With effect from Academic Year 2015-16

Syllabus of M.C.A. II YEAR

OF

THREE YEAR PG COURSE

IN

MASTER OF COMPUTER APPLICATIONS

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS
CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (Autonomous)
Hyderabad – 500 75
With effect from Academic Year 2014-15

**SCHEME OF INSTRUCTION AND EXAMINATION**

**M.C.A. II YEAR**

**MASTER OF COMPUTER APPLICATIONS**

### I SEMESTER

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Syllabus Ref. No.</th>
<th>SUBJECT</th>
<th>Scheme of Instruction Periods per week</th>
<th>Scheme of Examination</th>
<th>Maximum Marks</th>
<th>Credits</th>
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<td>Semester End Exam</td>
<td>Sessionals</td>
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<td>Software Engineering and Information Systems</td>
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<td>4</td>
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**PRACTICALS**

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<td>Sessionals</td>
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<td>MC216</td>
<td>Database Management System Lab</td>
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<td><strong>TOTAL</strong></td>
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L: Lecture, T: Tutorial, D: Drawing, P: Practical
MC211

SOFTWARE ENGINEERING AND INFORMATION SYSTEMS

Instruction
Duration of Main Examination
Main Examination
Internal Examination
Assignment
Credits

4L periods per week
3 Hours.
75 Marks
20 Marks
5 Marks
3

OBJECTIVES:
1. To provide the concepts of management information systems and enterprise management systems.
2. To enable the student to understand the principles of software engineering concepts.

OUTCOMES:
1. Student understands the basic concepts and applications of software engineering principles.
2. Students also gain various management principles of information systems.

UNIT-I
Introduction to Management Information Systems and its level. Knowledge management in the organization, enhancing management decision making, information system and control, managing infrastructure and Enterprise system. GDSS, Decision support systems and its applications.

UNIT-II

UNIT- III

UNIT-IV

UNIT-V
Testing Techniques & Strategies: white box, black box, basis path testing, Unit testing, Integration testing, Validation testing & System Testing. Software Maintenance, Maintenance activities, Software Reengineering, Reverse Engineering, Forward Engineering.
Text Books:

Suggested Readings:
MC212 DESIGN AND ANALYSIS OF ALGORITHMS

Instruction 4L periods per week
Duration of Main Examination 3 Hours.
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5 Marks
Credits 3

OBJECTIVES:
1. To enable the student to understand the principles of algorithm concepts.
2. To provide the understanding concepts of various strategies to solve problems.

OUTCOMES:
1. Apply the algorithms and design techniques to solve problems.
2. Analyze complexities various problems in different domains.

UNIT-I
Elementary Data Structures: Stacks and Queues, Trees, Dictionaries, Priority Queues, Sets & Disjoint Set Union, Graphs.

UNIT-II
Greedy Method: Knapsack Problem, Tree Vertex Splitting, Job Sequencing with Deadlines, Minimum Cost Spanning Trees, Optimal Storage on Tapes, Optimal Merge Pattern.

UNIT-III
Dynamic Programming: General Method, Multistage Graphs, All Pairs Shortest Path, Single Source Shortest Paths, Optimal Binary Search Trees, 0/1 Knapsack, Reliability Design, Traveling Salesmen Problem
Basic Traversal and Search Techniques: Techniques for Binary Trees, Techniques for Graphs, Connected Components, and Spanning Trees, Biconnected Components and DFS.

UNIT-IV
Back Tracking: General Method, 8-Queen's Problem, Sum of Subsets, Graph Coloring, Hamiltonian Cycles, Knapsack Problem.
Branch Bound: The Method 0/1 Knapsack Problem, Traveling Salesperson.

UNIT-V
Text Books:

Suggested Readings:
DATABASE MANAGEMENT SYSTEM

Instruction  
Duration of Main Examination  
Main Examination  
Internal Examination  
Assignment  
Credits  

4L periods per week  
3 Hours.  
75 Marks  
20 Marks  
5 Marks  
3

OBJECTIVES:
1. To understand the fundamentals of data models and conceptualize and depict a database, System using ER diagram
2. To make a study of SQL and relational database design.
3. To know about data storage techniques and query processing.
4. To impart knowledge in transaction processing, concurrency control techniques and recovery procedures.

