

HISTORY, BASICS OF C++ AND CHARACTER SET

Questions:

1. Give a brief about the history C programming language.
2. Brief about the main features of C++ programming.
3. What are the character-set in C++?
4. List the C++ tokens.
5. What is a keyword? Give few examples.
6. What do you mean by an identifier?
7. Mention the important rules for identifiers.
8. Give two examples each for valid and invalid identifiers.
9. Explain with an example a simple C++ program.
10. What are the C++ instructions for accepting an input and displaying the output?
11. Give two examples for a preprocessor directive.
12. What are constants? Mention the types of constants.
13. Write a note on integer constants.
14. Represent 3.14×10^2 in mantissa and exponent form.
15. What is a character constant? List some escape sequence.
16. How is the end of the string denoted?
17. What is the syntax for declaring a symbolic constant? Give one example.
18. Write a C++ program to find area of a triangle.
19. Write a C++ program to find the perimeter of a circle using symbolic constant for pi. (Perimeter = $2\pi r$)
20. Write a C++ program to find largest of three numbers and print the largest value with an identifying message.

BEST PRACTICES FOR PROGRAMMING

Questions:

1. How do you name a variable according to standards that denotes the average marks?
2. Give some examples of naming a variable in a standard form.
3. What are the advantages of following a coding standard?
4. What information must a file header block provide?
5. How do you mark the end of the program?
6. Give an example for a function comment block.
7. What are the general commenting guidelines?
8. When is it necessary to put a comment in the code?
9. What is the ratio of the code to comment?
10. What do you mean by indentation? What are its advantages?
11. With a good indentation write a simple C++ program.

C++ PROGRAM STRUCTURE, PROGRAM LIFE CYCLE AND I/O OPERATIONS

Questions:

1. What is the output of the following cout statement?


```
cout<<>>"Today is Sunday\nSunday is a Holiday\n";
```
2. From where does the C++ program start its execution?
3. How to declare a preprocessor directive?
4. What does the *iostream.h* header file contain?
5. Explain the *main()* function.
6. How an end of the statement is marked?
7. Explain *cout* and *cin* statement.
8. List the phases of C++ program.
9. Briefly explain the typical C++ program development environment.
10. Write a C++ program for the conversion of seconds into hour, minutes and seconds.

11. Write a C++ program to count the number of digits and sum of the digits of a given input.

12. Identify errors:

```
#define PI 3.14159;

main()

{   int A, B;

    float D;

    D = A/B

    C = 5;

    cout<< "D =">>D ;

}
```

13. Write a simple C++ to display numbers in triangular form as shown

1

23

456

7890