NAGARJUNA GOVERNMENT COLLEGE,

AUTONOMOUS:NALGONDA

www.ngcnalgonda.org

(Re Accredited by NAAC with "A" Grade)

BOARD OF STUDIES MEETING

DEPARTMENT OF COMPUTER SCIENCE

2014-15

DEPARTMENT OF COMPUTER SCIENCE
BOARD OF STUDIES MEETING 2014-15
RESOLUTI ONS

The members of Board of studies in Computer Science Department, N.G. College, Nalgonda met under the chairmanship of Sri **CH.BIXMAIAH** on 15- 05 -2014 and passed the following Resolutions.

AGENDA :

1. To consider and approve the syllabus for B.Sc I,II,III years(I, II, III, IV,V &VI Semesters) during 2014-15.

2. To consider and approve the introduction of Internal Assessment for the students admitted into I,II & III years degree course during 2014-15.

3. To consider and approve the model question paper for B.Sc I,II,&III year 2014-15

4. To consider and approve the list of examiners for paper setting, evaluation for B.Sc. I,II, & III year (I,II,III,IV,V & VI Semester) during 2014-15.

5. Any other related academic matters.

RESOLUTIONS:

1. It is resolved to approve the Syllabus and Question papers Models for the I,II,III,IV,V and VI Semester for the year 2014-15 and also in authorized the chairman of Board of Studies to nominate panel of Examiners and paper setter.

2. It is resolved to adopt each semester is of 100 marks in which 70 Marks for Theory and 30 Marks for Internal Examinations (20 Marks for written examination 5 Marks for Assignment and 5 marks for Seminar) introduce for the year 2014-15 as per the direction of CCE, Hyd.

3. It is resolved to organize class wise and year wise Class Seminar, Group Discussion and Guest Lecture.

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University College of Engineering & Technology
Mahatma Gandhi University
Panagal, Nalgonda-508 001. A.P.

CHAIRMAN
Board of Studies in Computer Sc.
N.G. College, NALGONDA.

PROCEEDINGS OF NAGARJUNA GOVT. COLLEGE, NALGONDA
AUTONOMOUS
Present: Dr.R.Nagender Reddy, M.A.LLB.Ph-D

Rc.No.Spl/BOS/2014.   **Date:12.05.2014.**

Sub:- Approval of BOS for the Academic year 2014 – 2015 Order issued - Req – Reg.

As per the instructions of the Commissioner of Collegiate Education to ensure the employability to the Under Graduate Students, the College is introducing Choice Based Credit System (CBCS) this academic year 2014 – 2015 by offering inter-disciplinary courses, which is mandatory to all the students to be pursued in any one of the semesters through the three years Degree course.

2. The Examinations are conducted on Semester Basis.

3. Each semester is of 100 marks in which 70 marks for Theory and 30 marks for Internal Examinations (20 marks for written examination, 5 marks for Assignment and 5 marks for Seminar).

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Commissionerate of Collegiate Education, A.P., Hyderabad

Tentative schedule for completion of the process for introduction of CBCS in Govt., Autonomous Colleges from the academic year 2014-15

S.No	Activity	Time line
1	Preparation of draft Blue prints for Modular & CBS system for 11 subjects	16.4.2014
2	Preparation of draft Blue prints CGPA evaluation system for BA. B.Sc and B.Com programmes	17.4.2014
3	Vetting of draft Blue prints in 11 subjects by the respective department in colleges. Preparation of Blue prints for all other subjects in respective colleges	26.4.2014
4	All preliminary permissions from the CCE office to the principals	02.5.2014
5	Completion of verification of final Blue prints by O/o CCE officers by visiting the colleges	10.5.2014
6	Approval of Modular, CBCS and CGPA by respective BoS	15.5.2014
7	Approval of CBCS by Academic Councils of the respective colleges	20.5.2014
8	Approval of CBCS by respective GBs	21.5.2014
9	Commencement of CBCS in 10 Govt., autonomous colleges	01.6.2014

Principal
Nagarjuna Govt. College
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NAGARJUNA GOVERNMENT COLLEGE (AUTONOMOUS) NALGONDA
(Affiliated to Mathatma Gandhi University)
PANEL OF EXAMINERS FOR THE YEAR 2014-15

Subject: **COMPUTER SCIENCE**

SNO	Paper	Name of the Examiners with full Addresses	Phone Numbers
1	I	S.Vija Lakshmi, Silver Jubile Degree and PG College, Habsiguda, Hyderabad.	**9494541376, 8801773421**
2	I	M.Vijay, Computer Lecturer, Indian Institute of Management of Commerce, 6-1-91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04	**8143567352**
3	I	K.Prashanth Kumar, Gouthami Degree College, Datta Mansion, opp.Bus Stop, SR Nagar, Hyderabad 500038	**9848580559**
4	II	B.Vinod Babu, Badruka Degree college, Kachiguda, Hyderabad.	**9848258287**
5	II	M.Vijay, Computer Lecturer, Indian Institute of Management of Commerce, 6-1-91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04	**8143567352**
6	II	K.Prasanth Kumar, Lecturer in Computer Science, Indian Institute of Management of Commerce, 6-1-91,Adi.Telephone Bhavan, Khairatabad, Hyderabad-04	**9908615205**
7	III	M.Satyanaryana, Lecturer in Computer Science, Indian Institute of Management of Commerce, 6-1-91,Adi.Telephone Bhavan, Khairatabad, Hyderabad-04	**9866260143**
8	III	B.Vinod Babu, Badruka Degree college, Kachiguda, Hyderabad.	**9848258287**
9	III	S.Vija Lakshmi, Silver Jubile Degree and PG College, Habsiguda, Hyderabad.	**9494541376, 8801773421**
10	IV	M.Satyanaryana, Lecturer in Computer Science, Indian Institute of Management of Commerce, 6-1-91,Adi.Telephone Bhavan, Khairatabad, Hyderabad-04	**9866260143**
11	IV	K.Prashanth Kumar, Gouthami Degree College, Datta Mansion, opp.Bus Stop, SR Nagar, Hyderabad 500038	9848580559
12	IV	B.Vinod Babu, Badruka Degree college, Kachiguda, Hyderabad.	**9848258287**
13	V	M.Satyanaryana, Lecturer in Computer Science, Indian Institute of Management of Commerce, 6-1-91,Adi.Telephone Bhavan, Khairatabad, Hyderabad-04	**9866260143**

Incharge of Dept. of Computers
Nagarjuna Government College
NALGONDA.

NAGARJUNA GOVERNMENT COLLEGE (AUTONOMOUS) NALGONDA
(Affiliated to Mathatma Gandhi University)
PANEL OF EXAMINERS FOR THE YEAR 2014-15

Subject: **COMPUTER SCIENCE**

SNO	Paper	Name of the Examiners with full Addresses	Phone Numbers
14	V	B.Vinod Babu, Badruka Degree college, Kachiguda, Hyderabad.	9848258287
15	V	M.Vijay, Computer Lecturer, Indian Institute of Management of Commerce, 6-1-91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04	8143567352
16	VI	S.Vija Lakshmi, Silver Jubile Degree and PG College, Habsiguda, Hyderabad.	9494541376, 8801773421
17	VI	M.Vijay, Computer Lecturer, Indian Institute of Management of Commerce, 6-1-91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04	8143567352
18	VI	S.R.Pavan Kumar Attaluri , Kakatiya Degree College, Nalgonda	9985542630
19	VII	K.Prasanth Kumar, Lecturer in Computer Science, Indian Institute of Management of Commerce, 6-1-91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04	9908615205
20	VII	M.Satyanaryana, Lecturer in Computer Science, Indian Institute of Management of Commerce, 6-1-91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04	9866260143
21	VII	S.R.Pavan Kumar Attaluri , Kakatiya Degree College, Nalgonda	9985542630
22	VIII	M.Vijay, Computer Lecturer, Indian Institute of Management of Commerce, 6-1-91,Adj.Telephone Bhavan, Khairatabad, Hyderabad-04	8143567352
23	VIII	S.Vija Lakshmi, Silver Jubile Degree and PG College, Habsiguda, Hyderabad.	9494541376, 8801773421
24	VIII	K.Prashanth Kumar, Gouthami Degree College, Datta Mansion, opp.Bus Stop, SR Nagar, Hyderabad 500038	9848580559

Head of the Department

Incharge of Dept. of Computers
Nagarjuna Government College
NALGONDA.

SIGNATURES

1. **Sri CH.BIXMAIAH** ,
   In-Charge Dept of Computer Science
   N.G. College.
   Nalgonda.

2. **Prof.Dr.R.REKHA**
   Chairman Board of Studies,
   In-Charge Dept of Computer Science
   Dept of Mathematics, M.G.U.,
   Nalgonda.

3. **Sri S.R.Pavan Kumar Attaluri**
   Kakathiya.Degree.College.
   Nalgonda.

4. **Sri K.Naga Raju** ,
   Govt.Degree Women's College.
   Nalgonda.

5. **Sri SP.VENKAT RAMANA**
   Contract Faculty Computer Science,
   N.G.College, Nalgonda.

