S
CO2	S	S	М	М	М	S
CO3	S	М	М	М	М	S
CO4	S	М	М	М	М	S
CO5	S	S	М	М	М	S

Subject Name: E-Commerce

No. of Hour per week: 4

Credit: 4

Subject Code: CCA32

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2020-2021)	E-Commerce	4	 CO1 – Students can analyze the compare and contrast traditional commerce and electronic E-commerce. CO2 – Students can explain the major types of E-commerce. CO3 –Students can discuss the process of E-commerce framework. CO4 – Students can identify the security threats in the E-commerce environment. CO5 –Students can describe how procurement and supply chains relate to B2B. CO6-Students can be aware of the ethical, social and security issues of information systems.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	М	М	S	Μ
CO2	S	М	М	S	S	Μ
CO3	S	М	М	S	S	Μ
CO4	S	М	М	S	М	М
CO5	S	М	М	S	М	Μ
CO6	S	М	Μ	S	S	Μ

Subject Name: Operations Research

No. of Hour per week: 5

Subject Code: CCA33

Course Outcomes:

Credit: 4

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2020-2021)	Operations Research	4	 CO1- The Student able to understand the concepts of optimization and to formulate and Solve Linear Programming problems CO2- The Student able to understand the concepts of Transportation problem and Assignment problem Co3- The Student able to understand the concepts of sequencing problem CO4- The Student able to understand the concepts of PERT-CPM and their applications in product planning control. CO5- The Student able to understand the concepts of Solve the Minimal Spanning Tree Problem, Shortest Route Problem, Maximal Flow Problem and Minimal Cost Capacitated Flow Problem

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	S	М	S	М
CO2	S	S	М	S	S	М
CO3	M	М	М	S	S	М
CO4	S	S	S	S	М	S
CO5	S	М	М	S	М	М

Subject Name: Web technology

No. of Hour per week: 3

Subject Code: CSCA34

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
III (Regulation 2020-2021)	Web technology		CO1-Students are able to develop a dynamic web page by the use of VB Script and Java Script. CO2-Students can able to write a server side Java application called JSP to catch from data send from client and store it on data base. CO3-Students can able to understand the concepts of HTML. CO4-Students are able to develop own web site using VB Script, Java Script.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	М	М	S	М
CO2	S	М	М	S	S	М
CO3	S	S	S	S	S	S
CO4	S	М	М	S	М	М
CO5	S	М	М	S	М	М

Subject Name: PROGRAMMING IN JAVA LAB

No. of Hour per week: 3

Subject Code: CPCA36

Credit: 3

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
	Java Programming Lab	3	CO1 - Students can able to apply basic concepts such
			as function Overloading, array and string manipulation
			in Java
			CO2 – students can able to utilize classes in the real
111	111		time applications
(Regulation			CO3-students can able to understand the types of
			inheritance
2020-2021)			CO4 –They can implement packages, manipulate
			threads and exception handling techniques
			CO5 – They can Develop Applet programs and
			manipulate the IO streams

COs	PO1	PO2	PO3	PO4	PO5	PO6
C01	S	М	S	S	М	S
CO2	S	S	S	S	S	М
CO3	S	S	S	М	S	S
CO4	S	М	S	S	М	М
CO5	S	S	М	М	М	S

Subject Name: Introduction to Information Technology No. of Hour per week: 2

Subject Code: CNCA35

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
	Introduction to Information	2	CO1 – students can aware the basic of computer and
	Technology		its evolution.
			CO2 – They can utilize office automation software Ms- Office
(Regulation			CO3 – Students can operate windows OS and its
2020-2021)			reatures.
			CO4 – students can aware the basic idea of internet
			and management systems.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	S	Μ
CO2	S	S	S	Μ	S	S
CO3	S	S	S	S	Μ	S
CO4	S	S	S	S	S	S
CO5	S	S	S	S	S	S

SEMESTER-IV

Subject Name: Relational Database Management Systems

Subject Code: CCA41

Course Outcomes:

