

Structure of Computer Science /Information Technology (IT)

Programme: B.Sc. with Computer Science as one of the Core Subjects.

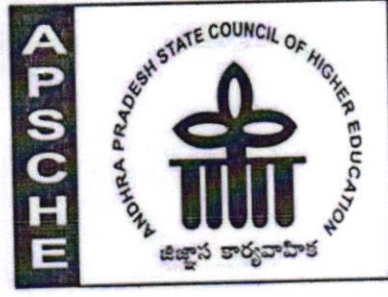
Discipline: Computer Science

Year	Semester	Paper Code	Subject	Hrs. per Week	Credits	IA	ES	Total
First Year	I	C1	Problem Solving in C	4	3	25	75	100
	I	C1-P	Problem Solving in C Lab	2	2		50	50
	II	C2	Data Structures using C	4	3	25	75	100
	II	C2-P	Data Structures using C Lab	2	2		50	50
Second Year	III	C3	Database Management System	4	3	25	75	100
	III	C3-P	Database Management System Lab	2	2		50	50
	IV	C4	Object Oriented Programming using Java	4	3	25	75	100
	IV	C4-P	Object Oriented Programming using Java Lab	2	2		50	50
	IV	<u>C5</u>	Operating Systems	4	3	25	75	100
	IV	<u>C5-P</u>	Operating Systems Lab using C/Java	2	2		50	50

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1) *[Signature]*
Ch. Raju





12/2/21

ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION

(A Statutory body of the Government of Andhra Pradesh)

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Atmakur(V), Mangalagiri(M), Guntur-522 503, Andhra Pradesh
Web: www.apsche.org **Email:** acapsche@gmail.com

REVISED SYLLABUS OF B.Sc. (COMPUTER SCIENCE/ INFORMATION TECHNOLOGY) UNDER CBCS FRAMEWORK WITH EFFECT FROM 2020-2021

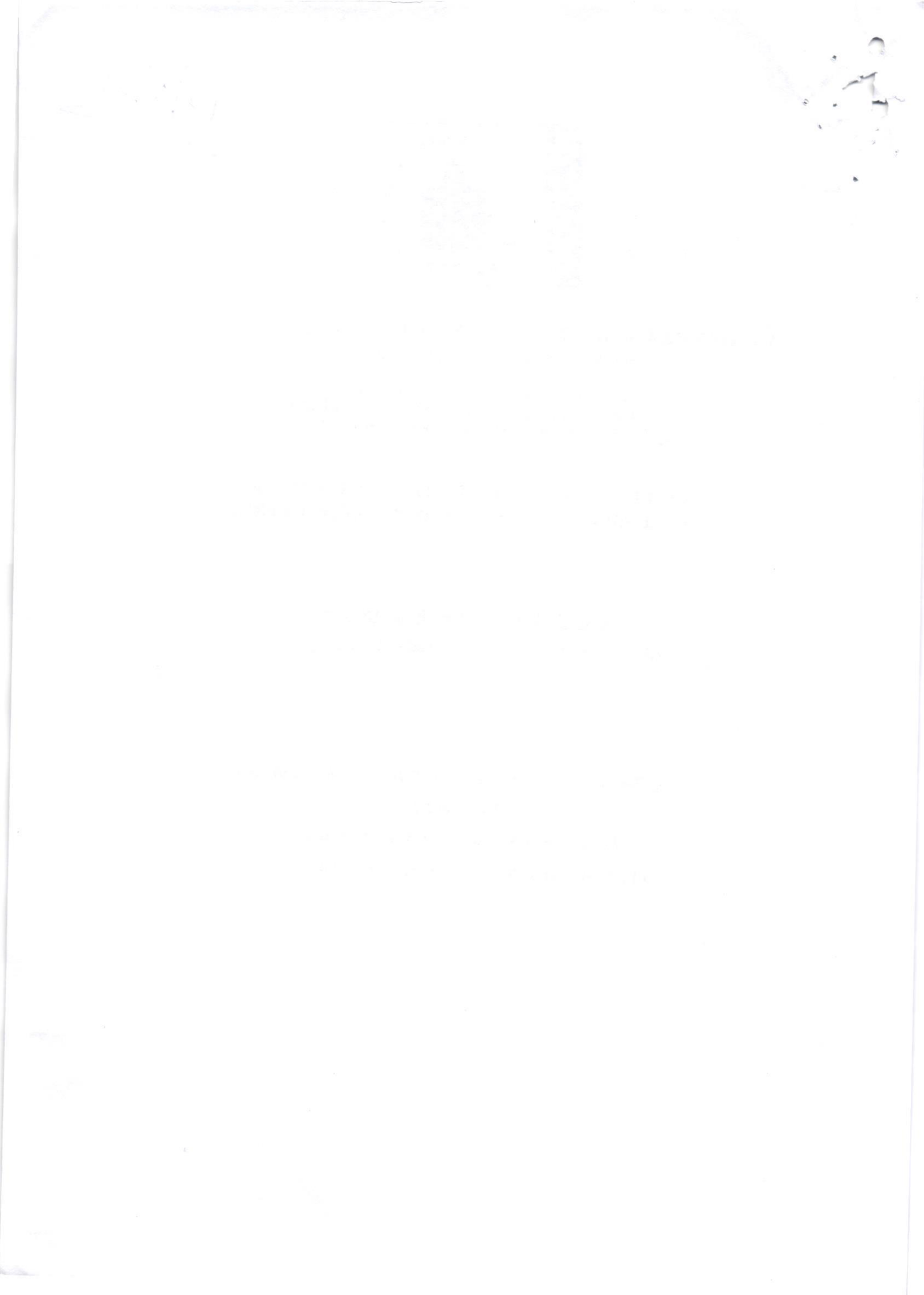
PROGRAMME: THREE-YEAR B.Sc.

(B.Sc. Computer Science/ Information Technology (IT))

(With Learning Outcomes, Unit-wise Syllabus, References, Co-curricular Activities & Model Q.P.)

For Fifteen Courses of 1, 2, 3 & 4 Semesters)

(To be Implemented from 2020-21 Academic Year)



Andhra Pradesh State Council of Higher Education
B.Sc. Computer Science/Information Technology (IT) Syllabus under CBCS
W.e.f.2021-2021 Academic Year

Structure of Computer Science/Information Technology (IT)

Syllabus I YEAR 1 SEMESTER

Problem solving in C

UNIT I

General Fundamentals: Introduction to computers: Block diagram of a computer, characteristics and limitations of computers, applications of computers, types of computers, computer generations.

Introduction to Algorithms and Programming Languages: Algorithm - Key features of Algorithms, Flow Charts, and Programming Languages - Generations of Programming Languages

UNIT II

Introduction to C: Introduction - Structure of C Program - Compiling and Executing C Programs - Using Comments -Keywords - Identifiers - Basic Data Types in C - Variables - Constants - I/O Statements in C- Operators in C.

Decision Control and Looping Statements: Introduction to Decision Control Statements- Conditional Branching Statements - Iterative Statements - Nested Loops - Break and Continue Statement - Goto Statement.

UNIT III

Arrays: Introduction - Different types of arrays (1D, 2D, and 3D) - Operations on Arrays - one dimensional, two dimensional and multi dimensional arrays, character handling and

Strings: String operations, string character functions.

UNIT IV

Functions: Introduction - User defined and pre-defined functions, passing parameters, Scope of variables - Storage Classes - Recursive functions.

Structure, Union, and Enumerated Data Types: Introduction, Nested Structures, Arrays of Structures - Structures and Functions, Structures and pointers- enumerated data types.

UNIT V

Pointers: Understanding Computer Memory - Introduction to Pointers - Pointer Expressions and Pointer Arithmetic - Null Pointers -Pointer and Arrays - Dynamic Memory Allocation - Drawbacks of Pointers

Files: Introduction to files - Using Files in C -Reading Data from files-writing Data to files- Detecting the end of file -Error handling during file operations.

