

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks. (2 Marks each)
1.	What inbuilt function should be used to return a value rounded up to the next higher integer?
Option A:	floor()
Option B:	round()
Option C:	puts()
Option D:	ceil()
2.	Collection of variables of same or different data types is called as
Option A:	Array
Option B:	Structure
Option C:	Function
Option D:	String
3.	What is value of a in following expression? int a = 10 + 4.867;
Option A:	a=10
Option B:	a=14.867
Option C:	a=14
Option D:	a=4
4.	<pre>#include <stdio.h> void main() { int x = 5; if (x == 5) printf("hi\n"); else printf("how are u\n"); printf("hello\n"); }</pre>
Option A:	hi
Option B:	hi hello
Option C:	how are you hello
Option D:	how are you
5.	The value obtained in the function is given back to the main program by using which keyword?
Option A:	new
Option B:	return
Option C:	volatile
Option D:	static

6.	In an array a[2][2] = {10,20,30,40,50,60}, then a[0][1] is which element?
Option A:	10
Option B:	20
Option C:	30
Option D:	40

Q2	Solve any Four out of Six (4 marks each)
A	Explain conditional operator used in C language with proper example.
B	Differentiate between entry and exit controlled loop with an example.
C	Write a program to accept a number and to check whether it is Armstrong number or not. (If sum of cube of digits equal to that number then number is Armstrong number. example $1^3+5^3+3^3=153$)
D	Define recursion. Write a program using recursive function 'power' to compute x raised to n i.e. x^n which can be defined as given below: power(x, n)=1 if n=0 power(x, n)=x if n=1 power(x, n)=x*power(x,n-1) otherwise
E	Explain following functions with proper example. a) strcmp() b) strcat() c) gets() d) strrev()
F	Write a program to accept elements of one dimensional array from user and sort and display them in ascending order.

Q3	Solve any Four out of Six (4 marks each)
A	Explain bitwise operators available in C?
B	Write a program to print the following pattern. Accept number of rows from user and display that much number of rows in output. 1 01 101 0101
C	Write a program to find factorial of a given number using function.
D	Explain compile time and run time initialization of an array with proper example.
E	Write a program to accept elements of two dimensional square matrix and check whether matrix is symmetric or not.
F	Write a program to read Title, Author and Price of 5 books using array of structures. Display the records in ascending order of Price.

Q4	Solve any Four out of Six (4 marks each)
A	Explain data type modifiers available in C language.
B	Write a program to accept three numbers and to find largest of three numbers using nested if-else.
C	Write a program to check whether the entered string is palindrome or not using user defined function.
D	Explain the following with proper example: a) break b) continue c) goto
E	Explain the advantages of using Function.
F	Distinguish between Structure and Union with proper example.