

Note: All Questions are Compulsory and Carry Equal Marks

**Q.1 Answer the Following.(Any Two)**

10 M

1. What are the basic components of C++ program?
2. Write a short note on Debugging and testing.
3. What is mean by flowchart? Explain different symbols used in flowchart.
4. Differentiate between algorithm and flowchart.

**Q.2 Answer the Following.(Any Two)**

10 M

1. What is mean by variable? What are the rules for defining a variable?
2. Write a short note on preprocessor directives.
3. What is mean by implicit conversion and explicit conversion in type casting?
4. Differentiate variable and constant?

**Q.3. Answer the Following.(Any Two)**

10 M

1. Explain for loop with proper example.
2. Explain conditional statement with proper syntax and example.
3. Write a C++ program to find whether entered number is positive or negative.
4. Write short notes on manipulators in C++.

**Q.4. Answer the Following.(Any Two)**

10 M

1. Write a note on function prototype.
2. Explain following string functions  
1) Strcpy 2) strcmp 3) strcat 4) strlen
3. Explain functions overloading with proper programming example.
4. What is inline function? Explain its need.

**Q.5 Answer the Following.(Any Two)**

10 M

1. Explain different ways in which single and multidimensional arrays can be initialized.
2. Write a C++ program to store the name, address and telephone numbers. Of an employee and display it on the screen using arrays.
3. What is mean by an array and how we can declare and initiative array.
4. Explain passing arrays to function.

**Q6. Answer the Following.(Any Two)**

10 M

1. Explain the use of pointers.
2. Write a note on structers.
3. What are different pointers available in C++?
4. What is the difference between pointer to constant and constant pointer?

**Q7. Answer the Following.(Any Three)**

15 M

1. Draw a flow chart to read two numbers and compare the numbers and display greater numbers
2. Differentiate between referencing and dereferencing operators
3. Write a C++ program to find factorial of given no.
4. Write a C++ program to show the use of recursion function.
5. Write a C++ program to show the use of multidimensional array.
6. Write a program to interchange the values of two arrays by reference.

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