

18MIT201 – PHP PROGRAMMING**Course Objectives**

- To introduce the importance of PHP in web page design.
- To understand the features like functions, forms in PHP.
- To understand Files, OOPs concepts , Cookies, Sessions and Data base.
- To handle requests and draw images on the server with AJAX.

Semester	II
Credit	4
Max. Marks	CIA -30 CE -70 TOT =100

UNIT I

11

PHP: Introduction – Essential PHP – Operators and Flow control: Working with math, assignment, increment and decrement, string, bitwise, execution, comparison and logical operators, Working with loops – Strings and Arrays.

UNIT II

10

PHP Functions and Browser handling power: Creating Functions, passing functions, passing arrays, pass by reference, default arguments, returning data, arrays, lists, references, accessing global data, working with static variables, PHP conditional functions, variable functions, nesting functions – Reading data in web pages: Handling text fields, areas, check boxes, radio buttons, list boxes, password controls, hidden controls, image maps, file uploads, buttons – PHP Browser handling power.

UNIT III

12

Working with Object oriented programming and File handling: Object oriented programming: creating classes, objects, setting access to properties and methods, using constructors and destructors, inheritance, overriding and overloading methods, auto loading classes – File Handling: open, read, close, parsing files, copy, delete, write and append files.

UNIT IV

11

Working with databases and setting sessions, cookies and FTP: Databases: creating, accessing, updating, inserting, deleting and sorting databases – Setting sessions, cookies and FTP: setting , reading, deleting cookies, working, downloading, uploading, deleting, creating and removing directories with FTP.

UNIT V

11

AJAX and Drawing Images on the server: Ajax: Handling AJAX requests, downloading images using AJAX, downloading javascript with AJAX– Drawing images on the server: creating and displaying images, drawing lines, rectangles, ellipse, arcs, polygons, figures, individual pixels, text, virtual text, working with image files, tiling images, copying images.

Total Periods:55**TEXT BOOK**

- 1.“The Complete Reference PHP Covers PHP 5.2“, Steven Holzner, Tata McGraw-Hill Edition 2008.
(UNIT I - Chapter 1,2,3 UNIT II - Chapter 4,5,6 UNIT III - Chapter 7,9
UNIT IV - Chapter 10,11 UNIT V Chapter 12,14)

REFERENCES

1. PHP6 and MySQL6 Bible – Steve Svehring
2. PHP Programming Solutions – Vickram Viswani

Course Outcome

- Utilizing the basic concept of statements and arrays.
- Implement functions and browser handling power of PHP.
- Imparting Database applications, File handling, Cookies in the webpage.
- Design and Implement Interactive Web Site using Forms, OOPS and AJAX.
- Create easy communication with the servers using AJAX, Drawing images on server.

Prepared by
(Prof. A. Sunil Samson)

Approved by
(Dr N Sumathi)

18MIT202 CORE VI - MOBILE APPLICATION DEVELOPMENT

Semester	II
Credit	4
Paper Types	Core
Max. Marks	CIA -30 CE -70 TOT -100

AIM

This course gives the ability to send and receive data across the cellular networks efficiently. Better understanding of Operating Systems such as Android and iOS used in Mobile data communication for developing Mobile applications that allows users to transmit data from remote locations to other remote or fixed locations effectively.

COURSE OBJECTIVES

- Understand mobile applications and to solve ,analyze real world problems
- Develop the requirements of the software and efficient product designs.
- work with values & social concern bridging the digital divide and to meet the current trends
- Awareness on the life-long learning, ethics and codes of professional practice.

PREREQUISITE

Students should have a basic understanding of any of the programming languages, especially Objective C programming language that helps to learn the concepts of iOS programming faster. It's needed to have basic understanding on Java programming to learn Android application development.

UNIT-I INTRODUCTION**12**

Preliminary Considerations – Cost of Development – Importance of Mobile Strategies in Business World – Mobile Web Presence – Mobile Applications – Marketing – Web Services for Mobile Devices – Creating Example Web Service _ Debugging Web Service

UNIT-II MOBILE USER INTERFACE DESIGN**12**

Effective Use of Screen Real Estate – Understanding Mobile Application Users – Understanding Mobile Information Design – Understanding Mobile Platforms – Using the Tools for Mobile Interface Design – Choosing a Mobile Web Option – Adaptive Mobile Website – Mobile Web Applications with HTML 5