REFERENCE BOOKS

1. Introduction to C programming by REEMA THAREJA from OXFORD UNIVERSITY PRESS
2. E .Balagurusamy: —COMPUTING FUNDAMENTALS & C PROGRAMMING -Tata McGraw-Hill, Second Reprint 2008, ISBN 978-0-07-066909-3.
3. Ashok N Kamthane: Programming with ANSI and Turbo C, Pearson Edition Publ, 2002.

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12/12/2021

Ch. Raju
S...

N. Srinivas
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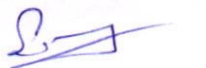
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Problem solving in C LAB

1. Write a program to check whether the given number is Armstrong or not.
2. Write a program to find the sum of individual digits of a positive integer.
3. Write a program to generate the first n terms of the Fibonacci sequence.
4. Write a program to find both the largest and smallest number in a list of integer values
5. Write a program to demonstrate reflection of parameters in swapping of two integer values using Call by Value & Call by Address
6. Write a program that uses functions to add two matrices.
7. Write a program to calculate factorial of given integer value using recursive functions
8. Write a program for multiplication of two N X N matrices.
9. Write a program to perform various string operations.
10. Write a program to search an element in a given list of values.
11. Write a program to sort a given list of integers in ascending order.
12. Write a program to calculate the salaries of all employees using **Employee (ID, Name, Designation, Basic Pay, DA, HRA, Gross Salary, Deduction, Net Salary)** structure.
 - a. DA is 30 % of Basic Pay
 - b. HRA is 15% of Basic Pay
 - c. Deduction is 10% of (Basic Pay + DA)
 - d. Gross Salary = Basic Pay + DA + HRA
 - e. Net Salary = Gross Salary - Deduction
13. Write a program to illustrate pointer arithmetic.
14. Write a program to read the data character by character from a file.
15. Write a program to create **Book (ISBN, Title, Author, Price, Pages, Publisher)** structure and store book details in a file and perform the following operations
 - a. Add book details
 - b. Search a book details for a given ISBN and display book details, if available
 - c. Update a book details using ISBN
 - d. Delete book details for a given ISBN and display list of remaining Books

Reference for lab activities

1. Ashok N Kamthane: Programming with ANSI and Turbo C, Pearson Edition Publ, 2002.


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Ann - A

MODEL QUESTION PAPER (Sem-end. Exam)

B.Sc (CS) / ~~IT~~ End Semester Exams

Time: 3 hours

problem showing in C

Max.Marks: 75

SECTION-A

Answer any FIVE questions.

5X5 = 25M

1. Explain Block diagram of Computer.
2. Define an Algorithm. What are the key features of an algorithm?
3. Write about goto statement with syntax and example.
4. Dynamic memory allocation.
5. Explain pointers in arrays.
6. Explain Nested structures
7. Drawback of pointer.
8. Briefly explain various types of recursions.
9. Write a program to check whether given number is prime or not.
10. Write a program for matrix transpose using arrays.

SECTION-B

Answer Any FIVE question

5X10 = 50M

1. Briefly explain about generations of computers.
2. What is a Flowchart? Explain significance with an example.
3. Explain basic data types in C?
4. Explain about iterative statements available in C.
5. What is an Array? Explain different types of arrays with examples.
6. What is a string? Explain various string handling functions available in C.
7. Define a function. Explain the passing parameter mechanism.
8. Explain about Structure with syntax and example in detail.
9. Define and use of a pointer and write a 'C' program on swapping of two numbers using pointers.
10. Explain dynamic memory allocation in detail.

Note: Paper Setter must select TWO short questions and TWO essay questions from each unit.

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12/2/2021

[Signature]

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12/2/21

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THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
530 SOUTH EAST ASIAN AVENUE
CHICAGO, ILLINOIS 60607

Dear Sirs,
I have the pleasure to inform you that your application for a Ph.D. degree in Chemistry has been accepted by the Department of Chemistry. You will be admitted to the program in the fall of 1968. Your advisor will be Professor [Name].

You will receive a letter from the Registrar's Office regarding the admission process. Please contact the Registrar's Office if you have any questions. We look forward to your arrival in Chicago.

Sincerely,
[Name]
Chairman, Department of Chemistry

Enclosed are two copies of this letter. One copy is for your files.

I YEAR II SEMESTER
DATA STRUCTURES USING C

UNIT - I:

Introduction to Data Structures: Introduction to the Theory of Data Structures, Data Representation, Abstract Data Types, Data Types, Primitive Data Types, Data Structure and Structured Type, Atomic Type, Difference between Abstract Data Types, Data Types, and Data Structures, Refinement Stages.

UNIT - II:

Linked Lists: Introduction to Lists and Linked Lists, Basic Linked List Operations, Doubly Linked List, Circular Linked List, Linked List versus Arrays.

UNIT - III:

Stacks: Introduction to Stacks, Stack as an Abstract Data Type, Representation of Stacks through Arrays, Representation of Stacks through Linked Lists, Applications of Stacks, Stacks and Recursion.

Queues: Introduction, Queue as an Abstract data Type, Representation of Queues, Circular Queues, Double Ended Queues- Deques, Priority Queues, Application of Queues.

UNIT - IV:

Binary Trees: Introduction to Non- Linear Data Structures, Introduction Binary Trees, Types of Trees, Basic Definition of Binary Trees, Properties of Binary Trees, Representation of Binary Trees, Operations on a Binary Search Tree, Binary Tree Traversal, Counting Number of Binary Trees, Applications of Binary Tree

UNIT - V:

Searching and sorting: Sorting - An Introduction, Bubble Sort, Insertion Sort, Merge Sort, Searching - An Introduction, Linear or Sequential Search, Binary Search, Indexed Sequential Search.

Graphs: Introduction to Graphs, Terms Associated with Graphs, Sequential Representation of Graphs, Linked Representation of Graphs, Traversal of Graphs, Spanning Trees, Shortest Path, Application of Graphs.

Text Books:

1. "Data Structures using C", ISRD group Second Edition, TMH
2. "Data Structures through C", Yashavant Kanetkar, BPB Publications

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Details of Lab Syllabus: Data Structures Using C Lab

1. Write a program to read 'N' numbers of elements into an array and also perform the following operation on an array
 - a. Add an element at the beginning of an array
 - b. Insert an element at given index of array
 - c. Update an element using a value and index
 - d. Delete an existing element
2. Write a program using stacks to convert a given
 - a. postfix expression to prefix
 - b. prefix expression to postfix
 - c. infix expression to postfix
3. Write Programs to implement the Stack operations using an array
4. Write Programs to implement the Stack operations using Linked List.
5. Write Programs to implement the Queue operations using an array.
6. Write Programs to implement the Queue operations using Linked List.
7. Write a program for arithmetic expression evaluation.
8. Write a program for Binary Search Tree Traversals
9. Write a program to implement dequeue using a doubly linked list.
10. Write a program to search an item in a given list using the following Searching Algorithms
 - a. Linear Search
 - b. Binary Search.
11. Write a program for implementation of the following Sorting Algorithms
 - a. Bubble Sort
 - b. Insertion Sort
 - c. Quick Sort
12. Write a program for polynomial addition using single linked list
13. Write a program to find out shortest path between given Source Node and Destination Node in a given graph using Dijkstra's algorithm.
14. Write a program to implement Depth First Search graph traversals algorithm
15. Write a program to implement Breadth First Search graph traversals algorithm




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Ann-B

MODEL QUESTION PAPER (Sem-end. Exam)

B.Sc (CS) / B.Sc (IT) End Semester Exams

Time: 3 hours

Data Structures Using C

Max.Marks: 75

SECTION-A

Answer any FIVE questions.

5X5 = 25M

1. Explain about Abstract Data Types.
2. Define linear and non-linear data structures.
3. Explain Linked List concept.
4. What are the applications of stacks?
5. What is priority queue?
6. Explain about binary search tree.
7. Define sorting. What are the advantages and disadvantages of merge sort?
8. Briefly explain various representations of Graphics.
9. How to reverse a given linked list.
10. Write different applications of Binary and Binary search trees.


