

- Provide code snippets for both operations. (CO2)
- Q.28 What are the basic manipulation functions in C? Explain with examples. (CO2)
- Q.29 Write the advantages and disadvantages of pointer. (CO2)
- Q.30 Explain the purpose of header files in C. What are some common header files and their uses? (CO1)
- Q.31 Write a program to demonstrate the use of a one dimensional array. (CO3)
- Q.32 Explain recursion function in C. (CO1)
- Q.33 Describe the different types of data files in C. What are their uses? (CO3)
- Q.34 Differentiate between while and do-while with syntax and their example. (CO2)
- Q.35 Explain the standard formatted and unformatted input / output functions. (CO2)

Section-D

Note: Long answer questions. Attempt any two questions out of three Questions. (2x10=20)

- Q.36 Write a complete C program that demonstrates the use of structures and pointers. Include functions to initialize, display, and modify the data. (CO4)
- Q.37 What do you mean by passing array to a function? Explain with suitable example. (CO3)
- Q.38 Write short notes on any two: (CO5)
- Features and characteristics of C
 - MATLAB programming
 - ORCAD

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Time : 3 Hrs.

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SECTION-A

Note: Multiple choice Questions. All Questions are compulsory. (10x1=10)

- Q.1 Which of the following is the correct syntax for a function in C? (CO1)
- Function_name () {}
 - Void function_name () {}
 - Function_name (void) () {}
 - Void function_name () {}
- Q.2 What is the size of an int data type in C on a typical 32-bit system? (CO2)
- 2 bytes
 - 4 bytes
 - 8 bytes
 - Depends on the compiler
- Q.3 Which of the following control structures allows for repeated execution of a block of code? (CO2)
- If statement
 - Switch statement
 - For loop
 - None of the above
- Q.4 In C, the symbol '&' is used to denote : (CO2)
- Address of
 - Pointer
 - Reference
 - None of the above
- Q.5 What will be output of the following code snippet: `Printf("%d", 10+20+"Hello"); 1)` (CO4)

- a) 30 b) Compilation error
c) 20 d) 10
- Q.6 A pointer in C is : (CO2)
a) A variable that stores a memory address
b) A type of array
c) A special data type
d) None of the above
- Q.7 _____ functions is used to read a string from the standard input? (CO2)
a) Gets() b) Scanf()
c) Read() d) Input()
- Q.8 What is the main purpose of a function prototype? (CO2)
a) To define the function body
b) To declare the function before its use
c) To create a new data type
d) None of the above
- Q.9 Which of the following is not a valid data type in C? (CO3)
a) int b) float
c) string d) char
- Q.10 Who is the father of C language? (CO1)
a) Bjarne Stroustrup b) James A Gosling
c) Dennis Ritchie d) None of the above

Section-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 _____ is used for making decision in flow chart. (CO1)

- Q.12 Define if-else statement. (CO2)
Q.13 Define conditional operator. (CO2)
Q.14 The C preprocessor are specified with _____ symbol. (CO1)
Q.15 Define algorithm. (CO1)
Q.16 What are global variable? (CO2)
Q.17 In an array, the first element is stored at index _____. (CO3)
Q.18 The keyword _____ is used to define a function that does not return a value. (CO2)
Q.19 A variable declared with the keyword _____ retains its value even after it goes out of scope. (CO2)
Q.20 The file operation mode "r" is used for _____ files. (CO4)

Section-C

Note: Short answer type Question. Attempt any twelve questions out of fifteen Questions. (12x5=60)

- Q.21 Explain the concept of flowchart and their important in programming. (CO1)
Q.22 Differentiate with example HLL, Machine Language (ML) and Assembly language. (CO1)
Q.23 Differentiate between translator and compiler. (CO1)
Q.24 Name different application software used in electronic engineering. (CO1)
Q.25 Differentiate between break and switch statement with suitable example. (CO2)
Q.26 Write a function of find the maximum of three integers and explain how it works. (CO4)
Q.27 How can you read from the write to a text file in C?