No. of Hour per week: 5

Credit: 4

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2020-2021)	Relational Database Management Systems	4	 CO1 - The students can able to understand DBMS architecture, physical and logical database designs, database modeling, relational, hierarchical and network models. CO2 - The students can able to apply Structured query language (SQL) for database definition and database manipulation. CO3 - The students can able to demonstrate of normalization theory and apply such knowledge to the normalization of a database. CO4 - The students can able to create database for real time application by their own. CO5- The students can able to understand the concept of File Organization. CO6 - The students can able to apply aggregate in their applications.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	S	М	М
CO2	S	S	М	Μ	Μ	S
CO3	S	S	S	S	М	М
CO4	S	М	М	М	S	S
CO5	S	S	М	Μ	М	М
CO6	S	S	М	S	М	М

Subject Name: Enterprise Resource Planning

No. of Hour per week: 4

Subject Code: CCA42

Credit: 4

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2020-2021)	Enterprise Resource Planning	4	 CO1 – The students able to make basic use of Enterprise software, and its role in integrating business functions. CO2 – The students able to analyze the strategic options for ERP identification and adoption. CO3 – The students able to design the ERP implementation strategies. CO4 – The students can able to create reengineered business processes for successful ERP implementation. CO5- The students can able to improve ERP related technologies.
			CO6- The students can able to analyze success and failure of ERP factors.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	S	М	М
CO2	S	S	М	М	М	S
CO3	S	S	S	S	М	М
CO4	S	М	М	М	S	М
CO5	S	S	М	М	М	М

Subject Name: Wireless Data Communication

No. of Hour per week: 5

Subject Code: CCA43

Credit: 4

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
	Wireless Data	4	CO1- The students can able to understand the
	Communication		concepts of basic OSI layers.
			CO2 - The students can able to understand the basic
			concepts of error detection and DLC.
IV			CO3 - The students can able to analyze the signals and
(Regulation			transmission media.
			CO4 - The students can able to analyze the
2020-2021)			characterize of wireless transmission technologies.
			CO5 - The students can able to ability to analyze to
			improved data services in cellular communication.
			CO6 – The students can able to various TCP /IP
			protocols.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	S	М	Μ
CO2	S	S	М	S	М	S
CO3	S	М	М	М	М	S
CO4	S	М	S	М	S	S
CO5	S	М	М	М	М	S

Subject Name: RDBMS Lab

No. of Hour per week: 3

Subject Code: CPCA46

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
	RDBMS Lab	3	CO1 – The students can able to implement Basic DDL,
			DML and DCL commands
			CO2 – The students can able to understand Data
			selection and operators used in queries and restrict
IV	IV		data retrieval and control the display order
(Regulation			CO3 – The students can able to implement sub queries
			and understand their purpose.
2020-2021)			CO4 – The students can able to implement Join
			multiple tables using different types of joins.
			CO5 – The students can able to develop PL/SQL Block
			for procedures, Functions, cursors and exception
			handling etc.

Course Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	S	М	М
CO2	S	S	М	S	М	S
CO3	S	М	М	М	М	S
CO4	S	М	S	М	S	S
CO5	S	М	М	М	М	S

Credit: 3

Subject Name: Financial Accounting - II No. of Hour per week: 7

Subject Code: CACM 25C

Credit: 6

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2020-2021)	Financial Accounting - II	6	 CO1 – The students can able to acquire the knowledge in accounting, system of maintenance of accounts, journals, ledger, bill of exchange, account current, average due date and bank reconciliation statement. CO2 – The students can able to know the features of single entry system, difference between single entry and double entry system, need for departmental accounts, basis for allocation of expenses, difference between wholesale profit and retail profit, different methods of depreciation, features of hire purchase and installments systems and difference between hire purchase and installment system. CO3 – The students can able to familiarizing the methods of preparation of single entry system of accounts, inter-department transfer at cost or selling price. Preparation of branch accounts, preparation of accounts using various methods of depreciation and calculation of interest under hire purchase and installment system. CO4 – The students can able to develop analytical skills in single entry system of account and balance sheets, stocks and debtors system and final accounts system and hire purchase trading account. CO5 –The students can able to evaluate the cost of department purchase consolidated final accounts and default and repossession of goods under hire purchase system.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	S	М	М
CO2	S	S	S	Μ	М	Μ
CO3	S	М	М	S	М	S
CO4	S	М	S	Μ	М	Μ
CO5	S	М	М	Μ	М	S
CO6	S	М	MS	S	М	S