SECTION-B

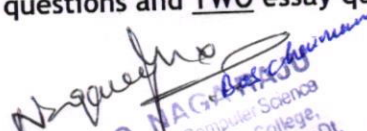
Answer following question

5X10 = 50M

1. What are primitive and non-primitive data structures with an example?
2. Explain different primitive data types.
3. Explain different operations on single linked list.
4. What is linked list? Explain different types of linked lists in data structures.
5. What is stack? Write ADT. Explain various operations of stack.
6. What is a Deque? What are the different techniques used to represent Deque? Explain.
7. Write about different tree travelling techniques and write an algorithm for travelling techniques.
8. Explain different applications and properties of binary tree.
9. Write about various Graph Travelling techniques.
10. What is searching? Explain Linear Search Algorithm with example.

Note: Paper Selector must select TWO short questions and TWO essay questions from each unit.


 12/2/2021
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 Ch. Ray
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Two Minutes Writing

Topic

I have been thinking about the future of our country. It seems like we are always in a state of flux, with new challenges and opportunities arising every day. I think it is important for us to stay focused on our core values and to work together to find solutions to our problems.

One of the biggest challenges we face is the environment. Climate change is a real and present danger, and we need to take action now to reduce our carbon footprint. We can do this by using renewable energy sources, conserving water, and reducing waste.

Another challenge is the economy. We need to create jobs and stimulate economic growth. This can be done by investing in infrastructure, supporting small businesses, and providing education and training for the workforce.

Finally, we need to address the issue of social inequality. Everyone should have the opportunity to succeed, regardless of their background or race. We need to invest in education and healthcare, and we need to create a more equitable society.

In conclusion, the future of our country is in our hands. We need to work together to address the challenges we face and to build a better, more prosperous future for all.

Computer science (B.Sc.)

DATABASE MANAGEMENT SYSTEMS

UNIT I

Semester - III - Syllabus

Overview of Database Management System: Introduction to data, information, database, database management systems, file-based system, Drawbacks of file-Based System, database approach, Classification of Database Management Systems, advantages of database approach, Various Data Models, Components of Database Management System, three schema architecture of data base.

UNIT II

Entity-Relationship Model: Introduction, the building blocks of an entity relationship diagram, classification of entity sets, attribute classification, relationship degree, relationship classification, reducing ER diagram to tables, enhanced entity-relationship model (EER model), generalization and specialization, IS A relationship and attribute inheritance, constraints on specialization and generalization, advantages of ER modelling.

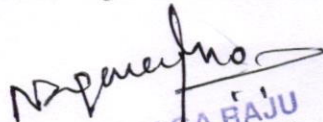
UNIT III Relational Model: Introduction, CODD Rules, relational data model, concept of key, relational integrity, relational algebra, relational algebra operations, advantages of relational algebra, limitations of relational algebra, relational calculus, tuple relational calculus, domain relational Calculus (DRC), Functional dependencies and normal forms upto 3rd normal form.

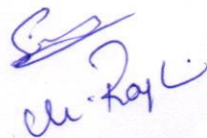
UNIT IV Structured Query Language: Commands in SQL, Data Types in SQL, Data Definition Language, Selection Operation, Projection Operation, Aggregate functions, Data Manipulation Language, Table Modification Commands, Join Operation, Set Operations, View, Sub Query.

UNIT V PL/SQL: Introduction, Shortcomings of SQL, Structure of PL/SQL, PL/SQL Language Elements, Data Types, Operators Precedence, Control Structure, Steps to Create a PL/SQL, Program, Iterative Control, Procedure, Function, Database Triggers, Types of Triggers.

BOOKS:

1. Database System Concepts by Abraham Silberschatz, Henry Korth, and S. Sudarshan, McGrawhill
2. Database Management Systems by Raghu Ramakrishnan, McGrawhill
3. Principles of Database Systems by J. D. Ullman
4. Fundamentals of Database Systems by R. Elmasri and S. Navathe
5. SQL: The Ultimate Beginners Guide by Steve Tale.

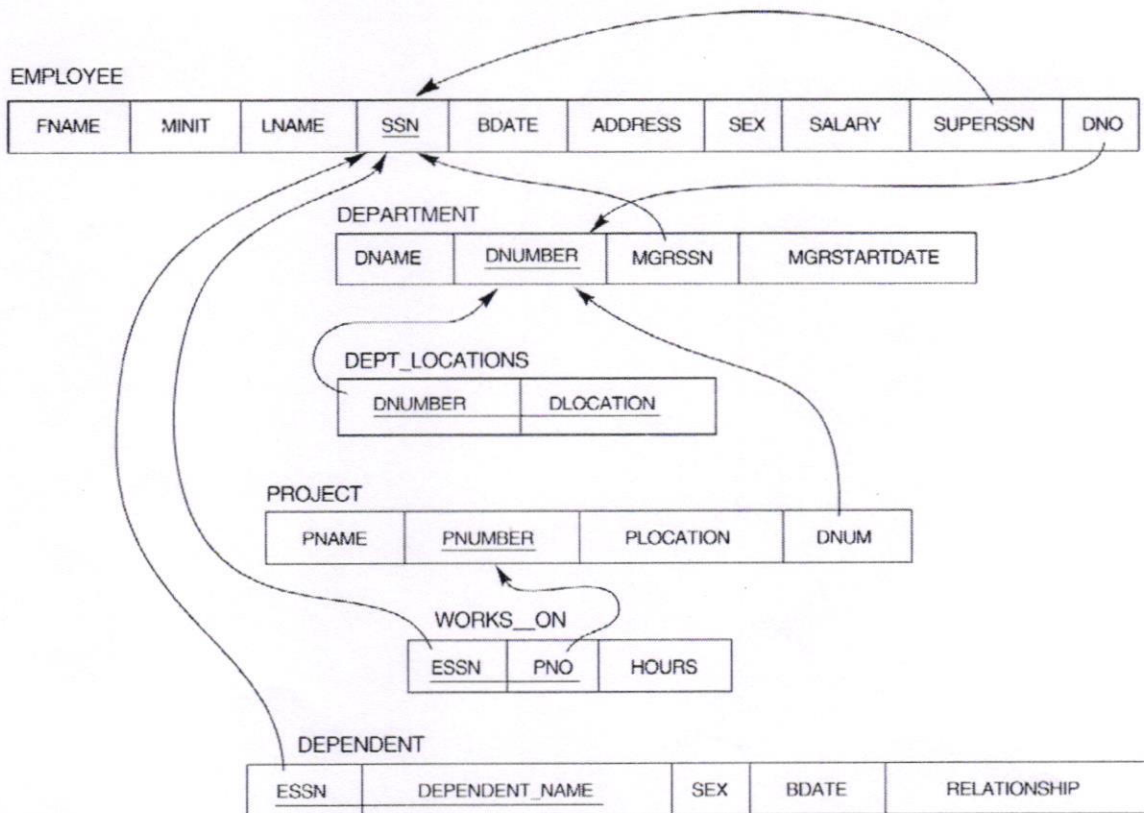

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Dr. K. Jayaram

Semester	Course Code	Course Title	Hours	Credits
III	C3-P	DATABASE MANAGEMENT SYSTEMS LAB	30	2

1. Draw ER diagram for hospital administration
2. Creation of college database and establish relationships between tables
3. Relational database schema of a company is given in the following figure.

Relational Database Schema - COMPANY



Questions to be performed on above schema

1. Create above tables with relevant *Primary Key, Foreign Key and other constraints*
2. Populate the tables with data
3. Display all the details of all employees working in the company.
4. Display *ssn, lname, fname, address* of employees who work in department no 7.

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2) S. J

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1.1	1.2	1.3	1.4
1.2	1.3	1.4	1.5

1. The first part of the report is an introduction to the project and a description of the objectives. This part should be written in a clear and concise manner and should be written in the first person.

2. The second part of the report is the main body of the report. This part should be written in a clear and concise manner and should be written in the first person.



