

(Affiliated to Visvesvaraya Technological University & Recognized by AICTE) AIRPORT ROAD, KENJAR, MANGALORE – 574 142

Phone: 0824 - 2254104 Website: www.sdc.ac.in, E-mail: sdit_kenjar@rediffmail.com

ENGINEERING MATHEMATICS-III

[As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018)

SEMESTER - III

Subject Code	17MAT31	IA Marks	40
Number of Lecture Hours/Week	04	Exam Marks	60
Total Number of Lecture Hours	50	Exam Hours	03

Course outcomes:

After Studying this course, students will be able to

- Know the use of periodic signals and Fourier series to analyze circuits and system communications.
- Explain the general linear system theory for continuous-time signals and digital signal processing using the Fourier Transform and z-transform.
- Employ appropriate numerical methods to solve algebraic and transcendental equations.
- Apply Green's Theorem, Divergence Theorem and Stokes' theorem in various applications in the field of electro-magnetic and gravitational fields and fluid flow problems.
- Determine the extremals of functionals and solve the simple problems of the calculus of variations.

ANALOG AND DIGITAL ELECTRONICS					
[As per Choice Based Credit System (CBCS) scheme]					
(Effective from the academic year 2017 -2018)					
SEMESTER - III					
Subject Code	17CS32	IA Marks	40		
Number of Lecture Hours/Week	Number of Lecture Hours/Week 04 Exam Marks 60				
Total Number of Lecture Hours 50 Exam Hours 03					
CREDITS - 04					

Course outcomes: After Studying this course, students will be able to

- Explain the operation of JFETs and MOSFETs, Operational Amplifier circuits and their application
- Explain Combinational Logic, Simplification Techniques using Karnaugh Maps, Quine McClusky technique.
- Demonstrate Operation of Decoders, Encoders, Multiplexers, Adders and Subtractors, working of Latches, Flip-Flops, Designing Registers, Counters, A/D and D/A Converters
- Design of Counters, Registers and A/D & D/A converters



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DATA STRUCTURES AND APPLICATIONS [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018) SEMESTER - III				
Subject Code 17CS33 IA Marks 40				
Number of Lecture Hours/Week 04 Exam Marks 60				
Total Number of Lecture Hours 50 Exam Hours 03				
	CREDIT	S - 04		

Course outcomes: After studying this course, students will be able to:

- Explain different types of data structures, operations and algorithms
- Apply searching and sorting operations on files
- Make use of stack, Queue, Lists, Trees and Graphs in problem solving.
- Develop all data structures in a high-level language for problem solving.



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COMPUTER ORGANIZATION					
[As per Cho	[As per Choice Based Credit System (CBCS) scheme]				
(Effective from the academic year 2017 -2018)					
SEMESTER - III					
Subject Code 17CS34 IA Marks 40					
Number of Lecture Hours/Week 04 Exam Marks 60					
Total Number of Lecture Hours 50 Exam Hours 03					

Course outcomes: After studying this course, students will be able to:

- Explain the basic organization of a computer system.
- Demonstrate functioning of different sub systems, such as processor, Input/output, and memory.
- Illustrate hardwired control and micro programmed control. pipelining, embedded and other computing systems.
- Build simple arithmetic and logical units.

UNIX AND SHELL PROGRAMMING					
[As per Choice Based Credit System (CBCS) scheme]					
(Effec	(Effective from the academic year 2017 -2018)				
SEMESTER – III					
Subject Code	17CS35	IA Marks	40		
Number of Lecture Hours/Week 03 Exam Marks 60					
Total Number of Lecture Hours 40 Exam Hours 03					
CREDITS - 03					

Course outcomes:

After studying this course, students will be able to:

- Explain UNIX system and use different commands.
- Compile Shell scripts for certain functions on different subsystems.
- Demonstrate use of editors and Perl script writing

Subject Code	17CS36	IA Marks	40
Number of Lecture Hours/Week	04	Exam Marks	60
Total Number of Lecture Hours	50	Exam Hours	03

Course outcomes: After studying this course, students will be able to:

- Make use of propositional and predicate logic in knowledge representation and truth verification.
- Demonstrate the application of discrete structures in different fields of computer science.
- Solve problems using recurrence relations and generating functions.
- Apply different mathematical proofs, techniques in proving theorems.
- Compare graphs, trees and their applications.