6. **Sri Y.Rukesh Kumar**
   (Guest Faculty)
   N.G.College, Nalgonda

Chairman Board of Studies

CHAIRMAN
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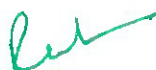Subject Expert

Subject Expert

Member

Member

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA
DEPARTMENT OF COMPUTER SCIENCE
ALLOCATION OF CREDITS AT SUBJECT LEVEL

COURSE : SCIENCE　　　　　　　　　　**SUBJECT: COMPUTER SCIENCE**

S. No	Semester	Module(Paper)	Hours per week	Max. Marks	No. of credits
1	I (CORE)	Pc Software	4	100	3
2	II (CORE)	C Programming	4	100	3
3	Practicals	Productivity Tools and 'C' Lab	3	50	2
4	III (CORE)	Objected Oriented Programming with Java	4	100	3
5	IV (CORE)	Java and Data Structures	4	100	3
6	Practicals	Java and Data Structures Lab	3	50	2
7	V Core	Database Management Systems	4	100	3
8	V Elective (Advanced)	Data Communication	3	100	2
		OR			
9	V Elective (Advanced)	Mobile Communication	3	100	
10	Practicals	DBMS Lab	3	50	2
11	VI Core	Web Technologies	4	100	3
12	VI Elective (Applied)	Operating System	3	100	2
		OR			
13	VI Elective (Applied)	Computer Networking	3	100	
14	Practicals	Web Programming Lab	3	50	2
15	Project Work	Self Study &Skill Based		Grade	
16	Others	Ms-Office & DTP		50	

Department of Computer Science
Nagarjuna Government College, Nalgonda

Name of the Module: PC- SOFTWARE
Nature of the Module: Core
Mode of Learning: Regular
No. of Hours: 04   Credits: 03

Semester: I
Subject: Computer Science

Total Hours: 60

CURRICULAR PLAN
Semester: I

S. No	Month and Week	No. of Hours	Topic	Curricular Activity	Co-curricular Activity	Remarks
1	June II	4	Fundamentals of Computers, Memory	Teaching		
2	June III	4	Operating System, Introduction to DOS	Teaching	Assignment/Seminar /Question and Answers	
3	June IV	4	MS WORD Working Basics, Formatting Your Text and Documents, Working with headers and footers	Teaching		
4	July I	4	Tables, Graphics, Templates, Mail merge	Teaching		
5	July II	4	Power Point , Creating presentations	Teaching	Assignment/Seminar /Question and Answers	
6	July III	4	MS Access- Creating a simple data base and tables	Teaching		
7	July IV	4	Forms The form wizard, Saving forms, Modifying forms	Teaching	Quiz	
8	Aug I	4	Entering And Editing Data	Teaching	Assignment/Seminar	
9	Aug II	4	Finding, Sorting and Displaying data	Teaching	Seminar	
10	Aug III	4	Printing Reports , Relational data bases	Teaching		
11	Aug IV	4	MS Excel-Excel basics Over view of excel features	Teaching	Group Discussion	
12	Sep I	4	Formatting, Introduction to functions	Teaching		
13	Sep II	4	Excel charts Chart part sand terminology , instant charts with the chart wizard, creation	Teaching	Student Carrier Counselling	
14	Sep III	4	Excel graphics Creating and placing Graphic objects, resizing graphics, drawing lines and shapes	Teaching	Assignment/Seminar /Quiz	
15	Sep IV	4	Revision of the Syllabus	Teaching		

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Department of Computer Science
Nagarjuna Government College, Nalgonda

Name of the Module: C PROGRAMMING   **Semester:** II

Nature of the Module: Core   **Subject:** Computer Science

Mode of Learning: Regular

No. of Hours: 04   **Credits:** 03   **Total Hours:** 60

CURRICULAR PLAN

Semester: II

2	Nov II	4	Arthemetic Exoressions	Teaching & Practical	Assignment/Seminar /Question and Answers	
3	Nov III	4	Data Types and Constants	Teaching & Practical		
4	Nov IV	4	Construct Statements, The Conditional Operator	Teaching & Practical		
5	Dec I	4	Working With Arrays	Teaching & Practical	Assignment/Seminar /Question and Answers	
6	Dec II	4	Working With Structure	Teaching & Practical		
7	Dec III	4	Working With Functions	Teaching & Practical	Quiz	
8	Dec IV	4	Strings Array of characters – variable length Character strings	Teaching & Practical	Assignment/Seminar	
9	Jan I	4	Pointers Defining a pointer variable - using pointers in Expressions	Teaching & Practical	Seminar	
10	Jan II	4	The Preprocessor The # Define Statement -- The # # Operator	Teaching & Practical		
11	Jan III	4	More on Data types	Teaching & Practical	Group Discussion	
12	Jan IV	4	Input and Out put Operations in "C"	Teaching & Practical		
13	Feb I	4	Miscellaneous The Goto Statement, the null Statement	Teaching & Practical	Student Carrier Counselling	
14	Feb II	4	Advanced futures working with unions –the comma Operat	Teaching & Practical	Assignment/Seminar /Quiz	
15	Feb III	4	Revision of the Syllabus	Teaching & Practical		
16	Feb IV	4	Remedial Classes	Teaching & Practical		

SYLLABUS

DEPARTMENT OF COMPUTERS

College: NAGARJUNA GOVT. DEGREE COLLEGE
Course: B.Sc.
Year : 2014-15
Name of the Module: PC- SOFTWARE
Nature of the Module: Core
Mode of the Learning: Regular

Subject: Computer Science
Semester: I

UNIT-I

FUNDAMENTALS OF COMPUTERS
Computer Definition – Types Of computer Logical Organization of a digital Computer-Memory:Main memory : RAM, ROM and Cache -- Secondary Memory : Magnetic type ,Floppy disk, Hard disk, Computer disk –input devises –Output Devises Operating System :Definition functions of an Operating system ,types of Operating system :Brief Details of batch processing ,Multi Programming ,multi Tasking ,time sharing ,real time Operating system –Introduction to DOS,DOS internal Commands DOS external Commands –introduction to windows ,desktop, file, Folder, My computer, my Documents, Recycle bin, internet explorer, windows explorer-Types programming Languages.

UNIT-II

MS WORD
Working Basics: Starting word, Creating a new document, Opening preexisting document, The parts of a word window, Typing text, Selecting text, Deleting text, Undo, Redo Repeat, Inserting text, Replacing text, Formatting text, Cut ,Copy, Paste-Printing.

Formatting Your Text and Documents: Auto format ,Line spacing, Margins, Borders and Shading.

Working with headers and footers Definition of headers and footers, Creating basic headers and footers, creating different headers and footers for odd and even pages.

Tables: Creating a simple tables, creating a table using the table menu, entering and editing Text in table, selecting in table, adding rows, changing row heights, deleting Rows, Inserting columns, deleting columns, changing column width.

Graphics : Importing graphics, clipart, insert picture, clip art gallery, using word's drawing features drawing Objects, text in drawing.

Templates :   template types, using templates, exploring templates, modifying templates.

Macros ; Macro, recoding macros, editing macros, running a macro.

Mail merge : Mail merge Concept, Main Document, Data sources, merging data source and main document, Over view of word menu Options word basic tool bar.

UNIT-III

Power Point : Basic, terminology, Getting started, views.

Creating presentations; using auto content wizard, using blank presentation Option, Using design template option , adding slides, deleting a slide, importing images from the out side world, drawing in power point, transition and build effects, deleting a slide, numbering a slide, saving presentation, closing presentation, printing presentation elements.

MS ACCESS

MS Access : Creating a simple data base and tables: creating a contacts Databases with the wiz, The access table wizard, Creating database tables without the wizard, field names data types and properties, adding, Deleting fields, renaming the fields in a table.

Forms : The form wizard, Saving forms, Modifying forms

Entering And Editing Data : Adding records, Duplicating previous entries without retyping, undo, correcting entries, global replacements, moving from record to record In a table.

Finding, Sorting and Displaying data : Queries and Dynasts, creating and using select Queries, returning to the Query design, Multilevel sorts, Finding incomplete matches, showing all records after a query , saving queries Cross tab Queries.

Printing Reports : Simple table, form and data base printing, defining advanced reports, Manual Reporting, Properties in reports, saving reports

Relational data bases : Flat versus relational, types relation ships, viewing relation ship, defining and redefining relationships, creating and deleting relationship

UNIT-V

MS Excel:

Excel basics Over view of excel features, getting started, creating a new work sheet, selecting cells, entering and editing text, entering and editing numbers, entering and editing formulas, referencing cells, copying cells, sorting cell data, inserting rows, inserting columns, inserting cells, deleting parts of a work sheet , clearing parts of work sheet.

Formatting : Page setup, changing columns widths and row heights ,auto format, changing font sizes and attributes, centering text across column, using border buttons and commands, changing colors and shading hiding rows and columns.

Introduction to functions : Parts of functions, functions requiring add-ins , the function wizard. Examples function by category: data and time functions, engineering functions, math and trig function, statistical functions, text functions .

Excel charts : Chart part sand terminology , instant charts with the chart wizard, creation

Different types of charts, printing charts, deleting charts – linking in excel.

Excel graphics : Creating and placing Graphic objects, resizing graphics, drawing lines and shapes.

Prescribed Books :

1. Peter Norton, Introduction to Computers, Sixth Edition, Tata McGraw Hill(2007).
2. Ron Mansfield, Working in Microsoft Office, Tata McGraw hill(2008)(Chapters:4
   9,11,12,13,14,15,16,17,18,19,24,25,28,30,31,33.34,35)

Reference Books :

1. Michael Miller, Absolute Beginners Guide to Computer Basics,Fourth Edition, pearson Education,(2007).

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College: NAGARJUNA GOVT. DEGREE COLLEGE
Course: B.Sc.
Year : 2014-15   **Subject: Computer Science**
Name of the Module: PC- SOFTWARE   **Semester: II**
Nature of the Module: Core
Mode of the Learning: Regular

'C' PROGRAMMING
UNIT-I
C LANGUAGE FUNDAMENTALS

Introduction –C fundamentals : programming- high level languages – compiling programs – integrated development environments – language interpreters – compiling your first program – running your program – understanding your first program – comments – variables, data types, and arithmetic's expressions : working with variables –understanding data types and constants – working with arithmetic expressions-the assignment operators – the printf function – the scanf function – Boolean variables

UNIT-II

Construct Statements : the if statements – the if else construct – nested if statement - the else if construct – the switch statements

The Conditional Operator – Program Looping : the for statement – relational operator - nested for loops – the while statements – the do statements – the break statements - the continue statement
Working With Arrays : defining an array – initializing arrays character arrays – the const Qualifier –multidimensional arrays –variable length arrays.
Working With Functions : defining a function –Arguments and local variables – retuning function results-function calling –declaring return types and argument types – top down programming –functions and arrays global variables – automatic and static variables –recursive functions.