OUTCOMES:
1. Understand the basic concepts of the database and data models.
2. Design a database using ER diagrams and map ER into Relations and normalize the relations
3. Acquire the knowledge of query evaluation to monitor the performance of the DBMS.
4. Develop a simple database applications using normalization.
5. Acquire the knowledge about different special purpose databases and to critique how they differ from traditional database systems.

UNIT-I
Introduction to DBMS and DB Models: File system Vs. DBMS, Advantages of DBMS, Data Abstraction, Database Design, and ER diagrams, Entities, Attributes and Entity Sets, Relationship Sets, Additional features of ER model, Conceptual Design with the ER model. The Relational Model: Introduction to the Relational Model, Integrity Constraints over relations, Logical Database design(ER to Relational), creating tables, views, Destroying / Altering Tables and Views.


UNIT-II
Relational Algebra and calculus: Preliminaries, Relational Algebra, Relational calculus, expressive, power of algebra and calculus

Structured Query Language: Overviews, Basic Structure of SQL, Queries, Set Operations, Null Values, Additional Basic Operations, Aggregate Functions, Nested Sub queries, Join Expression.

Advanced SQL: SQL Data Types, Integrity Constraints, Authorization, Functions and Procedural Constructs, Cursors, Triggers.
UNIT-III

UNIT-IV
Transaction Management: ACID Properties, Transactions and Schedules, Concurrent Execution of Transactions, Lock-Based Concurrency Control.
Concurrency Control: 2PL, Serializability, and Recoverability, Introduction to Lock Management, Dealing with Deadlock, Specialized Locking Techniques, Concurrency Control without Locking.

UNIT-V
Crash Recovery: Introduction to ARIES, The Log, Other Recovery Related Structures, The WAL, Checkpointing, Recovering from a system Crash, Media recovery.

Text Book

Suggested Readings:
MC214

OPERATING SYSTEMS

Instruction 4 periods per week
Duration of Main Examination 3 Hours.
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5 Marks
Credits 3

OBJECTIVES:
1. To be aware of the evolution and fundamental principles of operating system, processes and their communication
2. To understand the various operating system components like process management, memory management
3. To know about file management and I/O subsystems concepts in operating systems
4. To be aware of components of operating system with relevant case study

OUTCOMES:
1. Able to understand the operating system components and its services
2. Able to demonstrate the mapping between the physical memory and virtual memory
3. Able to understand file handling concepts in OS perspective
4. Able to understand the operating system components and services.

UNIT - I
INTRODUCTION, SYSTEM STRUCTURES: Operating System Services, System Calls, Types of System Calls, System Programs, Operating System Design and Implementation, Operating System Structure, Virtual Machines, Operating System debugging.
PROCESS SCHEDULING: Scheduling Criteria, Scheduling Algorithms, Thread Scheduling, Multiple Processor Scheduling.

UNIT - II
MEMORY MANAGEMENT STRATEGIES: Swapping, Contiguous Memory Allocation, Paging, Structure of the Page Table, Segmentation.
VIRTUAL MEMORY MANAGEMENT: Demand Paging, Copy on Write, Page Replacement Algorithms, Allocation of Frames, Thrashing.
UNIT -III
PROCESS SYNCHRONIZATION: Critical Section Problem, Peterson’s Solution, Semaphores, Classic Problems of Synchronization, Monitors.


UNIT IV
SECONDARY STORAGE STRUCTURE: Overview of Mass Storage Structure, Disk Structure, Disk Attachment, Disk Scheduling, Disk Management, Swap Space Management, RAID Structure.

I/O SYSTEMS: I/O Hardware, Application I/O Interface, Kernel I/O Subsystem, Transforming I/O Request to Hardware Operations, STREAMS.

UNIT- V
CASE STUDIES:


SYMBIAN OS: History and Overview of Symbian OS, Process and Threads, Memory Management, Input and Output, Storage systems, Security.

Text Books:

Suggested Readings:
ORGANIZATIONAL BEHAVIOR

Instruction 4L periods per week
Duration of Main Examination 3 Hours.
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5 Marks
Credits 3

OBJECTIVES:
To familiarize the students with the theory and practices of organization behavior and to teach the students about organization theory dynamics.

UNIT – I

UNIT – II
Organizational Designs and Structures – Traditional and Contemporary organizational designs.Organizational culture and ethical behavior – factors shaping organizational culture– creating an ethical culture.