ANALOG AND DIG			RY
, <u> </u>	Based Credit System		
(Effective fro	m the academic yea	ır 2017 -2018)	
	SEMESTER - III		1100000
Laboratory Code	17CSL37	IA Marks	40
Number of Lecture Hours/Week	01I + 02P	Exam Marks -	60
Total Number of Lecture Hours	40	Exam Hours	DEVI INCTITUTE OF TECUNOLO



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Course outcomes:

On the completion of this laboratory course, the students will be able to:

- Demonstrate various Electronic Devices like Cathode ray Oscilloscope, Signal generators, Digital Trainer Kit, Multimeters and components like Resistors, Capacitors, Op amp and Integrated Circuit.
- Design and demonstrate various combinational logic circuits.
- Design and demonstrate various types of counters and Registers using Flip-flops
- Make use of simulation package to design circuits.
- Infer the working and implementation of ALU.

DATA STRUCTURES LABORATORY [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018) **SEMESTER - III Laboratory Code** 17CSL38 **IA Marks** 40 Number of Lecture Hours/Week 01I + 02P**Exam Marks 60 Total Number of Lecture Hours** 40 **Exam Hours** 03 **CREDITS - 02**

Descriptions (if any)

Implement all the experiments in C Language under Linux / Windows environment.

Course outcomes:

On the completion of this laboratory course, the students will be able to:

- Analyze and Compare various linear and non-linear data structures
- Demonstrate the working nature of different types of data structures and their applications
- Develop, analyze and evaluate the searching and sorting algorithms
- Choose the appropriate data structure for solving real world problems

Subject Code	17MAT41	IA Marks	40		
Number of Lecture Hours/Week	04	Exam Marks	60		
Total Number of Lecture Hours	50	Exam Hours	03		
CREDITS _ 04					

Course Outcomes: After studying this course, students will be able to:

- Solve first and second order ordinary differential equation arising in flow problems using single step and multistep numerical methods.
- Illustrate problems of potential theory, quantum mechanics and heat conduction by employing notions and properties of Bessel's functions and Legendre's polynomials.



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- Explain the concepts of analytic functions, residues, poles of complex potentials and describe conformal and Bilinear transformation arising in field theory and signal processing.
- Develop probability distribution of discrete, continuous random variables and joint probability distribution occurring in digital signal processing, information theory and design engineering.
- Demonstrate testing of hypothesis of sampling distributions and illustrate examples of Markov chains related to discrete parameter stochastic process.



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OBJECT ORIENTED CONCEPTS

[As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018)

SEMESTER - IV

SENIESTER - IV				
Subject Code	17CS42	IA Marks	40	
Number of Lecture Hours/Week	03	Exam Marks	60	
Total Number of Lecture Hours	40	Exam Hours	03	

Course Outcomes: After studying this course, students will be able to

- Explain the object-oriented concepts and JAVA.
- Develop computer programs to solve real world problems in Java.
- Develop simple GUI interfaces for a computer program to interact with users, and to **comprehend** the event-based GUI handling principles using Applets and swings.

DESIGN AND ANALYSIS OF ALGORITHMS

[As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018)

SEMESTER - IV

Subject Code	17CS43	IA Marks	40
Number of Lecture Hours/Week	04	Exam Marks	60
Total Number of Lecture Hours	50	Exam Hours	03

Course Outcomes: After studying this course, students will be able to

- Describe computational solution to well known problems like searching, sorting etc.
- Estimate the computational complexity of different algorithms.
- Develop an algorithm using appropriate design strategies for problem solving.

