# LBS CENTRE FOR SCIENCE \& TECHNOLOGY PGDCA I SEMESTER REGULAR/ SUPPLEMENTARY EXAMINATION-JANUARY 2020 L 102 OOP THROUGH C++ 

Time: 3 Hrs.

## PART A

I Answer ALL questions in one or two sentences. (Each question carries 1 mark.)

1) What is a Flowchart?
2) What is the relationship between Class and Object?
3) Write two examples of Header Files in $\mathrm{C}++$.
4) Name two String Functions in C++.
5) What is Scope Resolution Operator?
6) Define Unary Operator.
7) What is an Abstract Class?
8) What is Command Line Argument?
9) What is the use of a Pointer Variable.
10) What is meant by typecasting?

PART B
II Answer any TEN questions from the following. (Each question carries $\mathbf{3}$ marks)

1) Briefly explain Algorithm with the help of an example.
2) What is an Array? Briefly explain the different types of Arrays.
3) Explain Virtual Function.
4) Briefly explain Function Overloading.
5) What is a Friend Function? Write the syntax to declare a Friend Function.
6) What are the different access specifiers in C++.? Specify the purpose of them.
7) What is Append Mode of opening a file?
8) Illustrate the use of Conditional Operator in C++.
9) Write the general form of Class declaration with an example.
10) What is the difference between a Constructor and a Destructor?
11) What is the use of Copy Constructor?
12) How will you declare an array of Objects?
13) Draw any three Flowchart symbols and state their purposes.
14) Draw the Stream Class hierarchy in C++.
15) Name any three modes of File opening.
[10 x $3=30]$

## PART C

III Answer any FIVE questions from the following. (Each question carries 12 marks)

1) Explain the features of Object Oriented Programming.
2) Explain the various operators in $\mathrm{C}++$.
3) Explain the Control structures in $\mathrm{C}+\mathrm{+}$.
4) Explain the different types of Inheritance in C++.
5) Write a C++ program to find the largest element in a matrix.
6) Explain Operator Overloading with an example.
7) Write a C++program to sort an integer Array in Descending Order.
8) Explain the various IO manipulators in $\mathrm{C}+\mathrm{+}$.
9) Write a C++program to Copy a file.
10) Explain Templates in $\mathrm{C}+\mathrm{+}$.