UNIT – III
Motivation–early and contemporary theories of motivation. Leadership – early and contemporary approaches to leadership.

UNIT – IV

UNIT – V

Text Books:
1. Jennifer George and Gareth Jones “Understanding and Managing Organizational Behavior”, Published by Pearson Education Inc.
Suggested Reading:

MC215

With effect from Academic Year 2014-15

TECHNICAL REPORT WRITING

Instruction
Duration of Main Examination
Main Examination
Sessional
Credits

3 Periods per week
3 Hours
50 Marks
25 Marks
2

OBJECTIVES:
Understands the LATEX documents.

1. Download and install a comprehensive LATEX distribution.
3. Format words, lines, and paragraphs, design pages, create lists, tables, references, and figures in LATEX.
4. Typeset complicated mathematics: beginning with basic formulas (inline) and centered and numbered equations (display math) and aligning multi-line equations.
5. Typeset mathematics symbols such as roots, arrows, Greek letters, and a wide variety of mathematical operators.
6. Building complex math structures such as fractions, stacked expressions, and matrices.
7. Import graphics, as well as: building diagrams, enhancing figures, and plotting functions, using the graphics packages: pstricks, and PGF/tikz
8. Listing content and references: creating a table of contents and lists of figures and tables; as well as how to cite books, create bibliographies, and generate an index.

Text Book:

DATABASE MANAGEMENT SYSTEMS LABORATORY

Instruction: 3 Periods per week
Duration of Main Examination: 3 Hours
Main Examination: 50 Marks
Sessional: 25 Marks
Credits: 2

I. SQL
1. Creating tables using commands in DDL
2. Manipulating the data using DML
3. Using Aggregate functions Set operators
4. Simple condition query creation using SQL Plus
5. Complex condition query creation using SQL Plus
6. Exercising all types of Joins, views
7. Exercising Data Control Language and Transaction Control Language

II. PL/SQL
8. Demonstration of Blocks, Cursors,
10. Creation of Triggers

III. FORMS
11. Designing forms for various databases.(Creating, Inserting, Updating, Deleting)

IV. REPORTS
12. Generation using SQLReports
13. Creation of Reports based on different queries .

Note:-The creation of sample database for the purpose of the experiments is expected to be pre-decided by the instructor.

Text Books:
MC217  OPERATING SYSTEMS LABORATORY

Instruction: 3 Periods per week
Duration of Main Examination: 3 Hours
Main Examination: 50 Marks
Internal Examination: 25 Marks
Credits: 2

OBJECTIVES:
1. To learn programs on system calls, threads and signals
2. To learn programs on process scheduling algorithms
3. To learn programs on Interprocess Communication.
4. To learn programs on synchronization problems
5. To learn programs on files
6. To learn about the basic Linux commands.
7. To learn basic shell programs.

OUTCOMES:
1. Able to write programs on system calls, threads and signals.
2. Able to learn programs on process scheduling algorithms
3. Able to write programs on Interprocess Communication.
4. Able to write programs on synchronization problems
5. Able write programs on files
6. Able to use basic Linux commands
7. Able to write basic shell programs

LIST OF PROGRAMS
1. Programs using process related systems calls.
2. Print type of file for each command line arguments.
3. Programs to create threads.
4. Program using Signals.
5. Programs on process scheduling algorithms
7. Echo server using message Queues.
8. Producer & Consumer Problem using Semaphores and Shared memory
10. Readers & Writers Problem using Semaphores and Shared memory
11. Dining philosopher’s problem using semaphores.
12. Programs related to files
14. Basic Linux Commands
15. Basic shell scripts
Text Books:

## SCHEME OF INSTRUCTION AND EXAMINATION
### M.CA. II YEAR
### MASTER OF COMPUTER APPLICATIONS

### II SEMESTER

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<td>Data Warehousing and Data Mining</td>
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<td>Computer Networks</td>
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L: Lecture, T: Tutorial, D: Drawing, P: Practical
DATA WAREHOUSING AND DATA MINING

Instruction 4L periods per week
Duration of Main Examination 3 Hours.
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5 Marks
Credits 3

OBJECTIVES:
1. To expose the students to the concepts of Data warehousing Architecture and Implementation
2. To Understand Data mining principles and techniques and Introduce DM as a cutting edge business intelligence
3. To understand the mining concepts like association rule mining, classification and clustering.