MICROPROCESSORS AND MICROCONTROLLERS

[As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018)

n the academic year 2017 -2018) SEMESTER _ IV

SEIVIESTER – IV				
Subject Code	17CS44	IA Marks	40	
Number of Lecture Hours/Week	04	Exam Marks	60	
Total Number of Lecture Hours	50	Exam Hours	03	

Course Outcomes: After studying this course, students will be able to

- Differentiate between microprocessors and microcontrollers
- Develop assembly language code to solve problems
- Explain interfacing of various devices to x86 family and ARM processor
- Demonstrate interrupt routines for interfacing devices

SOFTWARE ENGINEERING

[As per Choice Based Credit System (CBCS) scheme]

(Effective from the academic year 2017 -2018) SEMESTER – IV

Subject Code	17CS45	IA Marks	40
Number of Lecture Hours/Week	04	Exam Marks	60
Total Number of Lecture Hours	50	Exam Hours	03

Course Outcomes: After studying this course, students will be able to:

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- Design a software system, component, or process to meet desired needs within realistic constraints.
- Assess professional and ethical responsibility

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- Function on multi-disciplinary teams
- Make use of techniques, skills, and modern engineering tools necessary for engineering practice
- Comprehend software systems or parts of software systems.

DATA COMMUNICATION [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018) SEMESTER – IV

SENIESTER IV				
Subject Code	17CS46	IA Marks	40	
Number of Lecture Hours/Week	04	Exam Marks	60	
Total Number of Lecture Hours	50	Exam Hours	03	

Course Outcomes: After studying this course, students will be able to

- Illustrate basic computer network technology.
- Identify the different types of network topologies and protocols.
- List and explain the layers of the OSI model and TCP/IP model.
- Comprehend the different types of network devices and their functions within a network
- Demonstrate subnetting and routing mechanisms.

DESIGN AND ANALYSIS OF ALGORITHM LABORATORY

[As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018)

SEMESTER - IV

Subject Code	17CSL47	IA Marks	40
Number of Lecture Hours/Week	01 I + 02 P	Exam Marks	60
Total Number of Lecture Hours	40	Exam Hours	03

Course Outcomes: The students should be able to:

- Design algorithms using appropriate design techniques (brute-force, greedy, dynamic programming, etc.)
- Develop variety of algorithms such as sorting, graph related, combinatorial, etc., in a high level language.
- Analyze and compare the performance of algorithms using language features.
- Apply and implement learned algorithm design techniques and data structures to solve real-world problems.

MICROPROCESSOR AND MICROCONTROLLER LABORATORY

[As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018)

SEMESTER - IV

SEMESTER 1				
Subject Code	17CSL48	IA Marks	40	
Number of Lecture Hours/Week	01 I + 02 P	Exam Marks	60	
Total Number of Lecture Hours	40	Exam Hours	O3 Principal	

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Course Outcomes: After studying this course, students will be able to

- Summarize 80x86 instruction sets and comprehend the knowledge of how assembly language works.
- Design and develop assembly programs using 80x86 assembly language instructions
- Infer functioning of hardware devices and interfacing them to x86 family
- Choose processors for various kinds of applications.

MANAGEMENT AND ENTREPRENEURSHIP FOR IT INDUSTRY [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017-2018)

SEMESTER - V

Subject Code	17CS51	IA Marks	40
Number of Lecture Hours/Week	4	Exam Marks	60
Total Number of Lecture Hours	50	Exam Hours	03

Course outcomes: The students should be able to:

- Define management, organization, entrepreneur, planning, staffing, ERP and outline their importance in entrepreneurship
- Utilize the resources available effectively through ERP
- Make use of IPRs and institutional support in entrepreneurship

COMPUTER NETWORKS [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017-2018) SEMESTER – V					
Subject Code	17CS52	IA Marks	40		
Number of Lecture Hours/Week 4 Exam Marks 60					
Total Number of Lecture Hours	50	Exam Hours	03		

