

Second Semester -Xlth Standard QUESTION BANK-2023 (CS-Paper-1)

NOTE: Also kindly refer previous Question Banks related to C++ (Sem-I and Unit test-II)

MCQ:

1. Select the most appropriate option and rewrite the following statement.

- Which of the following is not a loop statement?
1) if() 2) while() 3) for() 4) none of the above
- Which of the following is correct for the statement - An array arr with size 5 is of int type,
1) int arr[4] ; 2) int arr[5]; 3) int arr[]; 4) None of these
- Which of the following operator is used after case keyword in switch statement?
1) ; 2) : 3) , 4) None
- If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block?
1) () 2) { } 3) [] 4) None of the above
- In the following for () loop which one is correct statement?
for (k = 2, k <=12, k++)
1) k should start with 1 2) There should be semicolon in place of commas
3) there should be a semicolon at the end of the statement
4) None of the above
- What is the final value of x when the code int x; for(x=0; x<10; x++) {} is run ?
1) 0 2) 1 3) 9 4) 10

Theory Questions:

- What is nested if? Explain with one example.
- What is ternary operator? Explain with one example.
- Explain the switch statement of C++ with example.
- Differentiate between switch () and if () statements.
- What is loop? What are the types of loop explain with example.
- Compare between while and do-while statements.
- Explain **for loop** syntax with proper example.
- Explain Entry controlled loops in details?
- Explain Exit controlled loops in details?
- Differentiate between Exit and Entry controlled loop with Example.
- Give one example of **for loop** and convert the same into **while()** or **do..while()**.
- What is an array?
- Explain the representation of an array in memory, with an example.
- What are the methods to access array elements? Explain with example.

True /False based question :

- a) In C++, loop always has 2 parts
- b) The array `int num[26]` has twenty six elements.
- c) The expression `num[1]` designates the first element in the array.
- d) `do ..while()` loop will execute at least once
- e) Entry controlled loop first checks the condition then executes the loop
- f) `break` statement terminate the `switch()` statement

Program based Questions :

1. Write a C++ program to read two positive integer numbers from user. Calculate and print the GCD and LCM of these numbers.
2. Write a program in C++ to read two integer values, say a and b. The program must calculate and print the value of 'a' raised to 'b'.
3. Write a C++ program to read 10 integer numbers from user. Calculate and print sum and average of entered integer numbers.
4. Write a C++ program to read 10 integer numbers from user. Calculate and print total count of even and odd numbers.
5. Write a C++ program to read an integer values from user. Calculate and print the factorial of a given number.
6. Write a C++ program to generate multiplication table of any number given by the user.
7. Write a program in C++ to read an integer value from the user to check whether the entered number is prime or not.
8. Write a program in C++ to generate and print Fibonacci series upto 'n' terms where 'n' is to be taken as an input from the user.