OUTCOMES:
Upon Completion of the course, the students will be able to
1. Store voluminous data for online processing
2. Preprocess the data for mining applications
3. Apply the association rules for mining the data
4. Design and deploy appropriate classification techniques
5. Cluster the high dimensional data for better organization of the data

UNIT - I
Introduction: Motivation, Data Warehousing and Data Mining, History, Demand for strategic information, Users, Benefits and Concerns. Data Models and OLAP.
Data Warehousing: Features, Granularity, Information flow mechanism, Metadata, Classes of data, Lifecycle of data, Data flow from warehouse to operational systems.

UNIT – II

UNIT - III
Dimensional Modeling: Other types of dimension tables, Keys to DW Schema, Enhancing performance, Technology requirements.
The ETL Process, Introduction, Data Extraction, Transformation, Loading, Quality.
UNIT – IV

UNIT - V
Classification: Introduction, Problem definition, Applications, Evaluation of clusters, Other issues, Classification techniques, Optimal Classification algorithms, Regression.

Clustering: Introduction, Problem definition, Applications, Measurement of similarity, evaluation, classification of clustering algorithms, partitioning methods, Hierarchical Methods, Density Based Methods, Grid Based methods, Outlier detection.

Text Books:
1. Jiawei Han, Micheline Kamber, "Data Mining - Concepts and Techniques", Morgan Kayufman, 2006.

Suggested Readings:
MC222

With effect from Academic Year 2014-15

COMPUTER NETWORKS

Instruction 4L periods per week
Duration of Main Examination 3 Hours.
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5 Marks
Credits 3

OBJECTIVES:
1. To learn the basics of data communication and networks.
2. To get the idea of different layers of OSI model.
3. To learn the Socket programming concepts.

OUTCOMES:
1. Students would have gained good idea of the basics of data communication and networks.
2. Students will get the idea of different layers of OSI model.
3. Students will learn the Socket programming concepts.

UNIT - I

UNIT-II

Mac Layer: LAN-Pure and Slotted ALOHA, Ethernet IEE 802.3-IEEE 802.4-IEEE 802.5,Bridges.

UNIT-III
Network Layer- Internetworks – Virtual circuit and Datagram Approach, Routers IP Addressing, Sub netting, CIDR.
Routing – Distance Vector Routing, Link State Routing, OSPF and BGP.

UNIT-IV
Transport Layer: Services of Transport Layer, Multiplexing.
Transmission Control Protocol (TCP) – Congestion control, Quality of Services(QOS) and User Datagram Protocol (UDP).
UNIT-V

Socket Programming: Socket address, elementary socket system calls, advanced socket system calls, reserved ports, socket option, asynchronous I/O input/output Multiplexing out-of-band data, sockets and signals, Internet super server.

Text Books:

Suggested Readings:
MC223 With effect from Academic Year 2014-15

WEB PROGRAMMING

Instruction 4L periods per week
Duration of Main Examination 3 Hours.
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5 Marks
Credits 3

OBJECTIVES:
1. To enable the student to understand web programming
2. To understand the latest web technologies like PHP, AJAX etc.

OUTCOMES:
1. Understand the basics of Web and XML
2. Identifies the difference between java script and vb script
3. Gets exposure the importance of server side programming
4. Gets the practice of database programming on web
5. Understands the latest web script language PHP.

UNIT – I

Cascading Style Sheet (CSS): The need for CSS, Introduction to CSS – Basic syntax and structure -Inline Styles – Embedding Style Sheets - Linking External Style Sheets – Backgrounds – Manipulating text - Margins and Padding - Positioning using CSS.

UNIT – II

UNIT- III
INTRODUCTION TO JAVASCRIPT
Introduction - Core features - Data types and Variables - Operators, Expressions, and Statements - Functions - Objects - Array, Date and Math related Objects - Document Object Model - Event Handling- Controlling Windows & Frames and Documents - Form handling and validations.
UNIT – IV
INTRODUCTION TO VB SCRIPT
Introduction - Core features - Data types and Variables - Operators, Expressions, and Statements –Functions. String Manipulation, classes and objects.
Web servers : Installation requirements to load IIS and Apache Tomcat.