UNIT-III ANDROID APPLICATION DEVELOPMENT**12**

Getting to know the Android User Interfaces – Designing Your User interface using Views – Displaying Pictures and Menus with Views – Using Image views to Display pictures – Using menus with views – Data Persistence – Saving and loading user performances - Persisting data to files – Creating and using Data bases

UNIT-IV CONTENT PROVIDERS, MESSAGING, NETWORKING, LOCATION**12**

Content providers using a content provider-creating content providers - SMS Messaging, Sending E-mail – Networking – Downloading Binary Data, Text Files- Accessing Web Services – Performing Asynchronous Calls – Location Based Services – Displaying Maps – Getting Location Data – Creating your own services – Communicating between a service and an activity – Binding activities to Services

UNIT– IOS ,WINDOWS AND MONO TOUCH FOR ANDROID

12

Getting started with iOS – iOS Project – Debugging iOS Apps – Objective C Basics – Hello Word App – Building the derby app in iOS – Windows Phone 7 Project – Building Derby App in Windows Phone 7- The Mono Framework-Tools for Android-Mono develop-Debugging-Mono Projects-Building the Derby app with Mono-Mono touch Features

Total Hours: 60

COURSE OUTCOMES

After successful completion of this course, the student will be able to:

- Apply foundational mobile application concepts
- Identify, formulate and solve real world hardware and software problems.
- To work with database technologies, iOS apps
- Examine mobile application market and web services for various mobile devices
- Able to build and develop tools for Android,iOS

TEXT BOOKS

1. Jeff McWherter and Scott Gowell,” Professional Mobile Application Development”, Wrox 2015.
2. Wei – Meng Lee, “Beginning Android Application Development”, Wiley 2011

REFERENCE BOOK

1. Charlie Collins, Michael Galpin and Matthias Kappler, “Android in Practice”, Dream Tech. 2012.

18MIT203 -DATAMINING AND WAREHOUSING**Course Objectives**

- To Understand Data mining principles ,techniques and Introduce DM as a cutting edge business intelligence
- To expose the students to the concepts of Data warehousing Architecture ,OLAP and Implementation
- To learn to use association rule mining for handling large data
- To be clear with the concept of classification for the retrieval purposes
- To study the clustering techniques in details for better organization and retrieval of data
- To identify Business applications and Trends of Data mining

Semester	II
Credit	4
Max. Marks	CIA -30 CE -70 TOT =100

UNIT-I**11**

Data Mining: What motivated Data Mining?why it is important- What is Data Mining - Kind of Data – Data Mining Functionalities – Classification of Data Mining systems- Data Mining Task Primitives-Integration of a Data Mining system with a Database or Data Warehouse System **Data Preprocessing:** Why Preprocess the Data – Data Cleaning – Data Integration and Transformation – Data Reduction

UNIT-II**11**

Data Warehouse and OLAP Technology: What is Data Warehouse – A Multidimensional Data Model – From Tables and spreadsheets to Data Cubes-Stars, Snowflakes and Fact Constellations-Examples -Data Warehouse Architecture – From Data Warehousing to Data Mining.

UNIT-III**11**

Data Cube Computation and Data Generalization: Efficient Methods for Data Cube Computation -Attribute Oriented Induction-An Alternate Method for data Generalization and Concept Description

UNIT-IV**11**

Mining FrequentPatterns,Associations:Basic Concepts and a Road map-Efficient and scalable Frequent Itemset Mining Methods-The Apriori Algorithm-Generating Association Rules from Frequents Itemsets-Mining Various kinds of Association Rules.

Classification and Prediction: What is Classification and Prediction – Classification by Decision Tree Induction–BayesianClassification-Classification by back Propagation- Associative Classification:Classification by Association Rule Analysis- Prediction

UNIT-V**11**

Cluster Analysis: Definition – Types of Data – A Categorization of Major Clustering Methods – Partitioning Methods – Hierarchical Methods – Density Based Methods. **Applications and Trends in Data Mining:** Data Mining Applications - Trends in data Mining.

Total Periods: 55**Course Outcomes**

- Store voluminous data for online processing
- Preprocess the data for mining applications
- Apply the association rules for mining the data
- Analyze various classification techniques
- Cluster the high dimensional data for better organization of the data
- Discover the knowledge imbibed in the high dimensional system

Text Book

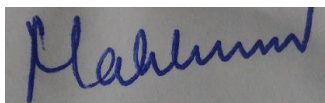
1. Jiawei Han and Micheline Kamber „Data Mining Concepts and Techniques“, Second Edition, Morgan Kaufmann Publishers 2006

UNIT I Chapter 1,2 UNIT II Chapter 3 UNIT III Chapter 4

UNIT IV Chapter 5,6 UNIT V Chapter 7,11

Reference Books

1. Pieter Adriaans, Dolf Zantinge, “Data Mining”, Pearson Education, 1998.
2. Sam Anahory and Dennis Murray, “Data Warehousing in the Real World “ Pearson Education, 1997.



