

QUESTION 2012

Group – A **(Multiple Choice Type Questions)**

1. Choose the correct alternatives for any ten of the following:

- i) C is a
- ☒ a) middle level language
 - ☐ b) high-level language
 - ☐ c) low-level language
 - ☐ d) none of these
- ii) A do-while loop is useful when we want that the statements within the loop must be executed
- ☐ a) only once
 - ☒ b) at least once
 - ☐ c) more than once
 - ☐ d) none of these
- iii) Every C function
- ☒ a) by default return an integer value
 - ☐ b) by default return more than one integer value
 - ☐ c) by default return an floating constant
 - ☐ d) None of these
- iv) An array is a collection of
- ☐ a) different data types scattered through memory
 - ☐ b) the same data type scattered throughout the memory
 - ☒ c) the same data type placed next to each other in memory
 - ☐ d) different data types placed next to each other in memory.
- v) When you pass an array as an argument to a function, what actually gets passed
- ☐ a) address of the array
 - ☒ c) address of the first element of the array
 - ☐ b) value of the elements of the array
 - ☐ d) number of elements of the array
- vi) What is a preprocessor directive?
- ☐ a) A message from compiler to the programmer
 - ☐ b) A message from compiler to the linker
 - ☒ c) A message from programmer to the preprocessor
 - ☐ d) A Message from programmer to the microprocessor

vii) A header file is

- a) a file that contains standard library functions
- ✓ b) a file that contains definitions & macros
- c) a file that contains user defined functions
- d) a file that is present in current working directory.

viii) The break statement is used to exit from

- a) an if statement
- c) a program

- ✓ b) a for loop
- d) the main () function

ix) Which function would you use if a single key is to be received through the keyboard?

a) scanf()

b) gets()

c) getch()

✓ d) getchar()

x) If *p & *q are two pointer variables, then which of the following statements are true

a) *p + *q

b) *p/*q

✓ c) *p + 10

d) none of these

xi) What is the output of the following programs?

```
main( )
```

```
{   int i = 1
```

```
    printf ("%d%d%d", i, ++i, i++);
```

```
}
```

a) 1 3 3

b) 3 2 2

c) 3 1 1

✓ d) 3 3 1

Group - B

(Short Answer Type Questions)

2. Describe the different symbols used in a flowchart with a suitable example. What do you mean by debugging of a program?

See Topic: INTRODUCTION, Long Answer Type Question No. 2 (a) & (d).

3. Briefly describe the different loop control structures in 'C' with syntax, example and explanation.

See Topic: FLOW OF CONTROL, Long Answer Type Question No. 3.

4. What are the advantages of using functions in 'C' programming? What is the difference between user defined functions & library functions?

What is recursion in programming? What advantage is there in its use?

See Topic: FUNCTIONS, Long Answer Type Question No. 2.

See Topic: FUNCTIONS, Short Answer Type Question No. 2 & 10.

5. What is dynamic memory allocation? Why a linked list is called a dynamic data structure? What are the advantages of using linked lists over arrays?

See Topic: DYNAMIC MEMORY ALLOCATION, Long Answer Type Question No. 3.

See Topic: DYNAMIC MEMORY ALLOCATION, Short Answer Type Question No. 6.

6. What is structure? How is a structure member accessed? What is an array of structures described with an example?
See Topic: STRUCTURES AND UNIONS, Short Answer Type Question No. 3.

Group - C
(Long Answer Type Questions)

7. Explain the difference between 'call by reference' and 'call by value'.
Where is the difference between global & local variable.
Write a recursive function for GCD calculation.

See Topic: POINTERS, Long Answer Type Question No. 1.

See Topic: FUNCTIONS, Short Answer Type Question No. 18.

See Topic: FLOW OF CONTROL, Long Answer Type Question No. 18.

8. What do you mean by storage classes in 'C'? Name different storage classes and explain each with examples. Write a 'C' program that implements the matrix multiplication using 2-D array.

See Topic: FUNCTIONS, Long Answer Type Question No. 4.

See Topic: ARRAYS, Long Answer Type Question No. 1(a).

9. What is linked list?

What are the advantages of switch case? Describe different types of data types.

Write a 'C' program to calculate factorial of a number.

See Topic: DYNAMIC MEMORY ALLOCATION, Short Answer Type Question No. 7.

See Topic: C FUNDAMENTALS, Long Answer Type Question No. 4.

See Topic: FUNCTIONS, Long Answer Type Question No. 5.

10. What is union? How does a union differ from a structure?

How a union member accessed? Write a 'C' program that implements a structure person that would contain person name, data_of_joining & salary.

See Topic: STRUCTURES AND UNIONS, Long Answer Type Question No. 1(b) & (c).

See Topic: STRUCTURES AND UNIONS, Long Answer Type Question No. 3.

11. Write short notes on any three of the following:

- a) Preprocessor directives
- b) strcpy () and strcmp () function
- c) Automatic and static variables
- d) getch () and getchar () function
- e) Actual & formal arguments.

a) See Topic: FUNCTIONS, Long Answer Type Question No. 9(a).

b) See Topic: ARRAYS, Long Answer Type Question No. 9(b).

c) See Topic: FUNCTIONS, Long Answer Type Question No. 9(d).

d) See Topic: FUNCTIONS, Long Answer Type Question No. 9(e).

e) See Topic: FUNCTIONS, Long Answer Type Question No. 9(f).