UNIT – V
PHP
Introduction - How web works - Setting up the environment (LAMP server) - Programming basics -Print/echo - Variables and constants – Strings and Arrays – Operators, Control structures and looping structures – Functions – Reading Data in Web Pages - Embedding PHP within HTML – Establishing connectivity with MySQL database.

Text Books:

Suggested Reading :
2. http://www.w3schools.com
SOFTWARE DESIGN AND ARCHITECTURE

Instruction 4L periods per week
Duration of Main Examination 3 Hours.
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5 Marks
Credits 3

OBJECTIVES:
1. To enable the student to understand the principles and concepts of software design and architecture, design models, architectural models, user interface design.

OUTCOMES:
1. Student understands the fundamental principles of software design and architecture, the concepts of architectural styles, design models, principles of user interface design.
2. Student understands the principles of functional independence consisting of cohesion and coupling concepts.

UNIT-I
Design process and Design quality, Design concepts, abstraction, architecture, modularity, information hiding, functional independence, Design model-data design elements, interface design elements.

UNIT-II
Golden rules of user interface design, interface analysis and design models, user analysis, task analysis and modeling, analysis of work environment, applying interface design steps, user interface design patterns.

UNIT-III
What is architecture, data design at architectural level, data design at component level, architectural styles, architectural patterns, representing system in context, refining architecture into components.

UNIT-IV
Architecture trade of analysis, architectural complexity, transform flow, transaction flow, transform mapping, transaction mapping.

UNIT-V
Designing class based components, guidelines, types of cohesion, types coupling, component level design, designing conventional components.

Text Books:
ARTIFICIAL INTELLIGENCE
(ELECTIVE)

Instruction 4L periods per week
Duration of Main Examination 3 Hours.
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5 Marks
Credits 3

OBJECTIVES:
1. To introduce the fundamental concepts of artificial intelligence.
2. To explore the different paradigms in knowledge representation and reasoning.
3. To understand the techniques in Statistical reasoning.
4. To understand the different techniques like game playing and planning.

OUTCOMES:
1. Student able to understand the history, development and various applications of artificial intelligence;
2. Familiarize with propositional and predicate logic and their roles in logic programming.
3. Students learn the knowledge representation and reasoning techniques in rule-based systems, case-based systems, and model-based systems;
4. Student can understand how uncertainty is being tackled in the knowledge representation and reasoning process, in particular, techniques based on probability theory and possibility theory (fuzzy logic).

UNIT – I
Problems, Problem Spaces, and Search: Defining the Problem as a State Space Search, Production Systems, Problem Characteristics, Production System Characteristics.

UNIT – II
Heuristic Search Techniques: Generate and Test, Hill Climbing, Best First Search, Problem Reduction, Constraint Satisfaction.

UNIT-III
UNIT-IV
**Statistical Reasoning:** Probability and Bayes Theorem, Certainty Factors and Rule-based Systems, Bayesian Network, Dempster-Shafer Theory, Fuzzy logic.

**Weak Slot-and-Filler Structures:** Semantic Nets, Frames.

**Strong Slot-and-Filler Structures:** Conceptual Dependency, Scripts.

UNIT-V
**Game Playing:** The Minimax Search Procedure, Adding Alpha-beta Cutoffs, Additional Refinements, Iterative Deepening.


**Text Books:**
2. NP Padhy, "Artificial Intelligence and Intelligent Systems", Oxford, 2009
MC 252

With effect from Academic Year 2014-15

DISTRIBUTED SYSTEMS
(ELECTIVE)

Instruction 4L periods per week
Duration of Main Examination 3 Hours.
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5Marks
Credits 3

OBJECTIVES:
1. To enable the student to understand the basic architecture of distributed systems.
2. To provide the concepts of distributed systems topology, message communications, fault tolerance mechanism and file systems.

OUTCOMES:
1. Student understands the architecture, role of middleware, communication systems, applications and file systems of distributed systems.
2. Student understands the principles of distributed object systems architecture and distributed shared memory.

UNIT-I
Introduction to Distributed Systems: Definition, Goals, Hardware and software Concepts and client/server model.

UNIT-II

UNIT-III

UNIT-IV
Distributed Object based Systems: CORBA, D-COM & GLOBE. Distributed File System, Case studies: SUN NFS, CODA.