UNIT-III
PROGRAMMING C
WORKING WITH STRUCTURE : Defining structure – Functions and structures – Initializing Structures – Array of Structure –Structure containing Structures – structure containing arrays - structure variants – Character strings : Array of characters – variable length Character strings – Escape Characters –character strings, structure and arrays – character Operations.

POINTERS : Defining a pointer variable - using pointers in Expressions – pointers and structures (Exclude linked list)- pointers and functions – pointers and arrays – Operations on pointers – pointers and memory address. Operation on Bits operator – Bit fields.

UNIT-IV

The preprocessor : The # Define Statement – The # # Operator –The # include Statement – Confident ional compilation.

More on Data types: Enumerated data types – The type def statement - data type conversions

Input and Out put Operations in "C" : Character I/O- formatted I/O-Input output Operations With files – Special functions for working with files.

Miscellaneous and Advanced futures :The Goto Statement, the null Statement ,working with unions –the comma Operator – type Qualifier.

Prescribed Books :

1.Stephen   G. kochan, Programming in C, Third Edition, pearson Education (2007)(Chapters : 1to 14,16,17)

Reference Books :

1.Michael Miller, Absolute Beginners Guide to Computer Basics,Fourth Edition, pearson Education,(2007).
2. Deborah Morlay, charles S .Parker, Under standing Computers Today and tommarow, 11th Edition, Thomson (2007).
3.Ed Bott, Woody Leonhard, Using Microsoft Office 2007 ,pearson Education(2007).
4.Beyron S Gottfried,Programming with C, Second edition, tata McGraw hill (2007).
5.Ashoke N. kamthane ,Programming With ANSI and Turbo C, pearson education (2007).
2. Rajaraman, Introduction to information Technology, PHI.
3. BalaGuruswamy. E ,Fundamentals of computing TMH(2002)

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NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA
(AUTONOMOUS)
DEPARTMENT OF COMPUTER SCIENCE
B.Sc II YEAR(2014-15) III – SEMESTER

PAPER CODE COMP/201   TOTAL MARKS: 40+10(INT)

OBJECT ORIENTED PROGRAMMING WITH JAVA

UNIT – I

JAVA FUNDAMENTALS

Fundamentals of Object Oriented programming :

Object Oriented paradigm – Basic concepts of Object Oriented Programming – Benefits of OOP – Applications of OOP.

Java Evolution :

Java Features – How Java differs from C and C++ - Java and Internet – Java and World Wide Web – Web Browsers – Hardware and Software Requirements – Java Environment.

(Chapters : 1,2)

UNIT – II : JAVA FUNDAMENTALS

Overview of Java Language:

Simple Java Program – Java Program Structure – Java Tokens- Java Statements – Implementing a Java Program – Java Virtual Machine – Command Line Arguments.

Constants, Variables and Data types:

Constants – Variables – Data types – Declaration of Variables-Giving Values to variables- Scope of Variables-Symbolic Constants-Type Casting.(Chapters :3,4)

UNIT – III   OOPS CONCEPTS IN JAVA

Operators and Expressions:

Arithmetic Operators – Relational Operators- Logical Operators – Assignment Operators – Increment and Decrement Operators – Conditional Operators – Bitwise Operators – Special Operators – Arithmetic Expressions – Evaluation of Expressions – Precedence of Arithmetic Operators – Operator Precedence and Associativity.

Decision Making and Branching:

Decision Making with If statement – Simple If Statement-If else Statement-Nesting If Else Statement- the ElseIf Ladder-The switch Statement – The ?: operator. (Chapters :5,6)

UNIT – IV   OOPS CONCEPTS IN JAVA

Decision Making and Looping: The while statement – The do statement – The for statement – Jumps in Loops.

Class , Objects and Methods:

Defining a Class – Fields Declaration – Methods Declaration – Creating Objects – Accessing class members – Constructors – Methods Overloading – Static Members – Nesting of Methods – Inheritance – Overriding Methods – Final Variables and Methods – Final Classes – Abstract Methods and Classes – Visibility Control.

(Chapters :7,8)

UNIT – V: PACKAGES AND INTERFACES IN JAVA

Arrays, Strings and Vectors: One-dimensional Arrays-creating an Array – Two dimensional Arrays – Strings – Vectors – Wrapper Classes – Enumerated Types.

Interfaces: Multiple Inheritance : Defining Interfaces – Extending Interfaces – Implementing Interfaces – Accessing Interface Variables.

(CHAPTERS : 9,10,11)

PRESCRIBED BOOKS:

1. E.Balaguruswamy, Programming with Java, A primer, 3e, TATA McGraw-Hill Company (2008).(Chapters : 1 to 14)

Reference Books   :

1. John R. Hubbard, Programming with Java, Second Edition, Schaum's outline Series, Tata McGrawhill (2007).
2. Timothy Budd, Understanding Object Oriented Programming with Java, Pearson Education (2007).
3. Jana, Java and Object Oriented Programming Paradigm, PHI (2007).

4. Deitel & Deitel. Java TM: How to Program, 7th Edition, PHI (2008).

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA
(AUTONOMOUS)
DEPARTMENT OF COMPUTER SCIENCE
B.Sc II YEAR(2013-14)
IV – SEMESTER

PAPER CODE COMP/202   TOTAL MARKS: 40+10(INT)

JAVA AND DATA STRUCTURES WITH JAVA
UNIT – I

Packages:

Java API Packages – Using system Packages – Naming Conventions – Creating Packages – Accessing a Package – Using a Package – Adding a Class to a Package – Hiding Classes – Static Import

Multithreaded programming and Applets.

Multithreaded Programming: Creating Threads – Extending the Thread Class – Stopping and Blocking a Thread – Life Cycle of a Thread – Using Thread Methods – Thread Exceptions – Thread Priority – Synchronization. . (CHAPTERS : 11,12)

UNIT – II

Managing Errors and Exceptions:

Types of Errors – Exceptions – Syntax of Exception Handling Code – Multiple Catch Statements – Using Finally Statement – Throwing our own Exceptions – Using Exceptions for debugging.

Applet Programming:

How Applets differ from Applications – Preparing to write Applets – Building Applet Code – Applet Life Cycle – Creating an executable Applet – Designing a WebPage – Applet Tag – Adding Applet to HTML file – Running the Applet – More about Applet Tag – Passing parameters to Applets – Aligning the display – More about HTML tags – Displaying Numerical Values – Getting Input from the user.(Chapters : , 13, 14)

UNIT – III   DATA STRUCTURES

Sorting: Bubble Sort – Selection Sort – Insertion Sort – Quick Sort-Stacks and
Queues: Stacks – Queues – Circular Queue – Deques - Priority Queue – Parsing Arithmetic

Expressions – (Chapters : 3,4)

UNIT – IV

Linked List:
Simple Linked List – Finding and Deleting Specified Links – Double Ended Lists – Abstract Data types – Sorted Lists – Doubly Linked Lists

Advanced Sorting : Quick Sort –(Chapters5,7 (Only Quick Sort))

UNIT – V

Binary Trees :
Tree Terminology – Finding a Node – Inserting a Node – Traversing the Tree – Finding Maximum and Minimum values – Deleting a Node – Efficiency of Binary Trees – Trees Represented as Arrays
Graphs:
Introduction to Graphs – Searches – Minimum Spanning Tree – Topological Sorting with Directed Graphs – Connectivity in Directed Graphs.
(Chapters : 8,13)

PRESCRIBED BOOKS   :

1.E.Balaguruswamy, Programming with Java, A primer, 3e, TATA McGraw-Hill Company (2008).(Chapters : 1 to 14)
2. Robert Lafore, Data Structures & Algorithms in Java, Second Edition, Pearson Education(2008) (Chapters: 3,4,5,7 (Only Quick Sort),8,13)
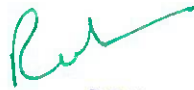
REFERENCE BOOKS   :

John R. Hubbard, Programming with Java, Second Edition, Schaum's outline Series, Tata McGrawhill (2007).

1. Timothy Budd, Understanding Object Oriented Programming with Java, Pearson Education (2007).

2. Adam Drozdek, Data Structures and Algorithms in Java, Second Edition, Cengage Learning(2008).

3. John R. Hubbard, Anita Hurry, Data Structures with Java, Pearson Education (2008).

4. Jana, Java and Object Oriented Programming Paradigm, PHI (2007).

5. Deitel & Deitel. Java TM: How to Program, 7th Edition, PHI (2008).

6. Samatha, Classic Data Structures, PHI (2005).

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DATABASE MANAGEMENT SYSTEMS

PAPER CODE: COMP 301   **TOTAL MARKS 40+10(INT)**

UNIT-I

Database Systems Introduction And Fundamentals

DATABASE SYSTEMS: Introducing the database and DBMS, Why the database is important.

Historical Roots: Files and File Systems, Problems with File System Data Management, Database Systems.

UNIT-II

Data Modeling

DATA MODELS: The importance of Data models, Data Model Basic Building Blocks, Business Rules, The evaluation of Data Models, Degree of Data Abstraction.

The Relational Database Model: A logical view of Data, Keys, Integrity Rules, Relational Set Operators, The Data Dictionary and the system catalog, Relationships with in the Relational Database, Data Redundancy revisited, Indexes, Codd's relational database rules.

UNIT-III

Entity Relationship Model: The ER Model, Developing ER Diagram, Database Design Challenges: Conflicting Goals.

Advanced Data Modeling: The Extended Entity Relationship Model, Entity clustering, Entity integrity: Selecting Primary keys, Design Cases: Learning Flexible Database Design.

UNIT-IV

Normalization of database tables: Database Tables and Normalization, The need for Normalization, The Normalization Process, Improving the design, Surrogate Key Considerations, High level Normal Forms, Normalization and database design, denormalization.