Subject Name: Internet of Things

Subject Code: CSCA44

Course Outcomes:

No. of Hour per week: 3

Credit: 3

Semester	Course Name	Course Credit	Course Outcomes
IV (Regulation 2020-2021)	Internet of Things	3	 CO1 - The students can able to analyze various protocols for Internet of Things. CO2 - The students can able to develop web services to access IoT devices. CO3 - The students can able to design a portable IoT using Rasperry Pi. CO4 - The students can analyze applications of IoT in real time situation. CO5 – The students can able to IoT device and connect to the cloud.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	М	S	М	М
CO2	S	М	М	S	М	S
CO3	S	S	S	S	М	S
CO4	S	S	М	S	S	М
CO5	S	S	S	S	S	М

Subject Name Internet Technology

No. of Hour per week: 2

Subject Code: CNCA45

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
	Internet Technology	2	CO1 - The students can able to know the history and Evolution of Internet. CO2 – The students can recognize the services of Internet.
IV (Regulation 2020-2021)		 CO3 – The student can able to know about Web page design and Web publishing. CO4 – The student can utilize the functions of search engines, Email Concept. 	
			CO5 - The student acquire the knowledge Internet Security.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	S	S
CO2	S	S	М	М	М	S
CO3	S	М	М	S	S	М
CO4	S	S	М	S	S	S
CO5	S	S	М	М	М	S

SEMESTER-V

Subject Name : Mobile Application Development

No. of Hour per week: 6

Subject Code: CCA51

Credit: 4

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2020-2021)	Mobile Application Development	4	CO1-Students can able to understand about the basic developments of android applications CO2. Students can able to understand the usage of the controls in android application. CO3.Students can able to understand the advanced controls that are used in android Applications. CO4. Students can able to understand how the alerts are worked in application. CO5. Students can able to understand the concept of connecting a database into the application.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	S	S
CO2	S	S	М	М	М	S
CO3	S	М	М	S	S	М
CO4	S	S	М	S	S	S
CO5	S	S	М	М	М	S

Subject Name: Operating System

No. of Hour per week: 6

Subject Code: CCA52

Credit: 4

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2020-2021)	Operating System	4	 CO1 - The students can able to understand DBMS architecture, physical and logical database designs, database modeling, relational, hierarchical and network models. CO2 - The students can able to apply Structured query language (SQL) for database definition and database manipulation. CO3 - The students can able to demonstrate of normalization theory and apply such knowledge to the normalization of a database. CO4 - The students can able to create database for real time application by their own. CO5- The students can able to understand the concept of File Organization. CO6 - The students can able to apply aggregate in their applications.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	М	S	S
CO2	S	М	М	М	S	Μ
CO3	S	М	М	S	М	S
CO4	S	М	М	S	М	S
CO5	S	S	М	M	М	Μ
CO6	S	М	М	М	S	Μ

Subject Name: Design and Analysis of Algorithms

No. of Hour per week: 4

Subject Code: CCA53

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2020-2021)	Design and Analysis of Algorithms	4	CO1 After studied unit-1, students can aware the basic of Algorithm ,performance analysis and randomized algorithm. CO2 After studied unit-2, Students can utilize Divide and conquer methods in our life CO3 After studied unit-3, Students can operate the Greedy methods Knapsack problem, Tree Vertex Splitting , for maximum incomes in Features. CO4 After studied unit-4, Students can find out the shortest paths using Dynamic programming. CO5 After studied unit-5, Students can search the banafits using Binary Trees Cranks 8 Ouepers
			problem.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	Μ	S	S
CO2	S	М	S	М	S	М
CO3	S	S	М	S	S	S
CO4	S	М	M	S	М	S
CO5	S	S	М	М	S	М

Subject Name: Mobile ApplicationsDevelopment-Lab

No. of Hour per week: 4

Subject Code: CPCA56

Credit: 3

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2020-2021)	Mobile Applications Development-Lab	3	CO1-Students can apply essential Android Programming concepts. CO2- Students can able to develop various Android applications related to layouts & rich uses interactive interfaces. Co3- Students they develop Android applications related to mobile related server-less database like SQLITE. CO4-Students can able to demonstrate their understanding of the fundamentals of Android Operating Systems. CO5-Students can ability to deploy software to mobile devices.