Course outcomes: The students should be able to:

- Explain principles of application layer protocols
- Outline transport layer services and infer UDP and TCP protocols
- Classify routers, IP and Routing Algorithms in network layer
- Explain the Wireless and Mobile Networks covering IEEE 802.11 Standard
- Define Multimedia Networking and Network Management

DATABASE MANAGEMENT SYSTEM [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017-2018) SEMESTER – V					
Subject Code	17CS53	IA Marks	40		
Number of Lecture Hours/Week	4	Exam Marks	60		
Total Number of Lecture Hours 50 Exam Hours 03					
Course outcomes: The students should be able to:					

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- Summarize the concepts of database objects; enforce integrity constraints on a database using RDBMS.
- Use Structured Query Language (SQL) for database manipulation.
- Design simple database systems
- Design code for some application to interact with databases.

AUTOMATA THEORY AND COMPUTABILITY [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017-2018) SEMESTER – V				
Subject Code	17CS54	IA Marks	40	
Number of Lecture Hours/Week	4	Exam Marks	60	
Total Number of Lecture Hours	50	Exam Hours	03	
Course outcomes: The students show	uld be able to:			
 □ Tell the core concepts in automata theory and Theory of Computation □ Explain how to translate between different models of Computation (e.g., Deterministic and Non-deterministic and Software models). □ Interpret Grammars and Automata (recognizers) for different language classes and become knowledgeable about restricted models of Computation (Regular, Context Free) and their relative powers. 				
 Develop skills in formal reasoning and reduction of a problem to a formal model, with an emphasis on semantic precision and conciseness. Classify a problem with respect to different models of Computation. 				

OBJECT ORIENTED MODELING AND DESIGN [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017-2018) SEMESTER – V						
Subject Code 17CS551 IA Marks 40						
Number of Lecture Hours/Week	Number of Lecture Hours/Week 3 Exam Marks 60					
Total Number of Lecture Hours 40 Exam Hours 03						
Course outcomes: The students should	Course outcomes: The students should be able to:					

- Describe the concepts of object-oriented and basic class modelling.
- Draw class diagrams, sequence diagrams and interaction diagrams to solve problems.
- Choose and apply a befitting design pattern for the given problem.

DOT NET FRAMEWORK FOR APPLICATION DEVELOPMENT [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018) SEMESTER – V					
Subject Code	17CS564	IA Marks	40		
Number of Lecture Hours/Week 3 Exam Marks 60					
Total Number of Lecture Hours 40 Exam Hours 03					
Course outcomes: The students sho	uld be able to:				

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- Build applications on Visual Studio .NET platform by understanding the syntax and semantics of C#
- Demonstrate Object Oriented Programming concepts in C# programming language
- Design custom interfaces for applications and leverage the available built-in interfaces in building complex applications.
- Illustrate the use of generics and collections in C#
- Compose queries to query in-memory data and define own operator behaviour

COMPUTER NETWORK LABORATORY [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017-2018) SEMESTER – V					
Subject Code	17CSL57	IA Marks	40		
Number of Lecture Hours/Week 01I + 02P Exam Marks 60					
Total Number of Lecture Hours 40 Exam Hours 03					
Course outcomes: The students sho	uld be able to:				

- - Analyze and Compare various networking protocols.
 - Demonstrate the working of different concepts of networking.
 - Implement and analyze networking protocols in NS2 / NS3

DBMS LABORATORY WITH MINI PROJECT [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017-2018) SEMESTER – V					
Subject Code	17CSL58	IA Marks	40		
Number of Lecture Hours/Week	01I + 02P	Exam Marks	60		
Total Number of Lecture Hours 40 Exam Hours 03					
Course outcomes: The students shou	ld be able to:				

- Use Structured Query Language (SQL) for database Creation and manipulation.
- Demonstrate the working of different concepts of DBMS
- Implement and test the project developed for an application.