UNIT-V

Introduction to SQL: Data Definition Commands, Data Manipulation Commands, Select queries, Advanced Data Definition Commands, Advanced Select queries, Virtual Tables, Joining Database Tables.

Prescribed Text Book:

1. Peter Rob, Carlos Coronel, Database Systems Design, Implementation and Management, Seventh Edition, Thomson (2007)

Reference Books:

1. Elimasri / Navathe, Fundamentals of Database Systems, Fifth Edition, Pearson Addison Wesley (2007).

2. Raman A Mata – Toledo/Panline K Cushman, Database Management Systems, Schaum's Outlibe series, Tata McGraw Hill (2007).

3. C.J.Date, A.Kannan, S.Swamynathan, An Introduction to Database Systems, Eight Edition, Pearson Education (2006).

4. Michel Kifer, Arthur Bernstein, Philip M. Lewis, Prabin K. Pani Graphi, Database Systems: An application oriented Approach, second edition, pearson education (2008).

5. Atul Kahate, Introduction to Database Management Systems, Pearson Education (2006).

NAGARJUNA GOVT. DEGREE COLLEGE:NALGONDA
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DEPARTMENT OF COMPUTER SCIENCE
B.Sc III YEAR(2014-15) SEMESTER-VI
SYLLABUS
DATABASE MANAGEMENT SYSTEMS

PAPER CODE: COMP 302   **TOTAL MARKS 40+10(INT)**

UNIT-I

ADVANCED SQL: Relational Set Operators, SQL Join Operators, Subqueries and correlated queries, SQL Functions, Oracle Sequences, Updatable Views, and Procedural SQL.

DATABASE DESIGN: The Information System, The Systems Development Life Cycle, The Database Life Cycle, Database Design Strategies, Centralized Vs Decentralized design.

UNIT-II

TRANSACTION MANAGEMENT AND CONCURRENCY CONTROL: What is transaction, Concurrency control, Concurrency control with locking Methods, Concurrency control with time stamping methods, concurrency control with optimistic methods, database recovery management.

UNIT-III

DISTRIBUTED DATABASE MANAGEMENT SYSTEMS: The evolution of Distributed Database Management Systems, DDBMS advantages and Disadvantages, Distribution Processing and Distribution Databases, Characteristics of Distributed database management systems, DDBMS Components, Levels of Data and Process distribution, Distributed database Transparency Features, Distributed Transparency, Transaction Transparency, Performance Transparency and Query Optimization, Distributed Database Design, Client Server VS DDBMS.

UNIT-IV

THE DATA WAREHOUSE: The need for data analysis, Decision support systems, The data warehouse, Online analytical processing, Star schemas, Data mining, SQL extension for OLAP.
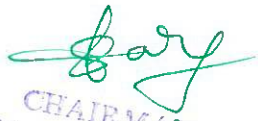
UNIT-V

DATABASE ADMINISTRATION: Data as a Corporate asset, The need for and role of databases in an organization, The evolution of the database administration function, The database environment's Human Component, Database administration Tools, The DBA at work: Using Oracle for Database Administration.

Prescribed Text Book:

Peter Rob, Carlos Coronel, Database Systems Design, Implementation and Management, Seventh Edition, Thomson (2007)

Reference Books:

1. Elimasri / Navathe, Fundamentals of Database Systems, Fifth Edition, Pearson Addison Wesley (2007).

2. Raman A Mata – Toledo/Panline K Cushman, Database Management Systems, Schaum's Outlibe series, Tata McGraw Hill (2007).

3. C.J.Date, A.Kannan, S.Swamynathan, An Introduction to Database Systems, Eight Edition, Pearson Education (2006).

4. Michel Kifer, Arthur Bernstein, Philip M. Lewis, Prabin K. Pani Graphi, Database Systems: An application oriented Approach, second edition, pearson education (2008).

5. Atul Kahate, Introduction to Database Management Systems, Pearson Education (2006).

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DEPARTMENT OF COMPUTER SCIENCE
B.Sc III YEAR(2014-15)
SEMESTER-V PAPER-VI
SYLLABUS
WEB TECHNOLAGIES

PAPER CODE: COMP /401   **TOTAL MARKS 40+10(INT)**

UNIT-I

Introduction: HTML, XML, and the World Wide Web.

UNIT-II

HTML: Basic HTML, The Document body, Text, Hyperlinks, Adding more formatting, Lists, Tables, Using colors and images, Images.

UNIT-III

MORE HTML: Multimedia objects, Frames, Forms-towards interactivity, The HTML document Head in detail, XHTML- An evolutionary markup.

UNIT-IV

CASCADING STYLE SHEETS: Introduction, Using styles: Simple examples, Defining your own styles, Properties and values in styles, Style sheets- A worked example, Formatting blocks of information, Layers.

UNIT-V

An introduction to Java Script: What is dynamic html, Java Script, Java script—The basics, Variables, String manipulation, Mathematical functions, Statements, Operators, Arrays, Functions.

Prescribed Book:

1. Chris Bates, Web Programming Building Internet Applications, Second Edition, Wiley (2007).

Reference Books:
1. Paul S.Wang Sanda S. Katila, An Introduction to Web Design Plus Programming, Thomson(2007).
2. Robert W.Sebesta, Programming the World Wide Web, Third Edition, Pearson Education (2007).
3. Thomas A.Powell, The Complete Reference HTML & XHTML, Fourth Edition, Tata McGraw Hill (2006).
4. Abders Moller and Michael Schwartzbach, An Introduction to XML and Web Technologies, Addison Wesley (2006).
5. Joel Sklar, Principles of Web Design, Thomson (2007).
6. Raj Kamal, Internet and Web Technologies, Tata McGraw Hill (2007).
7. Deitel, et al.,Internet and World Wide Web: How to Program, 3rd Edition, PHI (2008).
8. Gopalan & Akilandeswari, Web Technology: A Developer's Perspective, PHI (2008).

NAGARJUNA GOVT. DEGREE COLLEGE:NALGONDA
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DEPARTMENT OF COMPUTER SCIENCE
B.Sc III YEAR(2014-15) PAPER-VIII
SEMESTER-VI
SYLLABUS
WEB TECHNOLAGIES

PAPER CODE:COMP/402   **TOTAL MARKS 40+10(INT)**

UNIT-I

Objects in Java Script: Data and objects in java script, Regular expressions, Exception Handling, Built in objects, Events.

UNIT-II

Dynamic HTML with Java Script: Data validation, Opening a new window, Messages and Confirmations, The status bar, Writing to a different frame, Rollover buttons, Moving images, Multiple pages in a single download, A text-only menu system, Floating logos.

UNIT-III

Active Server Pages and Java: Active Server Pages, Java.

XML: Defining Data for Web applications: Basic XML, Document type definition, XML schema, Document Object Model, Presenting XML

UNIT-IV

Good Design: Structure, Tables versus Frames, Accessibility, Internationalization, Exercises.

Useful Software: Web browsers, Perl, Web servers, mod_perl, Databases, Accessing your ISP, Exercises.

UNIT-V

Protocols: Protocols, IP and TCP, Hyper Text Transfer Protocol, Common Gateway Interface, The Document Object Model, introducing the Document Object Model, Exercises.

Case Study: The plan, The data

Prescribed Book:

❖ Chris Bates, Web Programming Building Internet Applications, Second Edition, Wiley (2007)

Reference Books:

❖ Paul S.Wang Sanda S. Katila, An Introduction to Web Design Plus Programming, Thomson(2007).

❖ Robert W.Sebesta, Programming the World Wide Web, Third Edition, Pearson Education (2007).

❖ Thomas A.Powell, The Complete Reference HTML & XHTML, Fourth Edition, Tata McGraw Hill (2006).

❖ Abders Moller and Michael Schwartzbach, An Introduction to XML and Web Technologies, Addison Wesley (2006).

❖ Joel Sklar, Principles of Web Design, Thomson (2007).

❖ Raj Kamal, Internet and Web Technologies, Tata McGraw Hill (2007).

❖ Deitel, et al.,Internet and World Wide Web: How to Program, 3rd Edition, PHI (2008).

❖ Gopalan & Akilandeswari, Web Technology: A Developer's Perspective, PHI (2008).

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QUESTION BANK

NAGARJUNA GOVT. DEGREE COLLEGE NALGONDA
(AUTOTONOMOUS)
DEPARTMENT OF COMPUTER SCIENCE
B.Sc I YEAR (2014-15)
PC SOFTWARE AND 'C' PROGRAMMING
PRACTICAL QUESTION BANK

TIME 3 HOURS
MAX.MARKS 50

Productivity Tool Lab Cycle

MS-WORD

1. Design a visiting card for managing director of a Company with following specification

    i.   Size of visiting card if 3.5"x 2"

    ii.   Name of a company with big font using water mark

    iii.   Phone number, fax number and e-mail address with appropriate symbols

    iv.   Office and residence address separated by line.

2. Create a letter head of a Company

    i.   Name of Company on the top of the page with big font and good style

    ii.   Phone numbers, fax numbers, e-mail address with appropriate symbols

    iii.   Main products manufactured to be described at the bottom

    iv.   Slogans if any should be specified in bold at the bottom

3. Creation of your Bio-Data: Consisting name, email-id, Contact address, carrier Objective Education qualification, social activities, achievment.

4. Introduce one practical covering the creation of word document involving all Mathematical functions and symbols.

5. Introduce lab on explaining and demonstrating the components of P>C with real models.

MS-POWERPOINT

1. Make a power point presentation on your strengths, Weakness, hobbies, factors that waste your time.
2. Make a power point presentation on any Current affair (Not less than 8 slides)
3. Make a power point presentation to representation your College
4. Make a power point presentation of all the details of the books that you had studied B.Sc first your.