- For more information on this report, please contact the author.
1. The first part of the report is an introduction to the project and a description of the objectives. This part should be written in a clear and concise manner and should be written in the first person.
 2. The second part of the report is the main body of the report. This part should be written in a clear and concise manner and should be written in the first person.
 3. The third part of the report is the conclusion. This part should be written in a clear and concise manner and should be written in the first person.
 4. The fourth part of the report is the references. This part should be written in a clear and concise manner and should be written in the first person.

Dr. M. R. Khan
 11/11/11

5. Retrieve the *Birthdate and Address* of the employee whose name is 'Franklin T. Wong'
6. Retrieve the name and salary of every employee
7. Retrieve all distinct salary values
8. Retrieve all employee names whose address is in 'Bellaire'
9. Retrieve all employees who were born during the 1950s
10. Retrieve all employees in department 5 whose salary is between 50,000 and 60,000(inclusive)
11. Retrieve the names of all employees who do not have supervisors
12. Retrieve SSN and department name for all employees
13. Retrieve the name and address of all employees who work for the 'Research' department
14. For every project located in 'Stafford', list the project number, the controlling department number, and the department manager's last name, address, and birth date.
15. For each employee, retrieve the employee's name, and the name of his or her immediate supervisor.
16. Retrieve all combinations of Employee Name and Department Name
17. Make a list of all project numbers for projects that involve an employee whose last name is 'Narayan' either as a worker or as a manager of the department that controls the project.
18. Increase the salary of all employees working on the 'ProductX' project by 15%. Retrieve employee name and increased salary of these employees.
19. Retrieve a list of employees and the project name each works in, ordered by the employee's department, and within each department ordered alphabetically by employee first name.
20. Select the names of employees whose salary does not match with salary of any employee in department 10.
21. Retrieve the employee numbers of all employees who work on project located in Bellaire, Houston, or Stafford.
22. Find the sum of the salaries of all employees, the maximum salary, the minimum salary, and the average salary. Display with proper headings.
23. Find the sum of the salaries and number of employees of all employees of the 'Marketing' department, as well as the maximum salary, the minimum salary, and the average salary in this department.

1) cu. Ray L.

2) 

1. The first step in the process of the survey was to identify the objectives of the study. This was done by consulting with the management and the employees. The objectives were to determine the level of job satisfaction, to identify the factors that influence job satisfaction, and to determine the relationship between job satisfaction and organizational performance.

2. The second step was to design the survey instrument. This was done by developing a questionnaire that was based on the literature and the objectives of the study. The questionnaire was designed to be self-administered and to be easy to understand. It consisted of a demographic section and a Likert scale section.

3. The third step was to pilot test the questionnaire. This was done by administering the questionnaire to a small group of employees. The results of the pilot test were used to identify any problems with the questionnaire and to make necessary revisions.

4. The fourth step was to administer the questionnaire. This was done by distributing the questionnaire to all employees in the organization. The questionnaire was distributed to the employees in their respective departments.

5. The fifth step was to analyze the data. This was done by using statistical techniques to analyze the data. The results of the analysis were used to determine the level of job satisfaction, to identify the factors that influence job satisfaction, and to determine the relationship between job satisfaction and organizational performance.

6. The sixth step was to report the findings. This was done by writing a report that summarized the findings of the study. The report was presented to the management and the employees.

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24. Select the names of employees whose salary is greater than the average salary of all employees in department 10.
25. Delete all dependents of employee whose *ssn is '123456789'*.
26. Perform a query using alter command to drop/add field and a constraint in Employee table.

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1) *Mr. Raju*

2) *S. A*

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1. The subject of this report is the investigation of the activities of the [redacted] in the [redacted] area. The investigation was conducted by the [redacted] and the [redacted] on [redacted].

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Model Question Papers

Subject: DATABASE MANAGEMENT SYSTEM

Time: 3 Hours

Max.Marks:75

Section-A (Answer any FIVE Questions). 5x5=25 Marks

1. Explain Drawbacks of file-Based System.
2. Explain Classification of Database Management Systems.
3. Explain relationship degree.
4. Explain generalization and specialization
5. Explain relational algebra operations
6. Explain tuple relational calculus.
7. Explain Data Manipulation Language.
8. Explain Aggregate functions.
9. Explain Structure of PL/SQL
10. Explain Types of Triggers.

SECTION-B

Answer ANY FIVE Questions. 5X10=50 MARKS

1. Drawbacks of file-Based System
2. Components of Database Management System
3. Reducing ER diagram to tables
4. Constraints on specialization and generalization.
5. Discuss about the CODD Rules.
6. Explain different normal forms.
7. Explain different SQL commands.
8. Explain different constraints in SQL.
9. Explain about cursors in detail
10. Explain iterative statements in C.

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OBJECT ORIENTATED PROGRAMMING ~~THROUGH~~ ^{using} JAVA

Semester	Course Code	Course Title	Hours	Credits
IV	C4	OBJECT ORIENTATED PROGRAMMING THROUGH JAVA ^{using}	60	3

Objectives:

To introduce the fundamental concepts of Object-Oriented programming and to design & implement object oriented programming concepts in Java.

Course Learning Outcomes: At the end of this course student will:

1. Understand the benefits of a well-structured program
2. Understand different computer programming paradigms
3. Understand underlying principles of Object-Oriented Programming in Java
4. Develop problem-solving and programming skills using OOP concepts
5. Develop the ability to solve real-world problems through software development in high-level programming language like Java

UNIT – I

Introduction to Java: Features of Java, The Java virtual Machine, Parts of Java

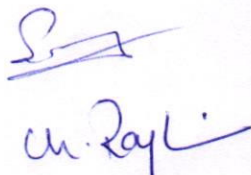
Naming Conventions and Data Types: Naming Conventions in Java, Data Types in Java, Literals

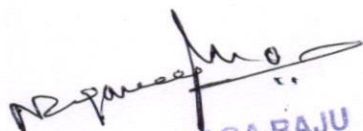
Operators in Java: Operators, Priority of Operators

Control Statements in Java: if... else Statement, do... while Statement, while Loop, for Loop, switch Statement, break Statement, continue Statement, return Statement

Input and Output: Accepting Input from the Keyboard, Reading Input with Java.util.Scanner Class, Displaying Output with System.out.printf(), Displaying Formatted Output with String.format()

Arrays: Types of Arrays, Three Dimensional Arrays (3D array), arrayname.length, Command Line Arguments


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UNIT - I

Sl. No.	Chapter No.	Chapter Title
1	1	UNIT I ORIENTATION
2	2	UNIT II

The purpose of this course is to provide a comprehensive understanding of the fundamental concepts of the subject and to develop the necessary skills for the study of the subject.

Course Learning Objectives at the end of the course student will

1. Understand the basic concepts of a well-structured program.
2. Apply the basic concepts of a well-structured program.
3. Identify and analyze the basic concepts of a well-structured program.
4. Develop the ability to solve real-world problems through software development in a well-structured program.

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 Pimpri, Maharashtra - 411 004

[Signature]

UNIT – II

Strings: Creating Strings, String Class Methods, String Comparison, Immutability of Strings

Introduction to OOPs: Problems in Procedure Oriented Approach, Features of Object-Oriented Programming System (OOPS)

Classes and Objects: Object Creation, Initializing the Instance Variables, Access Specifiers, Constructors

Methods in Java: Method Header or Method Prototype, Method Body, Understanding Methods, Static Methods, Static Block, The keyword 'this', Instance Methods, Passing Primitive Data Types to Methods, Passing Objects to Methods, Passing Arrays to Methods, Recursion, Factory Methods

Inheritance: Inheritance, The keyword 'super', The Protected Specifier, Types of Inheritance

UNIT – III

Polymorphism: Polymorphism with Variables, Polymorphism using Methods, Polymorphism with Static Methods, Polymorphism with Private Methods, Polymorphism with Final Methods, final Class

Type Casting: Types of Data Types, Casting Primitive Data Types, Casting Referenced Data Types, The Object Class

Abstract Classes: Abstract Method and Abstract Class

Interfaces: Interface, Multiple Inheritance using Interfaces

Packages: Package, Different Types of Packages, The JAR Files, Interfaces in a Package, Creating Sub Package in a Package, Access Specifiers in Java, Creating API Document

Exception Handling: Errors in Java Program, Exceptions, throws Clause, throw Clause, Types of Exceptions, Re – throwing an Exception

UNIT – IV

Streams: Stream, Creating a File using FileOutputStream, Reading Data from a File using FileInputStream, Creating a File using FileWriter, Reading a File using FileReader, Zipping and Unzipping Files, Serialization of Objects, Counting Number of Characters in a File, File Copy, File Class

Threads: Single Tasking, Multi Tasking, Uses of Threads, Creating a Thread and Running it, Terminating the Thread, Single Tasking Using a Thread, Multi Tasking Using Threads, Multiple Threads Acting on Single Object, Thread Class Methods, Deadlock of Threads,


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Section 11.11
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Dr. O. K. K. K.

