

Unit-1

- ↳ Explain the components of Digital computer with the help of Block Diagram.
- ↳ What is an operating system? Explain the functionality or services provided by OS.
- ↳ Differentiate compiler & Interpreter.
- ↳ Define Linker and Loader.
- ↳ What are the types of programming language?
- ↳ What is an algorithm? Explain its properties.
- ↳ What is Flowchart? Explain all the symbols in flowchart.
- ↳ What is a Data type? Explain primitive or primary datatype along with their size, keyword, range and format specifier.
- ↳ Explain various storage class in C? Explain with the help of example.
- ↳ Explain the structure of C program.
- ↳ Errors and types with example.

4 Explain various categories of operator with the help of example

4 Explain operator precedence and associativity.

4 Write down the syntax of all the decision making statement
if, if-else, else if ladder, switch

4 Differentiate b/w i) Switch & else ladder
ii) type conversion & type casting

(Flowchart of each program)

4 WAP to check whether A triangle is Equilateral or not

4 WAP to check whether the roots of quadratic eqn are real, equal, or imaginary also find real & equal roots

4 WAP to perform arithmetic operation on two variable using switch

4

Q14. Memory Hierarchy of computer system

Unit 1-3

Loops

↳ Differentiate b/w entry & exit control loop or (while or do while)

↳ Differentiate b/w Break & continue

↳ Syntax of while / do while / for loop

↳ WAP to check whether palindrome or not

↳ Armstrong ↳ Prime Number
↳ Fibonacci Series

↳ Sum of the series $1 + 1^2 + 1^3 + \dots + n$

↳ To print prime numbers 1 to 500

function

↳ What is a function? Explain various types and category of function

↳ Difference b/w Actual & formal arguments

↳ Explain use of return statement.

↳ What are the various parameter passing mechanism

OR

↳ Difference b/w call by value or call by reference

- Q What is recursion?
- Q WAP to find factorial of the number using recursion.
- Q Fibonacci Series upto n. using Recursion.
- Q Any one program by using all the category of user-defined function.

Unit-4

Array

- Q What is an array? Explain advantages & disadvantages of array.

- Q WAP to find maximum element of an array.

- Q WAP to perform linear search

- Q WAP to perform Binary search

- Q to perform Bubble sort

2D

- Q to find transpose of a matrix and whether symmetric or not

- ↳ to find trace of a matrix.
- ↳ to multiply matrix A of order $m \times n$ with B of order $n \times q$.
- ↳ what is a string? How it is declared and initialized.
- ↳ Explain various string handling functions and example.
- ↳ To check whether a string is Palindrome or Not.
- ↳ Differentiate between structure & Union.
- ↳ WAP to create a record of 20 students consist of Student Name, Rollno, Marks of a subject. Print the details of those students who score greater than 50.
- ↳ Explain user defined datatype with example (typedef & enum).

Unit-5

Q. What is a pointer? How it is declared and initialized.

Q. Write a short note on pointer arithmetic.

Q. Bubble using pointer.

Q. Explain various DMA with example (Malloc & Calloc).

Q. What is a preprocessor? Explain various pre-processor directive.

OR

Q. Short note on

- ↳ File inclusion

- ↳ Macro

- ↳ Conditional compilation

Q. What is a file? What are the various mode of file.

Q. Explain various file handling function with syntax.

Q. WAP to count number of character in a file.

Q. WAP to copy the content of file into other file.

↳ two file identical or not (program)

↳ to input integer 1 to 10 named file
 1.c out of these integer, write all
 the even integer name even.c and
 odd integer name odd.c

↳ Short note on link list, Notion
 of order of complexity. or asymp
 test Notion.

↳ Short note on command line argument