Prepared by
(Prof S B Mahalakshmi)



Approved by
(Dr N Sumathi)

18MIT204 – PHP Programming Lab

Course Objective:

- To understand various methods to handle string and array.
- To be aware of the OOPs concepts in PHP.
- To know the file handling techniques.
- To create database and to manipulate data.
- To be familiar with the graphics methods of PHP

Semester	II
Credit	4
Max. Marks	CIA -30 CE -70 TOT =100

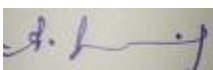
Exercises

1. Write a PHP Program for associative array.
2. Write a PHP Program for String handling
3. Write a PHP Program to use various Functions of PHP.
4. Write a PHP Program to read form data.
5. Write a PHP Program to implement Inheritance.
6. Write a PHP Program to implement Overloading and overriding
7. Write a PHP Program for File handling.
8. Develop PHP Program to Create a Database and to Insert and Delete data.
9. Write a PHP Program to implement cookies.
10. Write a PHP Program for Drawing images on a web page.

Course Outcomes:

- Able to handle array and string handling methods.
- Implement OOPs Concepts in an application.
- Create a database in MYSQL and to manipulate data into it.
- Able to store information about client’s session using Cookies.
- Design an interactive webpage with graphical techniques.

Total-55 hours



Prepared by
(Prof. A. Sunil Samson)



Approved by
(Dr N Sumathi)

18MIT205 PRACTICAL-IV MOBILE APPLICATION DEVELOPMENT LAB

Semester	II
Credit	4
Max. Marks	CIA -30 CE -70 TOT =100

COURSE OBJECTIVES

- Know the components and structure of mobile application development frameworks for android and windows OS based mobiles.
- Understand how to work with various mobile application development frameworks
- .Learn the basic and important design concepts and issues of development of mobile applications.
- Understand the capabilities and limitations of mobile devices.

LIST OF EXPERIMENTS

1. Construct an application that uses GUI components, Font and Colors
2. Create an application that uses Layout Managers and event listeners.
3. Develop a native calculator application.
4. Write an application that draws basic graphical primitives on the screen.
5. Develop an application that makes use of database.
6. Illustrate by creating an application that uses RSS Feed.
7. Implement an application that implements Multi-threading
8. Develop a native application that uses GPS location information.
9. Write a mobile application that creates alarm clock
10. Implement an alert upon receiving messages in an application.

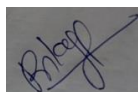
Course Outcomes:

Having successfully completed this course, the student will be able to:

- apply foundational mobile application concepts
- understand, identify, formulate and solve real world hardware and software problems.
- to work with database and iOS apps
- examine mobile application and web services for various mobile devices

Total Hours: 55

Prepared By



(R Nagarajan)

Approved By



(Dr G Maria Priscilla)

18MIT206 - MINI PROJECT

Aim: To lay foundation for the Major Project

Course Objectives:

- To transfer the theoretical knowledge studied so far in to application soft wares
- To gain experience in organization and implementation of a small project and thus acquire the necessary confidence to carry out main project
- To understand and gain the knowledge of software engineering practices
- To document based on the standards

Semester	II
Credit	3
Max. Marks	CIA -80 CE -20 TOT =100

GUIDE LINES FOR MINI PROJECT

1. Each student should carry out individually on mini project and it may be a case study using a software package that they have learnt or may be an implementation of an application using the language they have known.
2. The Project has to be done in an organization and a certificate has to be obtained for the same from the organization/concerned.
3. It should be compulsorily done only under the supervision of the staff concerned.
4. The project has to be done in any area relating to computer field.
5. The students are requested to present himself/herself for a Review for two times which will be considered for internal evaluation.
6. The students may be instructed to follow the guidelines with regard to preparation of Project Report writing.
7. Comprehensive examination (Viva Voce) will be conducted with Internal and one External Examiner which carries maximum of **80** marks for Project Evaluation and **20** marks for viva.