COs	PO1	PO2	PO3	PO4	PO5	PO6
C01	S	М	S	М	М	S
CO2	М	S	М	S	S	М
CO3	М	S	S	М	S	М
CO4	М	S	S	М	S	S
C05	М	S	S	S	S	S

Subject Name: Operating System-Lab

No. of Hour per week: 4

Subject Code: CPCA57

Credit: 3

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2020-2021)	Operating System-Lab	3	 CO1 – The students can know how data is transmitted and checking of errors. CO2 – Students can develop program for FIFO, LRU Optimal page replacement algorithms. CO3 – The Students can demonstrate the various operation of file system. CO4-Students can apply the scheduling algorithms for the given problem

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	M	М	М
CO2	S	S	М	S	М	S
CO3	S	S	М	М	М	М
CO4	S	S	М	М	М	S
CO5	S	S	М	М	М	М

Subject Name: Data Mining

Subject Code: CECA54A

Course Outcomes:

No. of Hour per week: 3

Credit: 3

Semester	Course Name	Course Credit	Course Outcomes
	A.Data Mining	3	CO1 – provide the foundation knowledge in multi
V			CO2 – classify types of meta data.
			CO3 - Remove redundancy and incomplete data from
(Regulation			the dataset using data preprocessing methods.
2020 2024)			CO4 – Students can explain the concept of cluster
2020-2021)		analysis.	
			CO5 – To Develop a data mining application for data
			analysis of the techniques.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	М	Μ
CO2	S	Μ	М	S	М	S
CO3	S	М	S	S	S	Μ
CO4	S	S	S	S	М	М
CO5	S	М	М	S	Μ	Μ

Subject Name: Software Engineering

No. of Hour per week: 3

Subject Code: : CSCA55

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
V (Regulation 2020-2021)	Software Engineering	2	CO1- Students can able to decompose the given project in various phases of a lifecycle. CO2- Students can able to choose appropriate process model depending on the user requirements. CO3-Students can able perform various life cycle activities like Analysis, Design, Implementation, Testing and Maintenance. CO4 -Students can able to know various processes used in all the phases of the product. CO5-Students can apply the knowledge, techniques, and skills in the development of a software product

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	М	S	М	М
CO2	S	S	S	М	М	S
CO3	S	М	М	S	М	М
CO4	S	S	М	М	S	S
CO5	S	М	М	S	М	М

SEMESTER-VI

Subject Name: Open Source Software

No. of Hour per week: 4

Subject Code: CCA61

Credit: 4

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2020-2021)	Open Source Software	4	 CO1 - The students can able to describe Introduction to Open Source Software, advantages, needs and examples of open source software, Hyper Text Markup Language, Lists, Tables, and Frames. CO2 - The students can able to describe Cascade Style Sheet, style sheet basics, style sheet properties. CO3 - The students can able to describe basis for open source operating system CO4 - The students can able to describe the JavaScript syntax, data types, variables, arrays, functions, control statements, objects. CO5 - The students can able to create simple database using DDL, DML commands. CO6 – The students can able to write PHP programs

COs	PO1	PO2	PO3	PO4	PO5	PO6
<u> </u>	s	s	М	s	М	М
	5	5	141	5	141	171
CO2	S	S	S	М	S	М
CO3	S	М	Μ	S	Μ	S
CO4	М	S	S	М	S	S
CO5	S	М	S	S	S	М
CO6	M	S	S	М	S	S

