

## Practice Questions

### Subject: C Programming

#### 2 Mark Questions

1	Explain different components of Computer System.
2	Explain flowchart with proper example.
3	Explain Algorithm with proper example.
4	Explain Escape sequences with proper example.
5	List different data types available in C.
6	Explain Data type modifiers available in C.
7	Explain type casting with proper example.
8	Explain logical operators with proper example.
9	Explain assignment operator with proper example.
10	Explain ternary (conditional) operator with example.
11	Explain multi-way branching statement available in C language.
12	Explain the use of keyword <b>default</b> in switch case statement.
13	Explain the use of keyword <b>break</b> in switch case statement.
14	Differentiate between entry and exit controlled loop.
15	Explain the role of control variable in execution of loop.
16	Explain following functions with proper examples a) sqrt() b) abs() c) pow() d) ceil() e) floor() f) getch() g) clrscr()
17	Explain order of precedence of an operator with proper example.
18	Explain associativity of an operator with proper example.

#### 5 Mark Questions

1	Explain bitwise operators with example.
2	Differentiate between else-if ladder and switch case.
3	Explain control breaking statements with example.
4	Rajesh's basic salary is input through the keyboard. His dearness allowance is 40% of basic salary and house rent allowance is 20% of basic salary. Write a program to calculate his gross salary.
5	Write a program to find maximum of three numbers using conditional operator.
6	Write a program to accept a year as input and printout if it is a leap year.  The Leap year is basically: 1. A year is a leap year if it is divisible by 4 but not by 100. 2. If a year is divisible by both 4 and by 100, then it can only be a leap year if it is also divisible by 400.
7	WAP to simulate simple arithmetic calculator using switch-case.

8	WAP to calculate value of f(x), if x has different ranges of values as below $f(x) = \begin{cases} x^2+2 & 0 \leq x \leq 10 \\ x^2+2x & 10 < x \leq 20 \\ x^3+2x^2 & 20 < x \leq 30 \\ 0 & x > 30 \end{cases}$										
9	WAP to find sum of the digits of a given number.										
10	WAP to check whether an entered number is palindrome or not.										
11	WAP to check whether an entered number is Armstrong number or not.										
12	WAP to find GCD and LCM of two numbers.										
13	WAP to calculate factorial of the given number.										
14	WAP to calculate power of a number(x raised to n), accept value of x and n from user.										
15	WAP to check prime property of a given number.										
16	WAP to display first 'n' terms of a Fibonacci series.										
17	Write a program to calculate sum of the series 1/2 – 3/4 + 5/6 – 7/8 +..... upto n terms										
18	WAP to accept a number and display it in word. Example input: 456 output: FOUR FIVE SIX										
19	WAP to display following patterns										
	1	1	****	1234	4321	1	ABCD	A	ABCDcba	1	1
	12	22	***	123	321	121	ABC	ABA	ABCBA	23	01
	123	333	**	12	21	12321	AB	ABCBA	ABA	456	101
	1234	4444	*	1	1	1234321	A	ABCDcba	A	78910	0101