Course Outcomes:

After successful completion of this course student will be able to:

- Develop skill to create practical solutions to identified problem.
- Ability to use software lifecycle model and other artifacts appropriate for problem
- Identify and master tools required for the project
- Plan and work systematically towards completion of a project work
- Develop the ability to explain and defend their work in front of an evaluation panel



Prepared by
(Dr N Sumathi)



Approved by
(Dr N Sumathi)

DEPARTMENT OF INFORMATION TECHNOLOGY

SRI RAMAKRISHNA COLLEGE OF ARTS AND SCIENCE, AUTONOMOUS
(FORMERLY SNR SONS COLLEGE)
COIMBATORE – 641006

GUIDELINES FOR MINI-PROJECT REPORT PREPARATION M.Sc., IT 2018 BATCH & ONWARDS

General rules

- Students are expected to undergo project work individually and submit individual project report.
- Project reports should be typed / printed in double space using A4 size Bond sheets with a left margin at column 10 and a right margin at column 75.
- A page should not contain more than 25 lines.
- Wrapper should be **SILVER COLOUR, HARD BINDING** and printing of wrappers should be done uniformly.
- The source code should be loaded and made readily available in the system during Viva-Voce examination for verification by the examiners.
- Table of contents should be in the specified format.
- A **Certificate from the organization** where the project is undertaken by the student should be obtained and copies should be duly enclosed in the project report.
- **Title Confirmation** and **Confirmation letter** from the concern where the student wish to undergo the project should be submitted on or before < **DATE** > to the Guide and HOD, Information Technology, Sri Ramakrishna College of Arts and Science, Coimbatore.
- The tenure of the project is from <From **DATE**> to <**To DATE**>.
- Guide will be selected by the candidate by picking the lot

REVIEW SCHEDULE:

I Review	:	< DATE >
II Review	:	< DATE >
III Review	:	< DATE >
Report Submission	:	< DATE >

The students are expected to report to their respective guides at least one week before the submission of the report and make all possible corrections in their reports from guides before binding the report.

- The students should submit three copies of project report (Dept, Library, Student)

Project Report Format:

The format of the report is as follows:

1. Wrapper (Annexure I)
2. Copy of the Wrapper
3. Certificate from the Department (Annexure II)
4. Declaration by the student (Annexure III)
5. Certificate from the organization
6. Acknowledgement
7. Table of contents (Annexure IV)

GUIDELINES FOR PROJECT REVIEWS AND PRESENTATIONS

Documents for project presentation	Applicable for
Title	First Review
Abstract	
Introduction	
Existing System	
Proposed System	
Modules Split up	
Architectural Design for Proposed System	Second Review
Table Design	
DFD / UML diagram	
Implementation	Third Review
Testing	

Class Tutor

(Name and Signature)

H. O. D

(Name and Signature)

Elective I–18MITE01 -SOFTWARE PROJECT MANAGEMENT

Semester	II
Credit	4
Max. Marks	CIA -30 CE -70 TOT =100

COURSE OBJECTIVES

- To introduce what is Project, Plans and its methods.
- To study to manage project at each stage of System Development Life Cycle.
- To understand various risks and about overcoming them with risk management.
- To study about managing people, resource allocation to a project.
- To introduce concept of graphical scheduling for a project.

UNIT–I**11**

Introducton- Software Project Vs other Projects – Contract and Technical Project management – Acitivities – Plans and Methodologies –Categorizing – Management – Problems – Objectives – Stake Holders – Requirement Specification – Management Control.Stepwise Project Planning. Project Evaluation – Strategic and Technical Assessment – Cost Benefit Evaluation Techniques – Risk Evaluation.

UNIT–II**11**

Selection of an appropriate project approach – Choosing Technologies – Technical Plan Content List – Process Models - Waterfall, V Process and Spiral Models – Software Prototyping – Incremental Delivery – Dynamic Systems – Iterative Processes Selecting. Software Effort Estimation – Estimates – Problems – Basics – Estimation Techniques – Expert Judgment – Estimating by Analogy – Albrecht Function Point Analysis – Function Point Mark II – Procedural code – Oriented Approach – COCOMO Activity Planning – Objectives – Schedules – Activities –Sequencing and Scheduling – Network Planning Model – Formulating – Time Dimension – Forward and Backward pass – Critical Path – Activity Float – Shortening – Critical Activities.