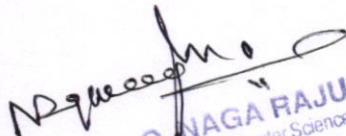
Dr. O. K. K. K.

Thread Communication, Thread Priorities, thread Group, Daemon Threads, Applications of Threads, Thread Life Cycle

UNIT – V

Applets: Creating an Applet, Uses of Applets, <APPLET> tag, A Simple Applet, An Applet with Swing Components, Animation in Applets, A Simple Game with an Applet, Applet Parameters

Java Database Connectivity: Database Servers, Database Clients, JDBC (Java Database Connectivity), Working with Oracle Database, Working with MySQL Database, Stages in a JDBC Program, Registering the Driver, Connecting to a Database, Preparing SQL Statements, Using jdbc-odbc Bridge Driver to Connect to Oracle Database, Retrieving Data from MySQL Database, Retrieving Data from MS Access Database, Stored Procedures and CallableStatements, Types of Result Sets


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S. 7
M. Jayal

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BOOKS:

1. Core Java: An Integrated Approach, Authored by Dr. R. Nageswara Rao & Kogent Learning Solutions Inc.
2. E. Balaguruswamy, Programming with JAVA, A primer, 3e, TATA McGraw-Hill Company.
3. John R. Hubbard, Programming with Java, Second Edition, Schaum's outline Series, TMH.
4. Deitel & Deitel. Java TM: How to Program, PHI (2007)

RECOMMENDED CO-CURRICULAR ACTIVITIES:

(Co-curricular activities shall not promote copying from textbook or from others work and shall encourage self/independent and group learning)

A. Measurable

1. Assignments (in writing and doing forms on the aspects of syllabus content and outside the syllabus content. Shall be individual and challenging)
2. Student seminars (on topics of the syllabus and related aspects (individual activity))
3. Quiz (on topics where the content can be compiled by smaller aspects and data (Individuals or groups as teams))
4. Study projects (by very small groups of students on selected local real-time problems pertaining to syllabus or related areas. The individual participation and contribution of students shall be ensured (team activity)


B. General

1. Group Discussion
2. Try to solve MCQ's available online.
3. Others

RECOMMENDED CONTINUOUS ASSESSMENT METHODS:

Some of the following suggested assessment methodologies could be adopted;

1. The oral and written examinations (Scheduled and surprise tests),
2. Closed-book and open-book tests,
3. Programming exercises,


M. Raju

1. The first part of the book is devoted to the study of the...
2. The second part of the book is devoted to the study of the...
3. The third part of the book is devoted to the study of the...
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RECOMMENDED READING

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2. The second part of the book is devoted to the study of the...
3. The third part of the book is devoted to the study of the...
4. The fourth part of the book is devoted to the study of the...
5. The fifth part of the book is devoted to the study of the...

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The book is divided into five parts. The first part is devoted to the...
The second part is devoted to the study of the...
The third part is devoted to the study of the...
The fourth part is devoted to the study of the...
The fifth part is devoted to the study of the...
The book is written in a clear and concise style. It is suitable for...
The book is a valuable reference work for students and teachers alike.

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2. The second part of the book is devoted to the study of the...
3. The third part of the book is devoted to the study of the...
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APPENDIX

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4. Practical assignments and laboratory reports,
5. Observation of practical skills,
6. Individual and group project reports.
7. Efficient delivery using seminar presentations,
8. Viva voce interviews.
9. Computerized adaptive testing, literature surveys and evaluations,
10. Peers and self-assessment, outputs form individual and collaborative work

S. J.
M. Kaye

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The first part of the report deals with the general situation in the country. It is followed by a detailed description of the various regions. The third part contains a list of the principal cities and towns. The fourth part is a list of the principal rivers and streams. The fifth part is a list of the principal lakes and ponds. The sixth part is a list of the principal mountains and hills. The seventh part is a list of the principal forests. The eighth part is a list of the principal minerals. The ninth part is a list of the principal industries. The tenth part is a list of the principal occupations. The eleventh part is a list of the principal products. The twelfth part is a list of the principal exports. The thirteenth part is a list of the principal imports. The fourteenth part is a list of the principal trade routes. The fifteenth part is a list of the principal ports. The sixteenth part is a list of the principal harbors. The seventeenth part is a list of the principal canals. The eighteenth part is a list of the principal roads. The nineteenth part is a list of the principal bridges. The twentieth part is a list of the principal public buildings. The twenty-first part is a list of the principal educational institutions. The twenty-second part is a list of the principal religious institutions. The twenty-third part is a list of the principal social institutions. The twenty-fourth part is a list of the principal cultural institutions. The twenty-fifth part is a list of the principal scientific institutions. The twenty-sixth part is a list of the principal artistic institutions. The twenty-seventh part is a list of the principal literary institutions. The twenty-eighth part is a list of the principal musical institutions. The twenty-ninth part is a list of the principal theatrical institutions. The thirtieth part is a list of the principal sporting institutions. The thirty-first part is a list of the principal gaming institutions. The thirty-second part is a list of the principal gambling institutions. The thirty-third part is a list of the principal betting institutions. The thirty-fourth part is a list of the principal racing institutions. The thirty-fifth part is a list of the principal fishing institutions. The thirty-sixth part is a list of the principal hunting institutions. The thirty-seventh part is a list of the principal shooting institutions. The thirty-eighth part is a list of the principal boating institutions. The thirty-ninth part is a list of the principal sailing institutions. The fortieth part is a list of the principal rowing institutions. The forty-first part is a list of the principal canoeing institutions. The forty-second part is a list of the principal water skiing institutions. The forty-third part is a list of the principal water polo institutions. The forty-fourth part is a list of the principal aquatics institutions. The forty-fifth part is a list of the principal swimming institutions. The forty-sixth part is a list of the principal diving institutions. The forty-seventh part is a list of the principal surfing institutions. The forty-eighth part is a list of the principal windsurfing institutions. The forty-ninth part is a list of the principal kitesurfing institutions. The fiftieth part is a list of the principal water sports institutions.