MS-ACCESS

1. Create a database using MS_ACCESS with at least   5 records TABLE 1 STRUCTURE: REGISTER NUMBER NAME DOB GENDER CLASS

TABLE2 STRUCTURE:
   REGISTER NUMBER M1M2 M3 M4M M5 TOTAL
Maintain the relation between two tables with REGISTER NUMBER as a primary key and answer the following quarries:

Show the list of students with the following fields as one query

REGISTER NUMBER NAME GENDER TOTALMARKS
2. **Maintain the relationship between above two tables with REGISTER NUMBER as a Primary key and answer the following reports.**
   Reports must have following columns
   Report1 with REGISTER NUMBER,NAME, MARKS OF ALL SUBJECTS and TOTAL
   Report2 with REGISTER NUMBER, TOTAL, PERCENTAGE.

3. **Create a database using MS-ACCESS with at least 5 records**
   TABLE1 STRUCTURE:
       EMP-CODE EMP-NAME AGE GENDER DOB
   TABLE2 STRUCTURE:
       EMP-CODE BASIC-PAY

Maintain the relationship between two tables with EMP – CODE as a Primary key generate the following reports:

REPORT1:

EMP-CODE EMP-NAME BASIC-PAY DA HRA GROSS-SALARY

REPORT2:

EMP-CODE EMP-NAME AGE GENDER GROSS-SALARY

MS-EXCEL

1.Create an electronic spreadsheet in which you enter the following decimal numbers and convert into Octal, Hexadecimal and Binary numbers Vice versa.

Decimal Numbers: 35,68,95,165,225,355,375,465

Binary Numbers: 101,1101,111011,10001,110011001,111011111.

2. The ABC Company shows the sales of different products for 5 years.Create column chart,3D-column and Bar chart for the following data

YEAR	PRODUCT-1	PRODUCT-2	PRODUCT-3	PRODUCT-4
2003	1000	800	900	1000
2004	800	80	500	900
2005	1200	190	400	800
2006	400	200	300	1000
2007	1800	400	400	1200

3. Create a suitable examination data base and find the sum of the marks(total) of each student and respective class secured by the student rules:

Pass if marks in each subject>=35

Distinction if average>=75

First class if average>=60 but<75

Second class if average>=50 but <60

Third class if average>=35 but <50

Fail if marks in any subject is <35

Display average marks of the class, subject wise and pass percentage..

C-PROGRAMMING LAB CYCLE

1. Program for

   i. Sum of factors of a number   ii. Sum of digits of a number

2. Program to check whether a given number is

   i. Prime Number or not,   ii. Perfect number or not   iii. Armstrong or

not

3. Program using recursion or not

   i. Factorial of a given number   ii. Fibonacci series

4. Program for roots of a quadratic equation

5. Program using functions

   i. With out return value   ii. With return value

   iii. with parameters   iv. With out parameters

6. Program to find largest/smallest of n numbers by using arrays

7. Program for sorting an array

8. Program for matrix addition & subtraction

9. Program for matrix multiplication

10. Program for transpose of agiven matrix

11. Program for (with and without string functions)

i. Comparison of two strings   ii. Concatenation of two strings

iii. Length of a string

12. Program to process student information. Student structure consists Sno, Sname, Marks in 6 subjects, Total, average. Calculate total and average of n students and assign grade with following criteria.

Grade A : All pass and avg >=75

Grade B : All pass and avg>=60 avg<75

Grade C : All pass and avg>=50 and avg<60

Grade D : All pass and avg>=40 and avg<50

Grade E : If fails in one or more subjects.

13. Program for (i) Nesting of Structure (ii) Passing structures to functions.

14. Program to demonstrate (i) Unions (ii) enumerated data typs.

15. Program for sum of diagonal elements of a square matrix?

16. Program to access (i) Array elements (ii) Structure elements using pointers.

17. Program for sorting strings using pointers.

18. Program to count number of (i) words (ii) lines (iii) Special Characters in

a given text.

19. Program to create a file to store and retrieve strings using fputs() and fgets().

20. Program to create a file to store and update employee records. The employee record consists of ENO, ENAME, DEPTNO, DEPTNAME, BASICSALARY, HRA, DA, DEDUCTION, TOTLASALARY and NETSALARY.

21. Program to evaluate following expression.

$1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \dots\dots + 1/n$

22. Program to find square root of a given number.

23. Program to create a table of Triangular Numbers.

24. Program for reversing digit of a Numbers.

25. Program for Base Conversion.

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DEPARTMENT OF COMPUTER SCIENCE
B.Sc II YEAR(2014-15)
PRACTICAL QUESTION BANK

TIME 3 HOURS   PAPER – II   Max.Marks 50

Java and Data structures Lab

Java Lab Cycle

1. Write a java program to determine the sum of the following harmonic series for a given value of 'n'.

   $1+1/2+1/3+\ldots\_1/n$

2. Write a program to perform the following operations on strings through interactive input.

   a) Sort given strings in alphabetical order.

   b) Check whether one string is sub string of another string or not.

   c) Convert the strings to uppercase.

3. Write a program to simulate on-line shopping.

4. Write a program to identify a duplicate value in a vector.

5. Create two threads such that one of the thread print even no's and another prints odd no's up to a given range.

6. Define an exception called "Marks Out Of Bound" Exception, that is thrown if the entered marks are greater than 100.

7. Write a JAVA program to shuffle the list elements using all the possible permutations.

8. Create a package called "Arithmetic" that contains methods to deal with all arithmetic operations. Also, write a program to use the package.

9. Write an Applet program to design a simple calculator.

10. Write a program to read a text and count all the occurrences of a given word. Also, display their positions.

11. Write an applet illustrating sequence of events in an applet.

12. Illustrate the method overriding in JAVA.

13. Write a program to fill elements into a list. Also, copy them in reverse order into another list.

14. Write an interactive program to accept name of a person and validate it. If the name contains any numeric value throw an exception "InvalidName".

15. Write an applet program to insert the text at the specified position.

16. Prompt for the cost price and selling price of an article and display the profit (or) loss percentage.

17. Create an anonymous array in JAVA.

18. Create a font animation application that changes the colors of text as and when prompted.

19. Write an interactive program to wish the user at different hours of the day.

20. Simulate the library information system i.e. maintain the list of books and borrower's details.

Data Structures Lab Cycle

21. Program to create, insert, delete and display operations on single linked list?

22. Program to create , insert, delete and display operations on double linked list ?

23. Program to create , insert, delete and display operations on circular single linked list ?

24. Program to split a single linked list

25. Program to reverse a single linked list

26. Program to implement Insertion Sort.

27. Program to implement PUSH and POP operations on Stack using array method.

28. Program to implement PUSH and POP operations on Stack using Linked list method.

29. Program to implement insert and delete operations on Queue using array method.

30. Program to implement insert and delete operations on Queue using linked list method.

31. Program to implement insert and delete operations on Priority Queue?

32. Program to implement insert and delete operations on Double Ended Queue?

33. Program to evaluate postfix expression by using Stack?

34. Program to construct Binary Search Tree and implement tree traversing Techniques.

35. Program to delete a leaf node from binary search tree.

36. Program to implement Selection Sort.

37. Program to implement Bubble Sort.

38. Program to implement Operations on Circular Queue.

39. Program to implement Quick Sort.

40. Program to Find number of Leaf nodes and Non-Leaf nodes in a Binary Search Tree.

41. Program for Insertion Sort.

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA(AUTONOMOUS)
B.Sc III YEAR(2014-15)PAPER III
DATABASE MANAGEMENT SYSTEM
PRACTICAL QUESTION BANK

TIME : 3 HOURS

MAX.MARKS : 50

DBMS LAB

Lab Cycle
Order Tracking Database

The Order Tracking Database consists of the following defined six relation schemas.

EMPLOYEES(ENO,ENAME,ZIP,HDATE)

PARTS(PNO,PNAME,QOH,PRICE,LEVEL) (HINT: QOH: QUALITY ON HAND)

CUSTOMERS(CNO,CNAME,STREET,ZIP,PHONE)

ORDERS(ONO,CNO,ENO,RECEIVED DATE,SHIPPED DATE)

ODETAILS(ONO,PNO,QTY)

ZIPCODES(ZIP,CITY)

Solve the following queries

1. Get all pairs of customer numbers for customers based on same zip code.

2. Get part numbers for parts that have been ordered by at least two different, customers.

3. For each odetail row, get ono, pno, pname, qty and price values along with the total price for the item. (total price=price*qty)

4. Get customer name and employee pairs such that the customer with name has placed an order through the employee.

5. Get customer names living in fort dodge or liberal.

6. Get cname values of customers who have ordered a product with pno 10506.

7. Get pname values of parts with the lowest price.

8. Get cname values of customers who have placed at least one order through the employee with number 1000.

9. Get the cities in which customers or employees are located.

10. Get the total sales in dollars on all orders.

11. Get part name values that cost more than the average cost of all parts.

12. Get part names of parts ordered by at least two different customers.

13. Get for each part get pno,pname and total sales.

14. For each part, get pno,pname, total sales, whose total sales exceeds 1000.

15. Get pno, part names of parts ordered by at least two different customers.

16. Get cname values of customers who have ordered parts from any one employee based in which it a or liberal.

SHIPMENT DATABASE

AN ENTERPRISE WISHES TO MAINTAIN THE DETAILS ABOUT HIS SUPPLIERS AND OTHER CORRESPONDING DETAILS. FOR THAT IT USES THE FOLLOWING TABLES

TABLE S(SID,SNAME,ADDRESS)

    PRIMARY KEY   : SID

TABLE P(PID,PNAME,COLOR)

    PRIMARY KEY   : PID

TABLE CAT(SID,PID,COST)

    PRIMARY KEY   : SID+PID

    REFERENCE KEY   : SID REFERENCES S.SID

                            PID REFERENCES P.PID

Solve the following queries

1. Find the pnames of parts for which there is some supplier

2. Find the snames of suppliers who supply every part.

3. Find the snames of suppliers who suppy every red part.

4. Find the pnames of parts supllied by london supplier and by no one else

5. Find the sids of suppliers who charge more for some part other than the average cost of that part.

6. Using group by with having clause get the part numbers for all the parts supplied by more than one supplier.

7. Get the names of the suppliers, who do not supply part p2.

8. Find the sids of suppliers who supply a red and a green part

9. Find the sids of suppliers who supply a red or a green part

10.find the total amount has to pay for that supplier by part located from London