UNIT–III**11**

Risk Management – Nature of risk – Types of risk – Managing risk – Hazard Identification – Analysis – Risk planning and control – Evaluating risks. Resource Allocation – Nature of Resources – Identifying requirements – Scheduling – Creating Critical paths- Counting cost – Publishing Schedule – Cost Schedules – Sequencing. Monitoring and Control – Creating Framework – Collecting data – Visualizing progress – Cost monitoring – Prioritizing Monitoring – Change control

UNIT–IV**11**

Managing Contracts – Types – Stages – Typical terms – Contract Management – Acceptance. Managing people and organizing teams – Understanding and Organizational Behaviour – Selecting – Instruction best methods – Motivation – Oldham-Hackman model – Working in Groups – Becoming a team – Decision making – Leadership – Organizational Structures – Stress – Health and Safety. Software Quality – The place – Importance – Defining – ISO 9126 – Quality measures – Product versus process – External standards – Techniques – Quality plans. Small projects – Introduction – Problems with student projects – Content of a project plan

UNIT–V**11**

PRINCE 2 – Case Study – Introduction – Components – Planning technique – Project Organization – Stages – Procedures – Directing – Starting – Initiating – Controlling a Stage – Managing product Delivery – Managing Stage Boundaries – Closing a project.

Total Periods: 55

Course Outcome

- Analyzing Organizational needs and Select most effective Software Development Model
- Demonstrate Strong Organizational Leadership, team and Stake Holders.
- Training Employee and Controlling Project Deliverables.
- Proactive behavior in Project Development and Completion.
- Analyze a project that Addresses Real World Management Challenges.

Textbook

1. Bob Hughes and Mike Cotterell, “Software Project Management “, Tata McGraw-Hill, Third Edition, 2008.

UNIT I	Chapter 1, 2, 3	UNIT II	Chapter 4, 5, 6
UNIT III	Chapter 7, 8, 9	UNIT IV	Chapter 10, 11, 12, 13
UNIT V	APPENDIX A		

Reference Book

1. G.P. Sudakar “Elements of Software Project Management”, PHI, 2010.



Prepared by
(Prof. A. Sunil Samson)

N. Sumathi

Approved by
(Dr N Sumathi)

Elective I –18MITE02 -SOFT COMPUTING

Semester	II
Credit	4
Max. Marks	CIA -30 CE -70 TOT =100

Course Objectives

- To introduce the ideas of neural networks , fuzzy logic and genetic algorithm.
- To study the features of Neural networks, architectures and its applications.
- To study various fuzzy systems and their concepts.
- To introduce the concept of genetic algorithm and its applications.
- To introduce the components and hypothesis of Genetic algorithm.

UNIT-I**11**

Fundamentals of Neural Networks: Basic concept of Neural Networks – Human Brain – Model of Artificial Neuron- Neural Network Architectures-Characteristics of Neural Networks-Learning Methods-Taxonomy of Neural Network Architecture-History of Neural Network Research-Early Neural Network Architecture-Some Application domains.

UNIT-II**11**

Backpropagation Networks: Architecture of a Backpropagation Network – backpropagation Learning-Illustration - Applications –Effect of tuning parameters of the Backpropagation Neural Network- Selection of various parameters in BPN-Variations of standard Backpropagation Algorithm.

UNIT-III**11**

Fuzzy set theory- Fuzzy Versus Crisp – Crisp sets – Fuzzy sets – Crisp Relations-Fuzzy Relations.

UNIT-IV**11**

Fuzzy systems: Crisp logic – Predicate logic –Fuzzy Logic –Fuzzy rule based system – Defuzzification Methods.

UNIT-V**11**

Fundamentals of Genetic Algorithms: Basic concepts - Creation of offsprings - Working principle – Encoding – Fitness function – Reproduction.

Genetic Modeling: Cross over – Inversion and deletion – Mutation operator – Bitwise operators - Bitwise operators in GA - Generation cycle - Convergence of genetic algorithm – Applications.

Total Periods: 55**Course Outcome**

- Understand various neural network architectures.
- Understand perceptron and propagation networks.
- Understand fuzzy logic components.
- Apply fuzzy logic and reasoning to handle uncertain problems
- Analyze genetic algorithm and their applications.

Textbook

1. S. Rajasekaran , G. A.Vijayalakshmi Pai, “ Neural Networks, Fuzzy logic and Genetic Algorithms Synthesis and Applications”, PHI , 2004.