CRYPTOGRAPHY, NETWORK SECURITY AND CYBER LAW [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018)

SEMESTER - VI

Subject Code	17CS61	IA Marks	40
Number of Lecture Hours/Week	4	Exam Marks	60
Total Number of Lecture Hours	50	Exam Hours	03

Course outcomes: The students should be able to:

- Discuss the cryptography and its need to various applications
- Design and Develop simple cryptography algorithms
- Understand the cyber security and need cyber Law

FILE STRUCTURES

[As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018)

SEMESTER - VI

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Subject Code	17IS62	IA Marks	40
Number of Lecture Hours/Week	4	Exam Marks	60
Total Number of Lecture Hours	50	Exam Hours	03

Course outcomes: The students should be able to:

- Discuss appropriate file structure for storage representation.
- Illustrate a suitable sorting technique to arrange the data.
- Explain indexing and hashing techniques for better performance to a given problem

COETWADE TECTINO					
SOFTWARE TESTING [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VI					
Subject Code 17IS63 IA Marks 40					
Number of Lecture Hours/Week 4 Exam Marks 60					
Total Number of Lecture Hours	50	Exam Hours	03		
Course outcomes: The students should be able to:					
Discuss test cases for any given problem					
• ☐ Compare the different testing techniques					
 □ Illustrate the problem into s 	uitable testing mode	el			

OPERATING SYSTEMS [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VI						
Subject Code	17CS64	IA Marks	40			
Number of Lecture Hours/Week	Number of Lecture Hours/Week 4 Exam Marks 60					
Total Number of Lecture Hours	50	Exam Hours	03			

☐ Understand the appropriate technique for the design of flow graph.

Course outcomes: The students should be able to:

- Demonstrate need for OS and different types of OS
- Discuss suitable techniques for management of different resources
- Illustrate processor, memory, storage and file system commands
- Explain the different concepts of OS in platform of usage through case studies

DATA MINING AND DATA WAREHOUSING [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VI					
Subject Code	17CS651	IA Marks	40		
Number of Lecture Hours/Week 3 Exam Marks 60					
Total Number of Lecture Hours 40 Exam Hours 03					
Course outcomes: The students should be able to:					

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- Understands data mining problems and implement the data warehouse
- Demonstrate the association rules for a given data pattern.
- Discuss between classification and clustering solution.

PYTHON APPLICATION PROGRAMMING [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018)

SEVIESTER – VI				
Subject Code	17CS664	IA Marks	40	
Number of Lecture Hours/Week	3	Exam Marks	60	
Total Number of Lecture Hours	40	Exam Hours	03	

Course outcomes: The students should be able to:

- Understand Python syntax and semantics and be fluent in the use of Python flow control and functions.
- Demonstrate proficiency in handling Strings and File Systems.
- Implement Python Programs using core data structures like Lists, Dictionaries and use Regular Expressions.
- Interpret the concepts of Object-Oriented Programming as used in Python.
- Implement exemplary applications related to Network Programming, Web Services and Databases in Python.



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SOFTWARE TESTING LABORATORY [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018)				
Subject Code	SEMESTER – VI 17ISL67	IA Marks	40	
Number of Lecture Hours/Week	01I + 02P	Exam Marks	60	
Total Number of Lecture Hours	40	Exam Hours	03	
	CREDITS – 02			
Course outcomes: The students should	ld be able to:			
 Understand requirements for the given problem □ Design and implement the solution for given problem in any programming language(C,C++,JAVA) 				
● □ Discuss test cases for any given problem				
● □ Apply the appropriate technique for the design of flow graph.				
● ☐ Create appropriate document for the software artefact.				

FILE STRUCTURES LABORATORY WITH MINI PROJECT [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VI					
Subject Code	17ISL68	IA Marks	40		
Number of Lecture Hours/Week	01I + 02P	Exam Marks	60		
Total Number of Lecture Hours 40 Exam Hours 03					
Course outcomes: The students should be able to:					
Implement operations related to files					

- ☐ Apply the concepts of file system to produce the given application.
- ☐ Evaluate performance of various file systems on given parameters.