EMPLOYEE DATABASE

An enterprise wishes to maintain a database to automate its operations. Enterprise divided into to certain departments and each department consists of employees. The following two tables describes the automation schemas

DEPT (DEPTNO, DNAME, LOC)

EMP (EMPNO,ENAME,JOB,MGR,HIREDATE,SAL,COMM,DEPTNO)

1. Create a view, which contain employee names and their manager names working in sales department.

2. Determine the names of employee, who earn more than their managers.

3. Determine the names of employees, who take highest salary in their departments.

4. Determine the employees, who located at the same place.

5. Determine the employees, whose total salary is like the minimum salary of any department.

6. Update the employee salary by 25%, whose experience is greater than 10 years.

7. Delete the employees, who completed 32 years of service.

8. Determine the minimum salary of an employee and his details, who join on the same date.

9. Determine the count of employees, who are taking commission and not taking commission.

10. Determine the department does not contain any employees.

11. Find out the details of top 5 earner of company.

12. Display those managers name whose salary is more than average salary of his employees.

13. Display those employees who joined the company before 15th of the month?

14. Display the manager who is having maximum number of employees working under him?

15. Print a list of employees displaying 'less salary' if less than 1500 if exactly 1500display as 'exact salary' and if greater than 1500 display 'more salary'?

16. Display those employees whose first 2 characters from hire date-last 2 characters of salary?

17. Display those employees whose 10% of salary is equal to the year of joining?

18. In which year did most people join the company? Display the year and number of employees.

19. Display the half of the enames in upper case and remaining lower case

20. Display ename, dname even if there no employees working in a particular department(use outer join).

University Database

University wishes to computerize their operations by using the following relations.

Student (snum:Integer, sname: string, major: string, level: string, age: integer)

Class (name: String, Hour:Integer, room: string, fid: integer)

Enrolled (sum: integer, cname: string)

Faculty (fid: Integer, fname: String, deptid: Integer)

Depart (deptid: Integer, dname: String, loc: integer)

By using above schema definitions, resolve the following queries

1. Find The Names Of All Juniors (Level=Jr) Who Are Enrolled In A Class Taught By Smith.

2. Find The Age Of The Oldest Student Who Is Either A History Major Or Is Enrolled In The Course Of Smith.

3. Find The Names Of All Classes That Either Meet R128 Or Have Five Or More Students Enrolled.

4. Find The Names Of All Students Who Are Enrolled In Two Classes That Meet At The Same Hour.

5. Find The Names Of Faculty Members Who Teach In Every Room In, Which Some Class Is Taught.

6. Find The Names Of Faculty Members For Whom The Combined Enrollment Of The Courses That They Teach Is Less Than Five.

7. Print The Level And Average Age Of Students For That Level, For Each Level.

8. Print The Level And Average Age Of The Student For That Level, For All Levels Except Jr.

9. Find The Names Of Students Who Are Enrolled In The Maximum Number Of Classes.

10. Find The Names of the students who are not enrolled in any class.

Airline Database

An Airline System would like to keep track their information by using the following relations.

Flights (flno: integer, from: string, to: string, distance: integer, Price: integer)

Aircraft (aid: integer, aname: string, cruising_range: integer)

Certified (eid: integer, aid: integer)

Employees (eid: integer, ename: string, salary: real)

Note that the employees relation describes pilots and other kinds of employees as well; every pilot is certified for aircraft and only pilots are certified to fly. Resolve the following queries:

1. for each pilot who is certified for more than three aircraft, find the eid's and the maximum cruising range of the aircraft that he (or she) certified for.

2.find the names of pilots whose salary is less than the price of the cheapest route from los angeles to honolulu.

3.find the name of the pilots certified from some boeing aircraft.

4.for all aircraft with cruising range over 1,000 miles, find the name of the aircraft and the average salary of all pilots certified for this aircraft.

5.find the aid's of all aircraft that can be used from los angels to chicago.

6.print the enames of pilots who can operate planes with cruising range greater than 3,000 miles, but are not certified by boeing aircraft.

7.find the total amount paid to employees as salaries.

8.find the eid's of employees who are certified for exactly three aircrafts.

9.find the eid's of employee who make second highest salary.

10.find the aid's of all than can be used on non-stop flights from bonn to chennai.

PL/SQL PROGRAMS

1. Write a pl/sql program to check the given number is strong or not.

2. Write a pl/sql program to check the given string is palindrome or not.

3. Write a pl/sql program to swap two numbers without using third variable.

4. Write a pl/sql program to generate multiplication tables for 2,4,6

5. Write a pl/sql program to display sum of even numbers and sum of odd numbers in the given range.

6. Write a pl/sql program to check the given number is pollinndrome or not.

7. The hrd manager has decided to raise the employee salary by 15%. Write a pl/sql block to accept the employee number and update the salary of that employee. display appropriate message based on the existence of the record in emp table.

8. Write a pl/sql program to display top 10 rows in emp table based on their job and salary.

9. Write a pl/sql program to raise the employee salary by 10%, for

   department number 30 people and also maintain the raised details in the raise table.

10. Write a procedure to update the salary of employee, who are not getting commission by 10%.

11.write a pl/sql procedure to prepare an electricity bill by using following table

TABLE USED: SELECT

NAME	NULL?	TYPE
MNO	NOT NULL	NUMBER(3)
CNAME		VARCHAR2(20)
CUR_READ		NUMBER(5)
PREV_READ		NUMBER(5)
NO_UNITS		NUMBER(5)
AMOUNT		NUMBER(8,2)
SER_TAX		NUMBER(8,2)
NET_AMT		NUMBER(9,2)

12. WRITE A PL/SQL PROCEDURE TO PREPARE AN TELEPHONE BILL BY USING FOLLOWING TABLE. AND PRINT THE MOTHLY BILLS FOR EACH CUSTOMER

TABLE USED : PHONE.

NAME	NULL?	TYPE
TEL_NO	NOT NULL	NUMBER(6)
CNAME		VARCHAR2(20)
CITY		VARCHAR2(10)
PR_READ		NUMBER(5)
CUR_READ		NUMBER(5)
NET_UNITS		NUMBER(5)
TOT_AMT		NUMBER(8,2)

13. WRITE A PL/SQL PROGRAM TO RAISE THE EMPLOYEE SALARY BY 10%, WHO ARE COMPLETED THERE 25 YEARS OF SERVICE.

14. WRITE A PL/SQL PROCEDURE TO EVALUATE THE GRADE OF A STUDENT WITH
     FOLLOWING CONDITIONS:

FOR PASS: ALL MARKS > 40

FOR I CLASS: TOTAL%>59

FOR II CLASS: TOTAL% BETWEEN >40 AND <60

FOR III CLASS: TOTAL% =40

AND ALSO MAINTAIN THE DETAILS IN ABSTRACT TABLE.

TABLES USED

<u>TABLE STD</u>

SQL> DESC STD

NAME	NULL?	TYPE
NO	NOT NULL	NUMBER
NAME		VARCHAR2(10)
INTNO		NUMBER
CLASS	NOT NULL	VARCHAR2(10)
M1		NUMBER
M2		NUMBER
M3		NUMBER
M4		NUMBER
M5		NUMBER

<u>TABLE ABSTRACT</u>

SQL> DESC ABSTRACT

NAME	NULL?	TYPE
STDNO		NUMBER
STDNAME		VARCHAR2(10)
CLASS		VARCHAR2(10)
INTNO		NUMBER
TOT		NUMBER
GRADE		VARCHAR2(10)
PERCENT		NUMBER
DAT_ENTER		DATE

15. WRITE A PROCEDURE TO UPDATE THE SALARY OF EMPLOYEE, WHO BELONGS TO
     CERTAIN DEPARTMENT WITH A CERTAIN PERCENTAGE OF RAISE.