UNIT I Chapter 2 **UNIT II** Chapter 3 **UNIT III** Chapter 6

UNIT IV Chapter 7 **UNIT V** Chapter 8,9

Reference Books

1. S.N. Sivanandan and S.N. Deepa, Principles of Soft Computing, Wiley India, 2007. ISBN: 10: 81-265-1075-7.

2. J.S.R.Jang, C.T.Sun and E.Mizutani, Neuro-Fuzzy and Soft Computing, PHI, 2004, Pearson Education. ,NewDelhi,2014.



Prepared by
(Dr.N.Sumathi)



Approved by
(Dr.N.Sumathi)

ELECTIVE- I : 18MITE03- DISTRIBUTED COMPUTING

Semester	II
Credit	4
Max. Marks	CIA -25 CE -75 TOT =100

Course Objectives

- Introduce foundations of Distributed Computing.
- Introduce about the networking and Operating system concept.
- Introduce the idea of peer to peer services and file system.
- To be aware of transaction models and deadlocks.
- Understand the issues involved in studying process and resource management.

UNIT –I

11

Characterization of Distributed Systems: Introduction - Examples of distributed systems – Resource sharing and the Web – Challenges. System Models: Introduction – Architectural models – Fundamental models.

UNIT – II

11

Networking and Internetworking: Introduction – Types of network – Network principles. Interprocess Communication: Introduction – The API for the Internet Protocols – External data representation and marshalling. Operating System Support: The Operating system layer – Protection – Processes and threads – Operating system architecture.

UNIT – III

11

Security: Overview of security techniques – Cryptographic algorithms – Digital signatures. Peer – to – peer Systems: Napster and its legacy – peer – to – peer middleware - Routing overlays. Time and Global States: Clocks, events and process states – Synchronizing physical clocks – Logical time and logical clocks – Global States.

UNIT –IV

11

Transactions and Concurrency Control: Transactions – Nested transactions – Locks – Optimistic concurrency control – Timestamp ordering. Distributed Transactions: Atomic commit protocols – Concurrency control in distributed transactions – Distributed deadlocks.

UNIT – V

11

Replication: System model and group communication – Fault-tolerant services – Transactions with replicated data. Web Services: Web services – Service descriptions and IDL for web services – A directory service for use with web services – XML security. CORBA case study: Introduction – CORBA RMI – CORBA services.

Total Periods : 55

Course Outcome

- Understand the concept of Distributed Computing.
- Remember network protocols and operating systems.
- An ability to apply cryptographic algorithms, clocks and events for problem solving.
- Identify and explain about the transaction models and deadlocks.
- Able to identify the replications in data communications

Text Book

1. George Coulouris, Jean Dollimore and Tim Kindberg, “Distributed Systems Concepts and Design”, Fifth Edition, Pearson Education, 2012.

Reference Books

1. Pradeep K Sinha, "Distributed Operating Systems: Concepts and Design", Prentice Hall of India, 2007.
2. Tanenbaum A.S., Van Steen M., “Distributed Systems: Principles and Paradigms”, Pearson Education, 2007.
3. Liu M.L., “Distributed Computing, Principles and Applications”, Pearson Education, 2004.
4. Nancy A Lynch, “Distributed Algorithms”, Morgan Kaufman Publishers, USA, 2003.

Prepared by
(Dr.N.Sumathi)

Approved by
(Dr.N.Sumathi)

Sri Ramakrishna College of Arts and Science

(Autonomous)

(Formerly S.N.R. Sons College)

(Affiliated to Bharathiar University)

(Re-Accredited with 'A' Grade by NAAC)

(An ISO 9001:2015 Certified Institution)



Nava India, Coimbatore-641 006, Tamil Nadu, India.

“Scheme of Examination along with Distribution of Marks and Credits”

CBCS & OBE PATTERN

SCHOOL OF COMPUTING

POST GRADUATE PROGRAMMES

M.Sc.IT.Degree Course

(For the students admitted during the academic year 2018–2019 and onwards)

