

Dear Coordinators,

The assignment for getting ready with the prerequisites for C++ is as under:

SESSION1:

TOPIC - Structure of C Program Installation and Understanding of IDE

Note: Explain the students the symbols of flow chart and make them solve the following examples.

1. Sequencing & Counting

- 1) Write an algorithm and draw a flow chart to swap two given numbers.
- 2) Write an algorithm and draw a flow chart to find the average marks of students for a particular subject.

2. Branching

- 1) Draw a flow chart for algorithm which takes age of person as input and finds whether person is child (1-10), young(11-25), Mid age(25-50) or old(51-100)

3. Loop

- 1) Draw a flow chart to add first 100 nos.
- 2) Draw a flow chart to multiply two nos. using addition operation

4. Modules

- 1) Write an algorithm to find n power of x, where n and x are given by user in main algorithm.
- 2) Write an algorithm to find summation of digits of given number.

Ex. If no. is 123 then output should be $1+2+3 = 6$

SESSION 2:

Install the VC++ Express edition. Prepare the answers of the questions below for the conceptual understanding of the students.

- Q.1 Study the format of C Program?
- Q.2 What are the different header files used in C Program?
- Q.3 What is the use of 'include' directive?
- Q.4 What are preprocessor directives?
- Q.5 Which are the directories used for storing header files?
- Q.6 Where are these directories stored?
- Q.7 What is the importance or significance of main function?
- Q.8 For which purpose argc and argv used?
- Q.9 Study the Features of VC++ compiler and do the installation of the same.
- Q.10 Which are the projects supported by its IDE?
- Q.11 Which are the Files supported by its IDE?
- Q.12 Which are the Languages supported by its IDE?
- Q.13 Study all the Windows of VC++ i.e Watch Window, Debug Window, Error Window etc?
- Q.14 What is the significance of Workspace?
- Q.15 What is the difference between .cpp, .obj and .exe file?
- Q.16 Which are the different versions available of VC compiler?
- Q. 17 Explain the process of generating the exe file from the cpp file.

SESSION 3:

Practice the following programs:

1. Write a program to find the maximum from given input of 3 numbers. (using if else)
2. Write a program to find the factorial of a given number. (using for or while loop)
3. Write a program to find the average of 3 numbers using a function.
4. Write a program for Matrix multiplication. (2 Dimensional Array and loop)