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Semester	Course Code	Course Title	Hours	Credits
IV	C4-P	OBJECT ORIENTATED PROGRAMMING ^{USING} THROUGH JAVA LAB	30	2

1. Write a program to read *Student Name, Reg.No, Marks[5]* and calculate *Total, Percentage, Result*. Display all the details of students
2. Write a program to perform the following String Operations
 - a. Read a string
 - b. Find out whether there is a given substring or not
 - c. Compare existing string by another string and display status
 - d. Replace existing string character with another character
 - e. Count number of works in a string
3. Java program to implements Addition and Multiplication of two N X N matrices.
4. Java program to demonstrate the use of Constructor.
5. Calculate area of the following shapes using method overloading.
 - a. Triangle
 - b. Rectangle
 - c. Circle
 - d. Square
6. Implement inheritance between *Person (Aadhar, Surname, Name, DOB, and Age)* and *Student (Admission Number, College, Course, Year)* classes where *ReadData(), DisplayData()* are overriding methods.
7. Java program for implementing Interfaces
8. Java program on Multiple Inheritance.
9. Java program for to display *Serial Number from 1 to N* by creating two Threads
10. Java program to demonstrate the following exception handlings
 - a. Divided by Zero
 - b. Array Index Out of Bound
 - c. File Not Found
 - d. Arithmetic Exception
 - e. User Defined Exception


S. J.
M. Rayle


QUESTION	ANSWER
1. Write a program to read five test marks, find the student's average mark, display all the details of marks.	JAVA 8/9
2. Write a program to perform the following using JSP.	JAVA 8/9
3. Write a program to implement Addition and Multiplication of two 4x3 matrices.	JAVA 8/9
4. Write a program to demonstrate the use of JSP.	JAVA 8/9
5. Write a program to perform the following using JDBC/JDBC-ODBC.	JAVA 8/9
6. Write a program to implement Addition and Multiplication of two 4x3 matrices.	JAVA 8/9
7. Write a program to demonstrate the use of JSP.	JAVA 8/9
8. Write a program to perform the following using JDBC/JDBC-ODBC.	JAVA 8/9
9. Write a program to demonstrate the use of JSP.	JAVA 8/9
10. Write a program to demonstrate the use of JSP.	JAVA 8/9

1. Write a program to read five test marks, find the student's average mark, display all the details of marks.
2. Write a program to perform the following using JSP.
 - a. Read a string
 - b. Find out whether there is a given string or not
 - c. Compare a string using its character string and display result
 - d. Find out whether a string is a word or not
 - e. Count number of words in a string
3. Write a program to implement Addition and Multiplication of two 4x3 matrices.
4. Write a program to demonstrate the use of JSP.
5. Write a program to perform the following using JDBC/JDBC-ODBC.
 - a. Insert
 - b. Update
 - c. Delete
 - d. Select
6. Write a program to implement Addition and Multiplication of two 4x3 matrices and display result.
7. Write a program to demonstrate the use of JSP.
8. Write a program to perform the following using JDBC/JDBC-ODBC.
9. Write a program to demonstrate the use of JSP.
10. Write a program to demonstrate the use of JSP.
 - a. Insert
 - b. Update
 - c. Delete
 - d. Select

12/2/20

11. Create an Applet to display different shapes such as Circle, Oval, Rectangle, Square and Triangle.
12. Write a program to create **Book (ISBN, Title, Author, Price, Pages, Publisher)** structure and store book details in a file and perform the following operations
 - a. Add book details
 - b. Search a book details for a given ISBN and display book details, if available
 - c. Update a book details using ISBN
 - d. Delete book details for a given ISBN and display list of remaining Books


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Ch. Ray

1. The first step in the process of...
 2. The second step is to...
 3. The third step is to...
 4. The fourth step is to...
 5. The fifth step is to...

Handwritten signature
 Dr. J. K. Smith
 Director of the...
 Department of...

QUESTION PAPER PATTERN FOR END SEMESTER EXAM

UG CBCS SEMESTER PATTERN

object oriented programming ~~using~~ using JAVA

Time: 3 Hours

Max. Marks : 75

SECTION-A

Answer any FIVE of the following Questions:

(5 x 5= 25 Marks)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

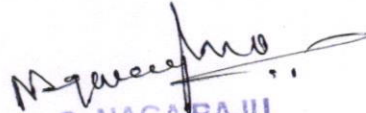
SECTION - B

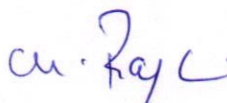
Answer any FIVE of the following Questions

(5 x 10 =50 Marks)

- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

Note: Paper Setter must select TWO Short Questions and TWO Essay Questions from Each Unit


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After reading the following questions, write the answer in the space provided.

SECTION A

(5 x 2 = 10 marks)

Answer any FIVE of the following questions:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

SECTION B

(2 x 10 = 20 marks)

Answer any FIVE of the following questions:

- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

Note: Total marks for all questions and T/O marks are 30.

Dr. D. D. D. D.
 DEPARTMENT OF
 PATENT PATENT
 UNIVERSITY OF
 PATENT PATENT

Dr. D. D. D. D.

OPERATING SYSTEMS

UNIT I

Introduction to Operating System Concept: Types of operating systems, operating systems concepts, operating systems services, Introduction to System call, System call types.

UNIT-II:

Process Management – Process concept, The process, Process State Diagram , Process control block, Process Scheduling- Scheduling Queues, Schedulers, Operations on Processes, Interprocess Communication, Threading Issues, Scheduling-Basic Concepts, Scheduling Criteria, Scheduling Algorithms

UNIT-III:

Concurrency: Process Synchronization, The Critical- Section Problem, Synchronization Hardware, Semaphores, Classic Problems of Synchronization, Monitors, Synchronization examples.

UNIT-IV:

Memory Management: Swapping, Contiguous Memory Allocation, Paging, structure of the Page Table, Segmentation

Virtual Memory Management: Virtual Memory, Demand Paging, Page-Replacement Algorithms, Thrashing.

UNIT-V:

File system Interface- the concept of a file, Access Methods, Directory structure, File system mounting, file sharing, protection.

File System implementation- File system structure, allocation methods, free-space management

Mass-storage structure overview of Mass-storage structure, Disk scheduling, Device drivers

TEXT BOOK:

1. Operating System Concepts, Abraham Silberschatz, Peter Baer Galvin and Greg Gagne 9th Edition, John Wiley and Sons Inc., 2012.
2. Operating Systems – Internals and Design Principles, William Stallings, 7th Edition, Prentice Hall, 2011.
3. Operating Systems-S Halder, Alex A Aravind Pearson Education Second Edition 2016 .

REFERENCES:

1. Modern Operating Systems, Andrew S. Tanenbaum, Second Edition, Addison Wesley, 2001.
2. Operating Systems: A Design-Oriented Approach, Charles Crowley, Tata Mc Graw Hill Education", 1996.
3. Operating Systems: A Concept-Based Approach, D M Dhamdhere, Second Edition, Tata Mc Graw-Hill Education, 2007.

S. Jayaram

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Page 10 of 12

The first part of the chapter discusses the various types of data structures and their applications. It covers arrays, linked lists, stacks, and queues, highlighting their strengths and weaknesses. The second part introduces tree structures, including binary trees, binary search trees, and B-trees. It also discusses graph algorithms like Breadth-First Search (BFS) and Depth-First Search (DFS). The third part focuses on sorting algorithms, comparing simple algorithms like bubble sort and insertion sort with more efficient ones like quicksort and mergesort. The final part of the chapter discusses hashing techniques for efficient data retrieval.

Dr. O. B. K. S. K.
Dr. O. B. K. S. K.
Dr. O. B. K. S. K.

Dr. O. B. K. S. K.

OPERATING SYSTEMS LAB USING C/Java

1. Write a program to implement Round Robin CPU Scheduling algorithm
2. Simulate SJF CPU Scheduling algorithm
3. Write a program the FCFS CPU Scheduling algorithm
4. Write a program to Priority CPU Scheduling algorithm
5. Simulate Sequential file allocation strategies
6. Simulate Indexed file allocation strategies
7. Simulate Linked file allocation strategies
8. Simulate MVT and MFT memory management techniques
9. Simulate Single level directory File organization techniques
10. Simulate Two level File organization techniques
11. Simulate Hierarchical File organization techniques
12. Write a program for Bankers Algorithm for Dead Lock Avoidance
13. Implement Bankers Algorithm Dead Lock Prevention.
14. Simulate all Page replacement algorithms.
 - a) FIFO
 - b) LRU
 - c) LFU
15. Simulate Paging Techniques of memory management

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V. G. B. S. Chinnam
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Dr. Ray

1. Introduction
2. Statement of the problem
3. Objectives of the study
4. Scope of the study
5. Significance of the study
6. Methodology
7. Results and discussion
8. Conclusion
9. References
10. Appendix
11. Bibliography
12. Acknowledgement
13. Declaration
14. Certificate
15. Curriculum Vitae
16. List of Publications
17. List of Awards
18. List of Members
19. List of Committees
20. List of Advisors
21. List of Reviewers
22. List of Examiners
23. List of Markers
24. List of Moderators
25. List of Supervisors
26. List of Consultants
27. List of Collaborators
28. List of Sponsors
29. List of Donors
30. List of Beneficiaries
31. List of Stakeholders
32. List of Interested Parties
33. List of Affected Parties
34. List of Consulted Parties
35. List of Consulted Organizations
36. List of Consulted Experts
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100. List of Consulted Organizations

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 Lecturer in Law
 Faculty of Law
 University of Malaya

(Signature)

Model Question Papers
Subject: OPERATING SYSTEM

Time: 3 Hours

Max.Marks:75

Section-A (Answer any FIVE Questions). 5x5=25 Marks

1. Explain the importance of Real-Time Embedded systems.
2. Define Cooperating process? What is the environment need in Cooperating processes?
3. What is Critical Section Problem?
4. Write the difference between internal and external fragmentation.
5. Define the Safe, unsafe, and deadlock state spaces
6. What are Operating-System Services?
7. Identify the situations for Preemption of a process.
8. Define Busy Waiting? How to overcome busy waiting using Semaphore operations.
9. What is Deadlock?
10. Write short note on demand paging.

