



MANIPAL
UNIVERSITY JAIPUR
University under Section 2(f) of the UGC Act

PROGRAMME	BACHELOR OF COMPUTER APPLICATIONS (BCA)
SEMESTER	I
COURSE CODE & NAME	DCA1107 - C PROGRAMMING

Section A

Multiple Choice Questions (2 Marks each)

[Please answer *all* the questions]

1. In C programming, which of the following symbols is used to denote a comment?
 - a) *
 - b) **
 - c) #
 - d) /* */
2. Every C program must have one _____ function.
 - a) main()
 - b) printf()
 - c) scan()
 - d) none
3. What does the scanf() function do in C?
 - a) Reads formatted input from the standard input
 - b) Writes formatted output to the standard output
 - c) Writes formatted output to a file
 - d) Reads formatted input from a file
4. What is the result of the expression "x -= 3;" if x is initially 8?
 - a) 5
 - b) 2
 - c) 11

d) 12

5. What is the purpose of the continue statement in a loop?

a) To terminate the loop

b) To skip the current iteration and continue with the next iteration

c) To exit from the loop

d) None of the above

6. What will be the result of the following code?

```
int i = 0;
while (1)
{
    i++;
}
```

a) The loop will run indefinitely, increasing i

b) The loop will execute once and terminate

c) The loop will not execute at all.

d) Compile time error

7. process by which a function calls itself repeatedly

a) Sub program

b) sub function

c) Module

d) Recursion

8. What is string tokenization?

a) The process of converting a string to uppercase

b) The process of breaking a string into smaller parts (tokens)

c) The process of comparing two strings

d) The process of finding the length of a string

9. _____ is not a valid keyword in C language.

a) else

b) if

c) switch

- d) for each
10. Which of the following operators performs a bitwise NOT operation in C?
- a) |
 - b) <<
 - c) >>
 - d) ~

Section B

SHORT ANSWERS (5 Marks each)

Approximately (200-250) words

[Please answer *Any Four* questions]

1. Examine the characteristics of the C programming language.
2. Discuss the significance of the const keyword in C programming.
3. Describe the syntax and usage of the if-else statement in C programming.
4. Differentiate between Call by Value and Call by address.
5. Explain the importance of function prototypes in C programming.
6. How does the assignment operator (=) function in C? Additionally, what distinguishes = from ==?

Section C

LONG ANSWERS (10 Marks each)

Approximately (400-500) words

[Please answer *Any Three* questions]

1. Explain the purpose and structure of the switch-case statement in C programming. Provide a detailed example demonstrating the usage of switch-case.
2. Discuss the if statement in detail, including its syntax and various forms (simple if, if-else, nested if).
3. Explain various String handling functions in C with Examples.
4. Explain the different types of loops in C. Provide examples.