WEB TECHNOLOGY AND ITS APPLICATIONS [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018)

Subject Code	17CS71	IA Marks	40	
Number of Lecture Hours/Week	04	Exam Marks	60	
Total Number of Lecture Hours	50	Exam Hours	03	
CREDITS – 04				

SEMESTER - VII

Course Outcomes: After studying this course, students will be able to

- Define HTML and CSS syntax and semantics to build web pages.
- Understand the concepts of Construct, visually format tables and forms using HTML using CSS
- · Develop Client-Side Scripts using JavaScript and Server-Side Scripts using PHP to generate and display the contents dynamically.
- List the principles of object oriented development using PHP
- Illustrate JavaScript frameworks like jQuery and Backbone which facilitates

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Course outcomes: The students should be able to:

SOFTWARE ARCHITECTURE AND DESIGN PATTERNS [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VII					
Subject Code 17IS72 IA Marks 40					
Number of Lecture Hours/Week 4 Exam Marks 60					
Total Number of Lecture Hours	50	Exam Hours	03		

Course outcomes: The students should be able to:

- Design and implement codes with higher performance and lower complexity
- Illustrate the code qualities needed to keep code flexible
- Define core design principles and understand the importance to assess the quality of a design with respect to these principles.
- List the capabilities of applying these principles in the design of object oriented systems.
- Demonstrate an understanding of a range of design patterns. Be capable of comprehending a design presented using this vocabulary.
- Recall the suitable select and apply patterns in specific contexts

MACHINE LEARNING

[As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018)

SEMESTER - VII

Subject Code	17CS73	IA Marks	40
Number of Lecture Hours/Week	03	Exam Marks	60
Total Number of Lecture Hours	50	Exam Hours	03
Total Number of Lecture Hours	50	Exam Hours	

Course Outcomes: After studying this course, students will be able to

- Recall the problems for machine learning. And select the either supervised, unsupersvised or reinforcement learning.
- Understand theory of probability and statistics related to machine learning
- Illustrate concept learning, ANN, Bayes classifier, k nearest neighbor, Q,

UNIX SYSTEM PROGRAMMING [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER - VII Subject Code 17CS744 IA Marks 40 Number of Lecture Hours/Week 3 Exam Marks 60 Total Number of Lecture Hours 40 Exam Hours 03 CREDITS - 03

Course outcomes: The students should be able to:

- Understand the working of Unix Systems
- Illustrate the application/service over a UNIX system.



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STORAGE AREA NETWORKS [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VII					
Subject Code	17CS754	IA Marks	40		
Number of Lecture Hours/Week 3 Exam Marks 60					
Total Number of Lecture Hours 40 Exam Hours 03					
CREDITS – 03					

Course outcomes: The students should be able to:

- Identify key challenges in managing information and analyze different storage networking technologies and virtualization
- Explain components and the implementation of NAS
- Describe CAS architecture and types of archives and forms of virtualization
- Illustrate the storage infrastructure and management activities

MACHINE LEARNING LABORATORY [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VII						
Subject Code	17CSL76	IA Marks	40			
Number of Lecture Hours/Week	Number of Lecture Hours/Week 01I + 02P Exam Marks 60					
Total Number of Lecture Hours 40 Exam Hours 03						
CREDITS – 02						

Course outcomes: The students should be able to:

- 1. Understand the implementation procedures for the machine learning algorithms.
- 2. Design Java/Python programs for various Learning algorithms.
- 3. Apply appropriate data sets to the Machine Learning algorithms.
- 4. Identify and apply Machine Learning algorithms to solve real world problems.