Study Components and Course Title	CIA	Comprehensive Exam		Comprehensive Exam Total	Total	Credit
		Online	Descriptive Theory			
I SEMESTER						
Core I –18MIT101: .Net Programming	30	20	50	70	100	4
Core II –18MIT102: J2EE Technology	30	20	50	70	100	4
Core III –18MIT103:Design and Analysis of Algorithms	30	20	50	70	100	4
Core IV –18MCSC101: Information Security *	30	20	50	70	100	4
Core V–18MIT104: Practical –I: .Net Programming Lab	30	–	–	70	100	4
Core VI-18MIT105: Practical – II: J2EE Lab	30	–	–	70	100	4
18CME01 :MACE-1	–	–	–	100	100	2\$
II SEMESTER						
Core VII - 18MIT201: PHP Programming	30	20	50	70	100	4
Core VIII - 18MIT202: Mobile Application Development	30	20	50	70	100	4
Core IX – 18MIT203: Data Mining & Warehousing	30	20	50	70	100	4
Elective I - 18MITE01/ 18MITE02/18MITE03	30	20	50	70	100	4
CoreX - 18MIT204: Practical III : PHP Programming Lab	30	–	–	70	100	4

CoreXI - 18MIT205: Practical IV: Mobile Application Development Lab	30	-	-	70	100	4
CoreXII - 18MIT206: Mini Project	80	-	-	20	100	3
18CME02:MACE-2	-	-	-	100	100	2 ^{\$}
III SEMESTER						
CoreXIII - 18MIT301: Data Science and Analytics	30	20	50	70	100	4
CoreXIV - 18MIT302: Python Programming	30	20	50	70	100	4
CoreXV - 18MIT303: Cloud Computing	30	20	50	70	100	4
Elective II : 18MITE04/ 18MITE05/ 18MITE06	30	20	50	70	100	4
Core XVI - 18MIT304: Practical – V: Data Science and Analytics Lab	30	-	-	70	100	4
Core XVII - 18MIT305: Practical – VI : Python Programming Lab	30	-	-	70	100	4
Core XVIII-18MIT306: Mini Project	80	-	-	20	100	3
IDC –18MITI01: Network Security	-	-	-		100 ^{\$}	3 ^{\$}
IV SEMESTER						
Core XIX- 18MIT401: Project Work & Viva Voce	160	-	-	40	200	12

List of Elective papers (Can choose any one of the paper as electives)		
Elective – I	18MITE01	Software Project Management
	18MITE02	Soft Computing
	18MITE03	Distributed Computing
Elective – II	18MITE04	Digital Image Processing
	18MITE05	Network Management
	18MITE06	Information Coding Techniques

SUMMARY						
Subject	Papers	Credits	Total Credits	Papers	Marks	Total Marks
Core (including Project Work & Viva Voce)	10	4	82	10	1800	2000
	6	4		6		
	2	3		2		
	1	12		1	200	
Electives	2	4	8	2	100	200
IDC	1	3\$	3\$			100\$
MACE	2	2\$	2\$			200\$
Total			90			2200

\$ - NOT INCLUDED IN TOTAL MARKS & CGPA calculations.

Note : Total credits may vary between 90 – 95

*Common Subject to M.Sc[IT] and M.Sc[CS]

Syllabus Coordinator

Dr. S.B.Mahalakshmi, Asst. Professor
School of Computing - PG (CS/IT)
Sri Ramakrishna College of Arts and Science
(Formerly SNR Sons College)
Coimbatore – 641 006

BOS-Chairman

Dr. N. Sumathi, Prof. & Head
School of Computing (UG – IT)
Sri Ramakrishna College of Arts and Science
(Formerly SNR Sons College)
Coimbatore – 641 006

MASTERS' ABILITY AND CAREER ENHANCEMENT (MACE – I)

Subject Code: 18CME01

Common to all the PG streams admitted from AY 2018-19

Semester	I
Credit	2
Paper type	Skill based
Max. Marks	Total=100 (Online:50+Verbal Oral: 50)

Instruction Hours per Semester: 40

Aim:

To educate and enrich the students on setting goals, career planning, communication skills and professional grooming. Equip them on the techniques of listening, non-verbal communication, etiquette, written and presentation skills etc.

Course Objectives

To enable students to,

- Set goals.
- Assess individual communication skills, aptitude and employability skills
- Revise the fundamentals of English grammar
- Enhance their English language.
- Equip with techniques of listening and non-verbal communication
- Enhance techniques such as listening, non-verbal communication, verbal oral & written skills etc.

Unit I

Assessment of individual levels of communication skills, aptitude and employability skills; Psychometric test, SWOT analysis; Planning on setting goals. Introduction to Career planning; Goal setting – Introduction to Soft Skills - Presentation skills - Intra-personal skills

Unit II

Enhancement of Basic English vocabulary; Nouns, Verbs, Tenses, Phrases, Synonyms, Antonyms, and Homonyms Descriptive words - Combining sentences

Unit III

English language enhancement- Business Idioms- Indianisms in English- Common Errors in Pronunciation - Signposts in English- Verbal ability-Articles-Parts of speech-Phrases, clauses and modifiers - errors in tenses – prepositional errors – parallelism errors – mood, conditionals and multiple usages.