UNIT-V

Suggested Readings:
MC253 With effect from Academic Year 2014-15

SOFT COMPUTING
(ELECTIVE)

Instruction 4L periods per week
Duration of Main Examination 3 Hours
Main Examination 75 Marks
Internal Examination 20 Marks
Assignment 5 Marks
Credits 2

OBJECTIVES:
After Completion of this course, the student should be able to get an ideal on:
1. Various types of soft computing techniques and their applications.
2. Various types of neural network architectures, learning methods and algorithms.
3. Fuzzy logic and their applications.
4. Genetic algorithms and their applications.

OUTCOMES:
After the end of the course the student should be able to:
1. Learn about soft computing techniques and their applications.
2. Apply Neural Network techniques to various types of problems.
3. Understand fuzzy logic, genetic algorithms and their applications.

UNIT-I
Soft computing vs. Hard computing, Various types of soft computing techniques, Applications of soft computing.

UNIT-II
Supervised Learning Neural Networks: Perceptron networks, Adaptive linear neuron(Adaline), Multiple Adaptive linear neuron(Madaline), Back propagation network, Radial basis function network.

UNIT-III
Unsupervised Learning Neural Networks: Kohonen self organizing networks, Adaptive resonance theory.
Associate Memory Networks: Bidirectional associative memory network, Hopfield networks.

UNIT-IV
Fuzzy Logic: Introduction to classical sets and Fuzzy sets, Fuzzy relations, Tolerance and equivalence relations, Membership functions, Defuzzification, Fuzzy arithmetic and Fuzzy measures.

UNIT-V
Text Books:

Suggested Readings:
MINI PROJECT

Instruction: 3 Periods per week
Duration of Main Examination: 3 Hours
Main Examination: 50 Marks
Internal Examination: 25 Marks
Credits: 2

OBJECTIVES:
The students get a basic idea and exposure, to understand the concept of a software project structure and the construction of the same.

OUTCOMES:
After completion, the students will be able to understand the basics of software project analysis design and coding concepts.

The students will carry out a literature survey of any information system, and develop the requirement analysis, design & produce code. Along with the output of the project a SRS document will be prepared. The recommended domains are :- data structures, web programming, DBMS, computer networks & operating systems.

Students are required to submit a report on the mini project at the end of the semester.
MC227

With effect from Academic Year 2014-15

COMPUTER NETWORKS LABORATORY

Instruction 3 Periods per week
Duration of Main Examination 3 Hours
Main Examination 50 Marks
Internal Examination 25 Marks
Credits 2

List of Programs

1. Using and understanding following Commands. Ifconfig, net stat, ping, arp, telnet, ftp
   ftp, finger.
2. a) Connection oriented Iterative Echo Server
   b) Connectionless Iterative Echo server
3. a) Connection oriented Concurrent Echo Server
   b) Connectionless Concurrent Echo server
4. a) Connection oriented Iterative Time Server
   b) Connectionless Iterative Time Server
5. a) Connection oriented Concurrent Time Server
   b) Connectionless Concurrent Time Server
6. Ping service implementation.
7. Remote program execution.
8. Program to pass file descriptors.
10. To demonstrate the usage of Advanced Socket System Calls like
    Getsockopt(), Setsockopt(), Select(), Readv(), getpeernamet(), Getsockname().
11. To demonstrate the Non-Blocking (Asynchronous) Input-Output.
12. To demonstrate the implementation of Pre forked Server.

Text Books
   Learning 1990.
MC228

With effect from Academic Year 2014-15

WEB PROGRAMMING LABORATORY

Instruction 3 Periods per week
Duration of Main Examination 3 Hours
Main Examination 50 Marks
Internal Examination 25 Marks
Credits 2

LIST OF EXPERIMENTS
1. Creation of HTML Files
2. Working with CSS
3. Working with Client Side Scripting
   3.1 VBScript
   3.2 JavaScript
4. Configuration of web servers
   4.1 Apache Web Server
   4.2 Internet Information Server (IIS)
5. Working with ActiveX Controls in web documents.
6. Working with other Server Side Scripting
   6.1 Active Server Pages
   6.2 JSP
   6.3 PHP
7. Sample Experiments in Ajax Programming
8. Working with JDBC connection.
9. Developing any E-commerce application

Text Books :

Suggested Readings :
2. http:// www.w3schools.com