NAGARJUNA GOVT. DEGREE COLLEGE: NALGONDA

(AUTONOMOUS)
DEPARTMENT OF COMPUTER SCIENCE
B.Sc III YEAR(2014-15)
WEB PROGRAMMING

PRACTICAL QUESTION BANK

**TIME : 3 HOURS**   **MAX.MARKS : 50**
Lab Cycle

1. Write a HTML program illustrating text formatting.

2. Illustrate font variations in your HTML code.

3. Prepare a sample code to illustrate links between different sections of the page.

4. Create a simple HTML program to illustrate three types of lists.

5. Embed a real player in your web page.

6. Embed a calendar object in your web page.

7. Create an applet that accepts two numbers and perform all the arithmetic operations on them.

8. Create nested table to store your curriculum.

9. Create a form that accepts the information from the subscriber of   a mailing system.
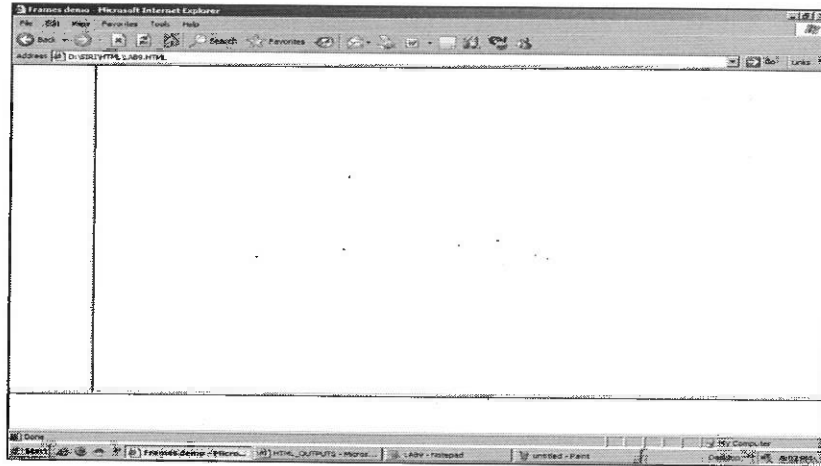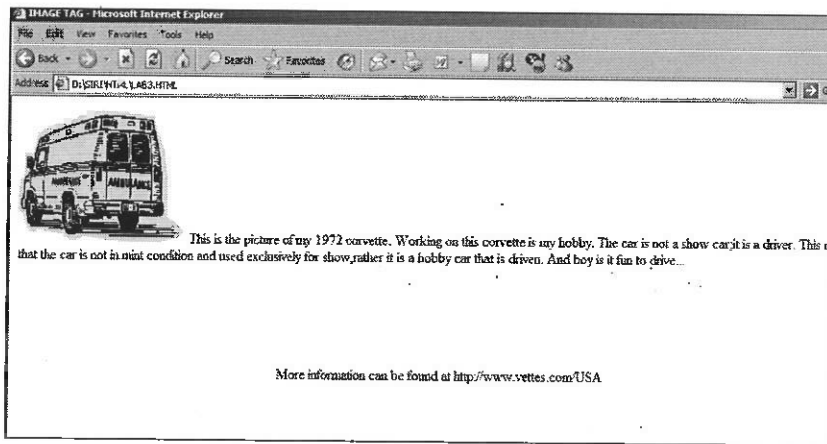
10. Design the page as follows:
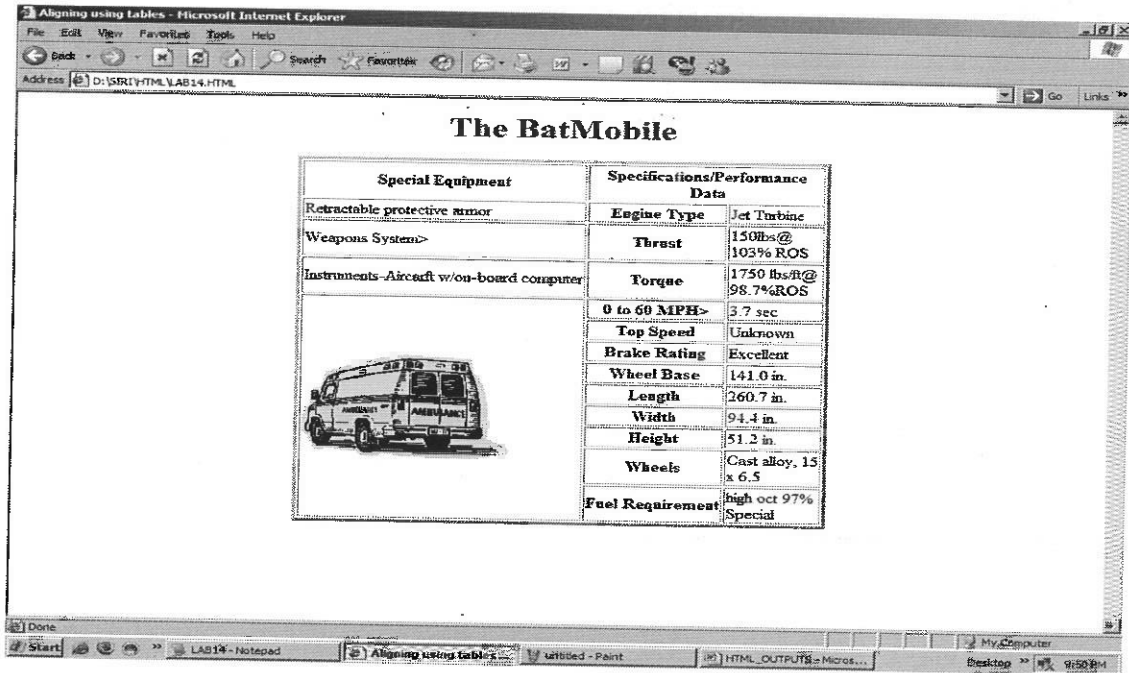
11. Using "table" tag, align the images as follows:
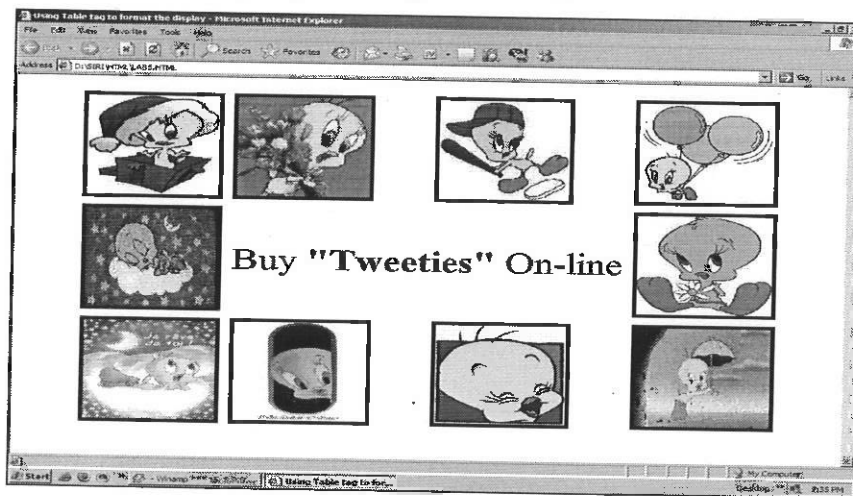
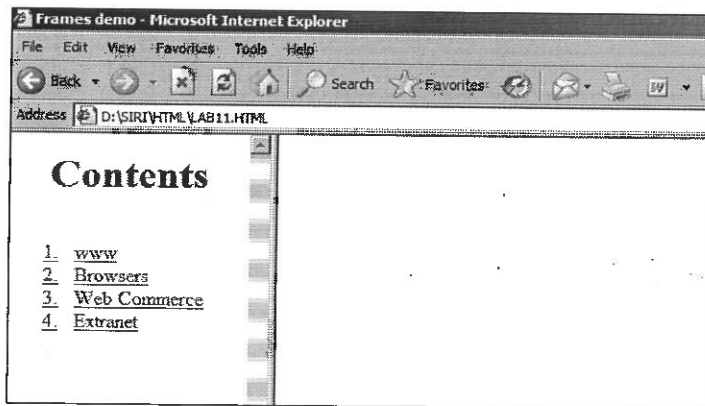12. Divide the web page as follows:

13. Design the page as follows:

14. Illustrate the horizontal rulers in your page.
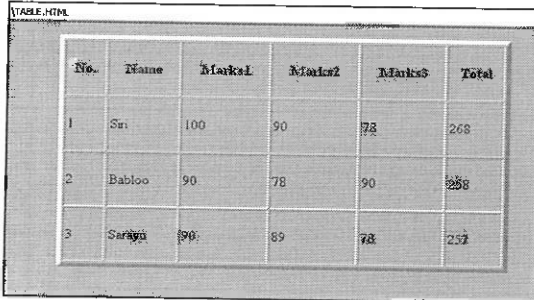
15. Create a help file as follows:

16. Write a Java Script to accept the first, middle and last names of the user and print the name.

17. Evaluate the following:

   a) "10"+"90"

   b) (10<8)>10:8

   c) J=(i++)+(--i)+(++i)+(i++) where i=2

18. Write a Program in Java Script to add two numbers.

19. Write a script to find the factorial of a given number using functions.

20. Write a script to print all primes with in the given range.

21. Write a program to sort the array elements using "Bubble Sort" technique.

22. Write a program in Java Script to implement "Binary Search" technique.

23. Write a script to print all perfect numbers with in the given range.

24. Write a script to evaluate the following expression:

$$1+2/2! +3/3! +\ldots\ldots+n/n!$$

25. Write a program to implement "Stack" operations.

26. Write a script to print Fibonacci series recursive functions.

27. Using a ternary operator, write a script to validate the withdrawal transaction of a customer. If he with draws more than his balance, such a transaction should be disallowed.

28. Write a script to wish the user "Good Morning" at different hours of the day.B.Sc(Computer Science): III Year: Lab-4.1 (Continued).

29.Prompt the user for the cost price and selling price of an article and output the profit or loss percentage.

30.Create a customer profile for data entry of customers in a hotel. The profile should prompt for the name, address, gender, age, room type, mode of payment of the customer.

31.Create a student registration system with the following fields:

   Name, Regdno, Gender, street, city, state, pincode, stdcode, phone, dbirth, college, experience, course code. Create a main object called "Stu_info" with all the fields and

"College" and "Experience" as sub objects with in the main object. Create separate object definition for College and Experience with the following fields:

College: Name, Location, Degree

Experience: Employer, Location, Duties and Period

32. Write a script to read information of 'n' students from the user and store them into the table as follows:

No.	Name	Marks1	Marks2	Marks3	Total
1	Sri	100	90	78	268
2	Babloo	90	78	90	258
3	Sarayu	90	89	78	257

33. Write the script for the various validations given below:

   a. Candidate code should be generated

   b. Date of Birth should not be null and age should be more than 21.

   c. All alphabet fields should be validated.

   d. All number fields should accept only numbers.

   e. Total experience should be calculated and displayed after accepting input for the "From" and "To" fields in the table.

34. Create a bio-data format with the following fields:

Name, candidate code, Date of birth, Gender, Address1, Address2, Phone, Passport number, Qualification and Percentage.

Also, create the following fields for entering present employment details:

Company name Company Address1, Address2, Address3, Phone, Fax, E-mail, Total Experience and Project details.

Create a table with the columns given below in a 3 row structure:

Employer name, Location, From, To, Field

35. Create a web page for a shopping mall that allows the user to tick off his purchases and obtain a

bill with the total being simultaneously added up. The web page must follow the specifications as

given below:

a.The entire web page must be divided into four portions. The top most portion states the name of the mall, the middle portion of the web page is divided vertically into two, the types of the items available in the mall are displayed on the left side and a detailed description of each item with the prices are available on the right. Finally, the bottom most portion of the web page must display the cash memo with the total along side.

b.Each item in the left hand frame must have a link to the file containing its detailed description, which must be displayed in the right hand frame. Ensure that the user is able to perceive only that portion of the file that is related to the item on which he clicked. Prior to the link being activated, the right hand frame must display a friendly message that gives an idea about its latter contents.