Unit IV

English listening- hearing Vs. listening - Nonverbal communication – Appearance, dressing and grooming - Tips to maintain good impression at work - business etiquette – basic postures and gestures and table manners, Body language - dealing with people communication - media etiquette - telephone etiquette, email etiquette.

Unit V

Basics of Writing Skills – Sentence Construction – Email Writing. Presentation Skills (Writing) – Effective organization of content – Importance of Presentation in both Writing and Speaking. Communication Process and Barriers – Elimination of stage fear – Impromptu speaking

Course Outcomes

On the successful completion of the course, the student would be able to-

- Set goals
- Learn fundamentals of English grammar, common errors of pronunciation and parts of speech.
- Understand individual communication skills, aptitude and skills required for employment
- Enhance their English language.
- Listen better, improve their body language, and adopt good manners and etiquettes.
- Write better and communicate effectively.

References:

- 1) A Modern Approach to Verbal and Nonverbal Reasoning by Dr. R. S. Aggarwal
- 2) A Modern A Modern Approach to Verbal by Dr. R. S. Aggarwal
- 3) A Modern Approach to Nonverbal Reasoning by Dr. R. S. Aggarwal
- 4) A Practical Course in Spoken English by J.K.Gangal
- 5) Effective English Communication for you by V.Shamala
- 6) Developing Communication Skills by Krishna Mohan & Meera Banerji
- 7) English for Competitive Exams by Bhatnagar



Verified By

Course Coordinator

MASTERS' ABILITY AND CAREER ENHANCEMENT (MACE – II)
Subject Code: 18CME02

Common to all the PG streams admitted from AY 2018-19

Semester	I
Credit	2
Paper type	Skill based
Max. Marks	Total=100 (Online:50+Verbal Oral: 50)

Instruction Hours per Semester: 40

Aim:

To educate and enrich the students on quantitative ability, arithmetic reasoning, and verbal ability. Enhance the students on group behavior and team building skills.

Course Objectives

To enable students to,

- Improve their quantitative ability.
- Ability of arithmetic reasoning
- Enhance their verbal ability through vocabulary building and grammar
- Enhance their group behavior and team building skills.
- Build resumes, speak in public, debate and discuss in groups

Unit I

(Quantitative Ability)

Speed Maths – Simple Conversion – Square roots and Cube roots – Vedic Maths – Short cuts – Special Concepts. Number Properties – Divisibility rules – Unit digit – HCF and LCM – Simplification. Percentage –Fundamentals – Increase and decrease concepts – Basics of Averages. Profit and Loss – Finding CP, MP, SP. Discount – Flat & Successive

Unit II

(Arithmetic Reasoning)

Data Arrangements – Linear and Circular arrangement – Alpha & Numeric series – Analogy. Blood Relation – Family Tree – Statement based. Coding & Decoding – Alpha coding and Numeric coding

Unit III

(Verbal Ability)

Vocabulary – Etymology, Root words, Verbal Analogy. Reading Comprehension: Workshop on Reading – Sub-skills of Reading, Techniques of Reading, Jumbled Paragraphs. Application of Grammar concepts – Parts of Speech, Tenses

Unit IV

Group discussion, interviews and presentation skills - Group behaviour – Team Work – Team building – Open and Closed group discussions.

Unit V

Exercises on Resume writing - Public speaking, Group discussion, debate, extempore, quiz and contemporary group play and role play.

Course Outcomes

On the successful completion of the course, the student would be able to-

- Enhance their ability to deal with quantities
- Understand and improve arithmetic reasoning.
- Build better vocabulary and grammar
- Improve the group behavior and team building.
- Prepare resumes, speak in public, debate and discuss in groups

References

1. Quantitative Aptitude for Competitive Exams by R. S. Agarwal
2. Quantum CAT by Sarvesh Verma
3. A Modern Approach to Logical Reasoning by R. S. Agarwal
4. Verbal Ability and Reading Comprehension by Arun sharma
5. Word Power Made Easy by Norman Lewis
6. High School English Grammar by Wren and Martin
7. English Conversation Practice by Grant Taylor
8. Group Discussion and Interviews by Anand Ganguly
9. Art of Social Media by Guy Kawasaki



Verified By

Course Coordinator