

Note: All Questions are Compulsory.

Q.1 Answer the Following. (Any Two) **10 M**

1. What is mean by flowchart? Explain different symbols used in flowchart.
2. Draw a flowchart to read two numbers and compare the numbers and display greater numbers.
3. What are the various stages in the development of a computer program?
4. Explain the importance of flowchart.

Q.2 Answer the Following. (Any Two) **10 M**

1. Explain following operators in C++ A) Conditional B) Logical C) Arithmetic
2. Write a short note on preprocessor directives.
3. Write a note on define constant.
4. What is mean by commenting and indentation in a program?

Q.3 Answer the Following. (Any Two) **10 M**

1. Explain conditional statement with proper syntax and example.
2. Differentiate between while- do while loop.
3. Write a C++ program to find whether entered number is positive or negative.
4. Explain the use of switch statement with an example.

Q.4 Answer the Following. (Any Two) **10 M**

1. Define function. Also explain function prototype in details.
2. Write a C++ program to show the use of inline function.
3. Explain the concept of recursion.
4. Explain following memory management function
A) Calloc B) malloc C) free D) realloc

Q.5 Answer the Following. (Any Two) **10 M**

1. What is mean by an array and how we can declare and initiative array.
2. How we can define multidimensional array?
3. Write program in C++ to add, update and delete a single value from a single dimensional array.
4. Write a note on pointer to constant.

Q.6 Answer the Following. (Any Two) **10 M**

1. Explain the concept of Structure with proper example.
2. What are vectors? Explain the use of the same.
3. Give an example of pointers to structure and explain.
4. Write a C++ program to accept at least 5 students marks and details as follows using structure array
A. Name B. Roll No. C. Marks in sub 1 D. marks in sub 2 E. Average

Q.7 Answer the Following. (Any Three) **15 M**

1. What are the basic components of C++ program?
2. What is mean by variable? What are the rules for defining a variables?
3. Write a C++ program to find factorial of given number.
5. Explain functions overloading with proper programming example.
6. Write a note on pointers in function.
7. How we can create structure?