Subject Name: Python programming

No. of Hour per week: 4

Subject Code: CCA62

Credit: 4

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2020-2021)	Python programming	4	CO1-Thestudent will be able to write simple Python programs gives basic knowledge.CO2-The student will be able to understand control structures.CO3-The student will be able to create functions.CO4The student will be able to arrange elements through sorting.CO5-The student will be able to handle exception.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	М	М	S	М	М
CO2	S	S	S	М	Μ	М
CO3	S	Μ	М	S	М	S
CO4	М	S	М	М	S	S
CO5	S	Μ	М	М	S	М

Subject Name: Python programming Lab

No. of Hour per week: 4

Subject Code: CPCA66

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2020-2021)	Python programming Lab	2	 CO1. The student will be able to write a program using operators. CO2. The student will be able to develop a program using loops. CO3. The student will be able to implement program using Arrays. CO4. The student will be able to implement the concept of String functions. CO5. The student will be able to build application with basic expressions.

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	М	М	S	S
CO2	S	М	М	М	S	М
CO3	S	М	М	S	М	S
CO4	S	М	М	S	М	S
CO5	S	S	М	М	М	М

Subject Name: Open Source Programming - Lab

No. of Hour per week: 4

Subject Code: CPCA67

Credit: 2

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2020-2021)	Open Source Programming - Lab	2	CO1.The students can able to know features of OSS over Commercial s/w CO2. The students can able to develop simple shell programs using simple commands CO3.The students can able to apply the DDL and DML commands for their simple Applications with MySQL as backend. CO4. The students can able to classify the usage of different operators and functions in PHP. CO5. The students can implement the web pages for manipulating files

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	S	S
CO2	S	S	S	S	S	S
CO3	S	М	М	S	М	М
CO4	S	S	М	S	М	М
CO5	S	S	М	Μ	М	S

Subject Name: 2. Cryptography

No. of Hour per week: 3

Subject Code: CECA63B

Credit: 3

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2020-2021)	2. Cryptography	3	 CO1. The student will be able to know the security attack sand services. CO2. The student will be able to understand the concept of Encryption Standards. CO3. The student will be able to understand public key cryptographic algorithms. CO 4. The student will be able to learn the concept of hash functions. CO5. The student will be able to understand the Email security.

COs	PO1	PO2	PO3	PO4	PO5	PO6
C01	S	М	S	М	М	S
CO2	М	S	М	S	S	М
CO3	М	S	S	М	S	М
CO4	М	S	S	М	S	S
CO5	М	S	S	S	S	S

Subject Name: Mobile Computing No. of Hour per week: 3

Subject Code: CECA64C

Credit: 3

Course Outcomes:

Semester	Course Name	Course Credit	Course Outcomes
VI (Regulation 2020-2021)	Mobile Computing	3	CO1-Students can to understand the challenges of wireless communication and the solutions that is in use. CO2-Students can able to study about various types of wireless data networks, wireless protocols and wireless voice networks. CO3-Students can able to design and implement mobile applications. CO4- Students can able to comprehend wireless LAN and cellular systems CO5-Students can able to learn development of applications in mobile computing platform

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	M	M	M
CO2	S	S	М	S	М	S
СОЗ	S	S	М	М	М	М
CO4	S	S	М	М	М	S
CO5	S	S	М	М	М	М

Subject Name: Object Oriented analysis and design

No. of Hour per week: 3

Subject Code: CSCA65

Course Outcomes:

Credit: 2

Semester	Course Name	Course Credit	Course Outcomes	
	Object Oriented analysis and	2	CO1 - The students can able to Learn the UML analysis	
	design		and design diagrams.	
			CO2 - The students can able to Apply appropriate	
VI			object model and design patterns	
			CO3 - The students can able to Create object code	
(Regulation			from design Patterns	
, U			CO4 - The students can able to Learn to map design to	
2020-2021)			code, Compare and contrast various testing	
			techniques	
			CO5- The students can able to Design and implement	
			projects using OO concepts.	

COs	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	М	М
CO2	S	М	М	S	М	S
CO3	S	М	S	S	S	М
CO4	S	S	S	S	М	М
CO5	S	М	М	S	М	М