SECTION-B

Answer ANY FIVE Questions. 5X10=50 MARKS

1. What is meant by interleaving and overlapping with respect to multi programming and multi processing? Explain. (Assume system have two user processes).
2. Explain the Time-shared operating system.
3. For given process how to evaluate Average Waiting Time and Average Turnaround Time for: i) FCFS ii) SJF iii) SRT iv) Non-Preemptive Priority v) Preemptive Priority vi) RR(Q=2).
4. What is paging? Explain its structure for 32 -byte memory with 4-byte pages.
5. What is effective access time? Compute it for 70% hit ratio, 20 ns to search TLB and 100 ns to access memory. Observe the difference when it is changed to 90% hit ratio.
6. Explain the usage and structure of monitors with an example.
7. Explain Banker's deadlock-avoidance algorithm with an illustration.
8. List out the various methods for free-space management and explain them.
9. Give a brief note on Disk scheduling algorithms
10. Differentiate SCAN, C-SCAN and LOOK, C-LOOK disk scheduling algorithms with an example

Note:- At least 2 question must be given from each unit in both section-A and Section-B

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S. R.
cu. Raju

Section A (Answer any Five Questions) (10 x 5 = 50 Marks)

1. Explain the importance of Real-time embedded systems.
2. Define scheduling process. What is the environment used in Cooperating processes?
3. What is Critical Section Problem?
4. What is the difference between internal and external fragmentation?
5. Explain the job, process, and device file system.
6. What is Operating System service?
7. Identify the window for execution of a process.
8. Explain how priority may be overcome by waiting using priority inversion.
9. What is Deadlock?
10. Write short note on demand paging.

SECTION B

Answer ANY FIVE Questions (5 x 10 = 50 Marks)

1. What is meant by interleaving and overlapping with respect to multi programing and multi processing? Explain. (Assume system have 4-0 user processes)
2. Explain the Time-shared operating system.
3. For given process how to evaluate Average Waiting Time and Average Turnaround Time (ATAT) and (AT) (RT) (Non-Preemptive Priority) (Preemptive Priority) (RR) (S).
4. What is page? Explain its structure for 32-bit memory with 4-byte page.
5. What is effective access time? Compute it for 100% hit rate of 30 ns to search the cache. (10 marks)
6. Memory: Compute the difference when it is changed to 200% hit rate.
7. Explain the usage and structure of monitor with an example.
8. Explain banker's deadlock avoidance algorithm with an illustration.
9. List out the various methods for file-space management and explain them.
10. Give a flowchart on task scheduling algorithm.
10. Differentiate between C-SCAN and LOOK. CLOOK disk scheduling algorithm with an example.

Note: At least 2 questions must be given from each part in both section A and section B.

(Handwritten signature and stamp)
Dr. B. Srinivasulu
Principal
Sri Venkateswara Engineering College
Vengal Rao Nagar, Tirumala Hills, Tirumala, Andhra Pradesh - 509 004

REVISED SYLLABUS UNDER CBCS FRAMEWORK WITH EFFECT FROM 2020-2021:

LIFE SKILL COURSES:		Syllabus
Sl.No.	Programme	
1	ANALYTICAL SKILLS	
2	BASIC COMPUTER APPLICATIONS ✓	
3	ELEMENTARY STATISTICS	
4	ENTREPRENEURSHIP DEVELOPMENT	
5	ENVIRONMENTAL EDUCATION	
6	HEALTH AND HYGIENE	
7	HUMAN VALUES PROFESSIONAL ETHICS AS PART OF LIFE SKILLS COURSES	
8	INDIAN CULTURE AND SCIENCE	
9	INFORMATION AND COMMUNICATION TECHNOLOGY ✓	
10	PERSONALITY ENHANCEMENT AND LEADERSHIP	
SKILL DEVELOPMENT COURSES:		Syllabus
Sl.No.	Programme	
1	TOURISM GUIDANCE	
2	JOURNALISTIC REPORTING	
3	PUBLIC RELATIONS	
4	SURVEY AND REPORTING	
5	FINANCIAL MARKETS	
6	DISASTER MANAGEMENT	
7	SOCIAL WORK METHODS	
8	PERFORMING ARTS	
9	ADVERTISING	
10	AGRICULTURE MARKETING	
11	BUSINESS COMMUNICATION	
12	INSURANCE PROMOTION	
13	LOGISTICS AND SUPPLY CHAIN MANAGEMENT	
14	ONLINE BUSINESS	
15	OFFICE SECRETARYSHIP	
16	RETAILING	
17	ELECTRICAL APPLIANCES	
18	SOLAR ENERGY	
19	FOOD ADULTERATION	
20	ENVIRONMENTAL AUDIT	
21	PLANT NURSERY	
22	FRUITS AND VEGETABLE PRESERVATION	
23	DAIRY TECHNOLOGY	
24	POULTRY FARMING	
Core Subjects		Syllabus
Sl.No.	Programme	
1	THREE-YEAR B.A. - ECONOMICS ✓	
2	THREE-YEAR B.A. - HISTORY	
3	THREE-YEAR B.A. - POLITICAL SCIENCE ✓	
4	THREE-YEAR B.Com - (GENERAL AND COMPUTER APPLICATIONS)	
5	THREE-YEAR BOTANY	
6	THREE-YEAR B.Sc. (CHEMISTRY) ✓	
7	THREE-YEAR B.Sc. (COMPUTER SCIENCE/ INFORMATION TECHNOLOGY)	
8	THREE-YEAR B.A. /B.Sc. MATHEMATICS ✓	
9	THREE-YEAR B.Sc. PHYSICS (FOR MATHEMATICS COMBINATIONS)	
10	THREE-YEAR B.Sc. PHYSICS (FOR NON-MATHEMATICS COMBINATIONS)	
11	THREE-YEAR B.Sc. ZOOLOGY	
12	THREE-YEAR B.A. /B.Sc./B.Com/BCA/BBM/BHM & CT ENGLISH under (Part - I)	
13	THREE-YEAR B.A. /B.Sc./B.Com/BCA/BBM/BHM & CT GENERAL TELUGU	
14	CBCS CURRICULAR FRAMEWORK	
15	GUIDELINES	

16. B.Sc (Data Science) - Three-years
 17. B.Sc (Aquaculture Technology)
 18. B.Sc

~~Maths - Statistics - Computer Science - Data Science.~~
 ② Maths - Electronics - IOT
 ③ B.A - History - Economics - Functional Telugu.

Market oriented Courses.

- 10. E-Sc (Data Science) - 4 sem.
- 11. B.Sc (Computer Science)
- 12. B.Tech

ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION

B.Sc. / B.Com / B.A

Revised Syllabus under CBCS w.e.f. 2020-2021

LIFE SKILL COURSE
BASIC COMPUTER APPLICATIONS

Semester	Course Code	Course Title	Hours	Credits
I	Life skill course	BASIC COMPUTER APPLICATIONS	30	2

Objectives:

This course aims at providing exposure to students in skill development towards basic office applications.