36. Design a simple calculator.

37. Write a DHTML program to give different colors for different heading tags.

38.Using DHTML, invert the behavior of <h1> to <h6> tags.

39.Create an inline style sheet for your web page.

40. Create an external style sheet for creating a font family.

41. Illustrate the creation of embedded style sheet.

42. Illustrate the procedure of creating user-defined classes.

43. Write an ASP script to send the information accepted from the user and send it to a CGI script.

44. Write an ASP script to update the student information with some number 'n' in the table.

45. Delete the desired student's record from the table using the ASP Script.

MODEL PAPER

COURSE: B.Sc.,

Semester: I

Max. Marks: 70

SUBJECT: Computer Science

Module: PC- Software

Time: 2:30 Hours

PART -A
(Very Short Questions)

5 X 2 = 10

I. Answer all the questions

1.
2.
3.
4.
5.

PART - B
(Short Questions)

4 X 5 = 20

II. Answer any four of the following
(At least one question from each unit)

6.
7.
8.
9.
10.
11.

PART-C
{Essay Type Questions)

III. Answer the following questions

4 X 10 = 40

12. A)
    B)

                                    (OR)

    C)
    D)

13. A)
    B)

                                    (OR)

    C)
    D)

14. A)
    B)

                                    (OR)

    C)
    D)

15. A)
    B)

                                    (OR)

    C)
    D)

***

CHAIRMAN
Board of Studies in Computer Science
N.G. College; NALGONDA,

NAGARJUNA GOVERNMENT COLLEGE (AUTONOMOUS) , NALGONDA
MODEL QUESTION PAPER

COURSE: B.Sc.,

Semester: II

Max. Marks: 70

SUBJECT: Computer Science

Module: C Programming

Time: 2:30 Hours

PART - A
(Very Short Questions)

5 X 2 = 10

I. Answer all the questions
1.
2.
3.
4.
5.

PART - B
(Short Questions)

4 X 5 = 20

II. Answer any four of the following
(At least one question from each unit)
6.
7.
8.
9.
10.
11.

PART-C
(Essay Type Questions)

III. Answer the following questions

4 X 10=40

12. A)
    B)

                                              (OR)

    C)
    D)

13. A)
    B)

                                              (OR)

    C)
    D)

14. A)
    B)

                                              (OR)

    C)
    D)

15. A)
    B)

                                              (OR)

    C)
    D)

FACULTY OF SCIENCE
B.Sc II nd Year SEMESTER-III
OBJECT ORIENTED PROGRAMMING WITH JAVA
PAPER-III 2014-15

PAPER CODE 201   **MODEL PAPER**
Time 2 1/2 Hours   **Max. Marks 40**
                            SECTION-A

To give five question with internal choice and ask them to answer 5

                                          5 X 6 = 30
                            UNIT-I

1. a) Explain Basic concepts of object-oriented Programming

                            (OR)

b)   Explain about java and world wide web.

                            UNIT-II

2. a)Explain about the Structure of Java Program.

                            OR

   b) What are different data types in Java.

                            UNIT-III

3. a) Discuss Type Conversion in Expressions.

                            OR

   b) explain about conditional statements.

                            UNIT-IV

4. a)Explain Control Structures in Java.

                            (OR)

   b)Explain Visibility Accessing class members in Java.

UNIT-V

5. a) Explain about creating an arrays.

(OR)

b) How multiple inheritance achieved in Java?

SECTION-B

To give 8 question and ask them to answer 5   5 X 2= 10

6. Define classes

7. Define Encapsulation

8. Explain any two data types

9. Explain variables

10. Expalin Operators

11. Define Inheritance.

12. What is applet tag.

13. Define String.

FACULTY OF SCIENCE
B.Sc II nd Year SEMESTER-IV
OBJECT ORIENTED PROGRAMMING WITH JAVA
PAPER-IV 2014-15
MODEL PAPER

Time 2 1/2 Hours   **Max. Marks 40**

SECTION-A

To give five question with internal choice and ask them to answer 5

5 X 6 = 30

UNIT-I

1. How can you create an executable Applet?

OR

2. What is a thread? Explain examples.

UNIT-II

3. What is an exception? Explain examples

OR

4. What is an Applet? Explain examples.

UNIT-III

5. What is sorting? Write a program using sorting.

OR

6. What is Queues ? Write a Program Using Sorting.

UNIT – IV

7. What is Linked list ? Write a Program using Linked list.

OR

8. What is quick Sort? Explain briefly quick sort.

UNIT – V

9. What is binary tree? Explain briefly tree order.

OR

10. What is graph ? Explain graph briefly.

SECTION-B

To give 8 question and ask them to answer 5 5 X 2= 10

11. Define Package?

12. What is Applet?

13. Explain type of Errors.

14. Define insertion sort.

15. Define circular queue.

16. Define double linked list.

17. Define Pre Order.

18. Define searches graphs.

FACULTY OF SCIENCE
B.Sc III Year : SEMESTER –V 2014-15
Subject:- DATABASE MANAGEMENT SYSTEMS
PAPER-V MODEL PAPER

Time 2 1/2 Hours   **Max. Marks 40**

SECTION-A

To give five question with internal choice and ask them to answer 5

5 X 6 = 30

UNIT – I

1. Explain a bout Historical Roots Files and File Systems.

OR

2. Explain Why the database is important.

UNIT- II

3. Explain a bout Relational Database Model on Integrity Rules.

OR

4. Write a Data Model Basic Building Blocks .

UNIT- III

5. Discuss the Extended Entity Relationship Model.

OR

6. Explain the E-R Model

UNIT- IV

7. Explain about Database Tables and Normalization

OR

8. Write a bout Normalization and database design

UNIT – V

9. Explain a bout Data Definition Commands

OR

10. Write a bout Advanced Data Definition Commands

SECTION-B

To give 8 question and ask them to answer 5   5 X 2= 10

11. Define Database.

12. Define Data Abstraction.

13 What is NORMAL FORM ?

14. What is a ER-Model ?

15. What is a PRIMARY KEY ?

16. What is a Aggregate Function ?

17. Explain Surrogate Key?

18. Write about DML Commands

FACULTY OF SCIENCE
B.Sc III Year
SEMESTER-V 2014-15
SUBJECT :- WEB TECHNOLOGIES
PAPER-VI   MODEL PAPER

Tim 2 1/2 Hours   Max. Marks 40

SECTION-A

To give five question with internal choice and ask them to answer 5

5 X 6 = 30

UNIT – I

1. Explain the World Wide Web

OR

2. Explain HTML .

UNIT- II

3. Write a Basic HTML

OR

4 Explain briefly Adding more formatting

UNIT- III

5. Explain about Multimedia objects, Frames,

OR

6. Explain about The HTML document Head in detail.

UNIT- IV

7. Explain CASCADING STYLE SHEETS Simple Examples

OR

8. Explain Layers.

UNIT – V

9 What is Dynamic Html.

OR

10. Explain about Mathematical function in Java Script.

SECTION-B

To give 8 question and ask them to answer 5

5 X 2= 10

11. Write Lists tags.

12. Write a HTML tags.

13. Explain Hyperlinks .

14. Short notes Frames .

15. Expand XHTML.

16. Write a Operators In java script,

17. Define Arrays in java script

18. Define Functions in java script

FACULTY OF SCIENCE
B.Sc III Year : SEMESTER – VI 2014-15
Subject:- DATABASE MANAGEMENT SYSTEMS
PAPER-VII MODEL PAPER

Time 2 1/2 Hours   Max. Marks 40

SECTION-A

To give five question with internal choice and ask them to answer 5   **5 X 6 = 30**

UNIT- I

1. Write a bout Relational Set Operators.

OR

2. Explain about The Systems Development Life Cycle(SDLC).

UNIT – II

3. Explain the database recovery management.

OR

4. Explain the Concurrency control.

UNIT-III

5. Explain the Evolution of Distributed Database Management Systems.

OR

6. Explain DDBMS Components.

UNIT –IV

7. Decision support systems in The Data Warehouse.

OR

8. Explain the Online analytical processing.

UNIT – V

9. Explain the Data as a Corporate asset

OR

10. Explain the Database administration Tools

SECTION-B

To give 8 question and ask them to answer 5

5 X 2 = 10

11. Wrtie a bout Two DML Commands .

12. Explain Client Server

13. Short notes Database Life Cycle

14. Define Data mining

15. Write any two Relational Operators

16. What is transaction

17. Define the DDBMS.

18. Define the DBA.

UNIT -IV

7. Explain a boutTables versus Frames

OR

8. Write a bout Web browsers USE FUL SOFTWARE

UNIT – V

9. Write about Hyper Text Transfer Protocol

OR

10. Explain a bout Case Study: The plan

SECTION-B

To give question and ask them to answer 5

5 X 2 = 10

11. Write a short notes String manipulation.

12. Define Layer

13. Write a Web browsers software's

14. Write a Perl. Software's

15. Write a Short notes XML schema

16. Write a bout Frames

17. Write a Web servers Soft wares

18. Explain a bout TCP.

FACULTY OF SCIENCE
B.Sc III Year
SEMESTER-VI 2014-15
SUBJECT :- WEB TECHNOLOGIES
PAPER-VIII   MODEL PAPER

Tim 2 1/2 Hours   Max. Marks 40

SECTION-A

To give five question with internal choice and ask them to answer 5

5 X 6 = 30

UNIT- I

1. Data and objects in java script,

OR

2. Explain Exception Handling

UNIT – II

3. Write about a Messages and Confirmations

OR

4. write about a Moving images

UNIT-III

5. Write a bout Active Server Pages

OR

6. Explain about Basic XML