WEB TECHNOLOGY LABORATORY WITH MINI PROJECT [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER - VII Subject Code 17CSL77 IA Marks 40 Number of Lecture Hours/Week 01I + 02PExam Marks 60 Total Number of Lecture Hours 40 Exam Hours 03

Course outcomes: The students should be able to:

- Design and develop dynamic web pages with good aesthetic sense of designing and latest technical know-how's.
- Understand the concepts of Web Application Terminologies, Internet Tools other web services.
- Recall how to link and publish web sites

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INTERNET OF THINGS TECHNOLOGY [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VIII				
Subject Code	17CS81	IA Marks	40	
Number of Lecture Hours/Week	04	Exam Marks	60	
Total Number of Lecture Hours	50	Exam Hours	03	

Course Outcomes: After studying this course, students will be able to

- Interpret the impact and challenges posed by IoT networks leading to new architectural models.
- Compare and contrast the deployment of smart objects and the technologies to connect them to network.
- Appraise the role of IoT protocols for efficient network communication.
- Elaborate the need for Data Analytics and Security in IoT.
- Illustrate different sensor technologies for sensing real world entities and identify the applications of IoT in Industry.

BIG DATA ANALYTICS [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VIII				
Subject Code	17CS82	IA Marks	40	
Number of Lecture Hours/Week	4	Exam Marks	60	
Total Number of Lecture Hours	50	Exam Hours	03	

Course outcomes: The students should be able to:

- Explain the concepts of HDFS and MapReduce framework
- Investigate Hadoop related tools for Big Data Analytics and perform basic Hadoop Administration
- Recognize the role of Business Intelligence, Data warehousing and Visualization in decision making
- Infer the importance of core data mining techniques for data analytics
- Compare and contrast different Text Mining Techniques



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NETWORK MANAGEMENT [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 - 2018) SEMESTER – VIII				
Subject Code	17CS833	IA Marks	40	
Number of Lecture Hours/Week	3	Exam Marks	60	
Total Number of Lecture Hours	40	Exam Hours	03	

Course outcomes: The students should be able to:

- Analyze the issues and challenges pertaining to management of emerging network technologies such as wired/wireless networks and high-speed internets.
- Apply network management standards to manage practical networks
- Formulate possible approaches for managing OSI network model.
- Infer SNMP for managing the network
- Infer RMON for monitoring the behavior of the network
- Identify the various components of network and formulate the scheme for the managing them

INTERNSHIP / PROFESSIONAL PRACTISE [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018)			
SEMESTER – VIII			
Subject Code	17IS84	IA Marks	50
Duration	4 weeks	Exam Marks	50
		Exam Hours	03

Course outcomes: The students should be able to:

- 1. Adapt easily to the industry environment
- 2. Take part in team work
- 3. Make use of modern tools
- 4. Decide upon project planning and financing.
- 5. Adapt ethical values.
- 6. Motivate for lifelong learning



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PROJECT WORK PHASE II [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018) SEMESTER – VIII				
Subject Code	17ISP85	IA Marks	100	
Number of Lecture Hours/Week	06	Exam Marks	100	
Total Number of Lecture Hours		Exam Hours	03	
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Course outcomes: The students should be able to:

- 1. Identify a issue and derive problem related to society, environment, economics, energy and technology
- 2. Formulate and Analyze the problem and determine the scope of the solution chosen
- 3. Determine, dissect, and estimate the parameters, required in the solution.
- 4. Evaluate the solution by considering the standard data / Objective function and by using appropriate performance metrics.
- 5. Compile the report and take part in present / publishing the finding in a reputed conference / publications
- 6. Attempt to obtain ownership of the solution / product developed.

SEMINAR [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2017 -2018)			
SEMESTER – VIII			
Subject Code	17ISS86	IA Marks	100
Number of Lecture Hours/Week	04	Exam Marks	
Total Number of Lecture Hours		Exam Hours	

Course outcomes: The students should be able to:

- Survey the changes in the technologies relevant to the topic selected
- Discuss the technology and interpret the impact on the society, environment and domain.
- Compile report of the study and present to the audience, following the ethics.