Course Learning Outcomes:

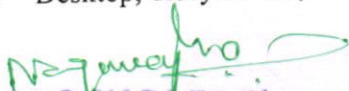
After successful completion of the course, student will be able to:

1. Demonstrate basic understanding of computer hardware and software.
2. Apply skills and concepts for basic use of a computer.
3. Identify appropriate tool of MS office to prepare basic documents, charts, spreadsheets and presentations.
4. Create personal, academic and business documents using MS office.
5. Create spreadsheets, charts and presentations.
6. Analyze data using charts and spread sheets.

Unit-I: (08 hrs)

Basics of Computers: Definition of a Computer - Characteristics of computers, Applications of Computers – Block Diagram of a Digital Computer – I/O Devices, hardware, software human ware, application software, system software, Memories - Primary, Auxiliary and Cache Memory.

MS Windows – Desktop, Recycle bin, My Computer, Documents, Pictures, Music, Videos,


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SKBR Govt. Dergee College,
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Ch. Raju





THE UNIVERSITY OF CHICAGO
 DEPARTMENT OF CHEMISTRY
 LABORATORY OF ORGANIC CHEMISTRY
 5301 S. DICKINSON DRIVE
 CHICAGO, ILLINOIS 60637

NAME	ADDRESS	CITY	STATE	ZIP

I am enclosing a check for the amount of \$_____. This check is payable to the order of the University of Chicago. The check is enclosed in a separate envelope.

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C-100

Task Bar, Control Panel.

Unit-II: (08 hrs)

MS-Word : Features of MS-Word - MS-Word Window Components - Creating, Editing, Formatting and Printing of Documents – Headers and Footers – Insert/Draw Tables, Table Auto format – Page Borders and Shading – Inserting Symbols, Shapes, Word Art, Page Numbers, Mail Merge.

Unit-III: (10 hrs)

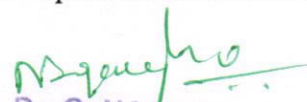
MS-Excel : Overview of Excel features – Creating a new worksheet, Selecting cells, Entering and editing Text, Numbers, Inserting Rows/Columns – Changing column widths and row heights, Formulae, Referencing cells , Changing font sizes and colors, Insertion of Charts, Auto fill, Sort.

MS-PowerPoint: Features of PowerPoint – Creating a Presentation - Inserting and Deleting Slides in a Presentation – Adding Clip Art/Pictures -Inserting Other Objects, Audio, Video - Resizing and scaling of an Object – Slide Transition – Custom Animation.

RECOMMENDED CO-CURRICULAR ACTIVITIES: (04 hrs)

(Co-curricular activities shall not promote copying from textbook or from others work and shall encourage self/independent and group learning)

1. Assignments (in writing and doing forms on the aspects of syllabus content and outside a. the syllabus content. Shall be individual and challenging)
2. Student seminars (on topics of the syllabus and related aspects (individual activity))
3. Quiz, Group Discussion
4. Solving MCQ's available online.
5. Suggested student hands on activities:
 - Create two folders, Rename the folder, create two files each using notepad and paint, move the files from one folder to another folder, delete a file you have created, copy and paste text within notepad.
 - Create a letter head for your college with watermark, your resume, visiting card, brochure for your college activity, organization chart for your college, any advertisement, Prepare your Class time table.
 - Prepare your mark sheet, Prepare your class time table, Prepare a salary bill for an organization, Sort the bill as per the alphabetical order of the names, Get online weather data and analyze it with various charts.
 - Create a PowerPoint presentation for a student seminar.


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RECOMMENDATIONS

1. The committee has reviewed the report and finds it to be satisfactory.

2. The committee has reviewed the report and finds it to be satisfactory.

3. The committee has reviewed the report and finds it to be satisfactory.

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DR. O. W. B. BAILEY
Chairman

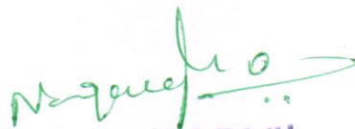
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BSC/BCOM/BA
REVISED SYLLABUS UNDER CBCS W.E.F 2020-2021
LIFE SKILL COURSE
BASIC COMPUTER APPLICATIONS

ANSWER THE FOLLOWING QUESTIONS:

20x1=20

- 1) "Transistors" are used in which generation?
a) 1G b) 2G c) 3G d) 4G
- 2) This type of memory is commonly called temporary or volatile storage
A. ROM B. RAM C. Flash Memory D. Virtual Memory
- 3) — is the heart of the computer and this is where all the computing is done.
A. Printer B. Central Processing Unit C. Mouse D. Keyboard
- 4) Select the smallest memory size
A. kilobyte B. megabyte C. gigabyte D. terabyte
- 5) The set of instructions that tells the computer what to do is
A. Softcopy B. Hardware C. Software D. Hardcopy
- 6) The main workspace of a Windows computer is called the -----
A. Folder B. taskbar C. desktop D. shortcut
- 7) A Microsoft Windows isa(n)
a. Operating system b. Graphic program c. Word Processing d. Database program
- 8) Which is not application software?
a. Windows b. Page Maker c. ms word 2007 d. Photosho
- 9). Taskbar is used for
a. Navigation program b. Switching between program c. Start a program d. All of above
- 10) The operating system is the most common type of Software
a. Communication b. Application c. System d. Word processing software



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cu. Raju 

BASIC COMPUTER APPLICATIONS

ANSWER THE FOLLOWING QUESTIONS:

1. The computer system is made up of hardware and software.
2. The hardware includes the physical components of the computer system.
3. The software includes the programs and data that run on the hardware.
4. The operating system is the most common type of software.
5. The operating system manages the hardware and software resources of the computer system.
6. The operating system provides a user interface for the computer system.
7. The operating system controls the execution of other programs on the system.
8. The operating system manages the system's memory and files.
9. The operating system provides security and access control for the system.
10. The operating system is responsible for the overall operation of the computer system.

DR. O. NAGA RAO
Principal
JNTU Hyderabad

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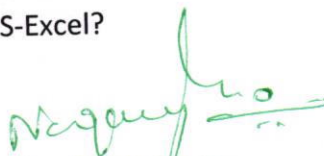
- 14) The center the selected text, the shortcut key is
 (A) Ctrl + C (B) Ctrl + E(C) Ctrl + U(D) Ctrl + O
- 15) A memory bus is mainly used for communication between
 (A) Processor and I/O devices (B) Processor and memory
 (C) Input devices and output devices(D) I/O devices and SMPS
- 16) To maximize the currently selected window, press
 (A) Ctrl+ F9 (B) Ctrl+ F10 (C) Ctrl+ F11 (D) Ctrl+ F12
- 17) How many columns are there in old version of MS Excel?
 (A) 250(B) 256(C) 265(D) 269
- 18) Typed text showed in active cell and also in ____
 (A) Formula bar (B) Ribbon(C) Title bar(D) Scroll bar
- 19) Workbook is a collection of
 (A) Worksheets(B) Page set-up(C) Buttons(D) Diagrams
- 20) ____ is the intersection of a row with a column.
 (A) Cell(B) Row(C) Column(D) All of these

Match the following 1X5=5

- | | | |
|------------------------------------|--------------------------|------------|
| 1.Short cut for Copy command | <input type="checkbox"/> | a) Ctrl +A |
| 2.Short cut for Replace command | <input type="checkbox"/> | b) Ctrl+R |
| 3.Short cut for Undo command | <input type="checkbox"/> | c) Ctrl+Z |
| 4.Short cut for Goto command | <input type="checkbox"/> | d) Ctrl+G |
| 5.Short cut for select all command | <input type="checkbox"/> | e) Ctrl +C |

Answer any five of the following 5X5=25

- 1) Define computer? Explain the characteristics of computer?
- 2) Explain any four input statements?
- 3) Explain the features of MS- Word?
- 4) Write about mail merge?
- 5) Define chart? Explain different types of charts?
- 6) Explain the procedure to create a presentation
- 7) How can you customize a presentation?
- 8) Explain about functions in MS-Excel?


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Dr. Raju

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