SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS)
(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai — 600 044.
M.Sc. END SEMESTER EXAMINATION APRIL/NOV - 2021
SEMESTER - I
20PAMCT1003 - Programming in C++

Total Duration : 3 Hrs		**Total Marks : 75**	
MCQ	: 30 Mins	MCQ	: 15
Descriptive	: 2 Hrs.30 Mins	Descriptive	: 60

Section B

Answer any **SIX** questions $(6 \times 5 = 30$ Marks$)$

1. Explain various applications of OOP.

2. Distinguish between early binding and late binding, with an example explain how late binding can be achieved in C++.

3. Define pure virtual functions. Write a C++ program to illustrate pure virtual functions.

4. Illustrate scope resolution operator with an example.

5. Explain the output manipulators: setw(), setprecision() and setfill().

6. Illustrate copy constructor with your own example.

7. Describe about implicit and explicit type conversion.

8. Error handling during file operations is mandatory – Justify your answer?

Section C

Part A

Answer any **TWO** questions $(2 \times 10 = 20$ Marks$)$

9. Differentiate between function overloading and function templates, can we overload a function template? Illustrate with an example.

10. Classify the types of inheritances. Write a C++ program to implement single inheritance with public access specific.

11. Explain the file operation functions in C++ to manipulate the position of file pointers in a random access file.

12. Explain the concept of friend function with your own example.

Part B

Compulsory question $(1 \times 10 = 10$ Marks$)$

13. Describe the basic concepts of object oriented programming language.