### 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 EXAMINATIONS APRIL - 2022 SEMESTER - I 20PAMCT1003 - Programming in C++

Total Duration : 3 Hrs.

Total Marks : 60

## Section A

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

- 1. Enumerate the basic concept of OOPS in detail.
- 2. Explain the inline function and its advantage in C++.
- 3. How do you overload the function in C++? Explain with example.
- 4. Why do you need Virtual function? Explain with suitable example.
- 5. Write about command line argument in C++ with example.
- 6. Elucidate different types of operators with example in C++.
- 7. Write a C++ program to add complex numbers by overloading the '+' operator.
- 8. Why do you need type conversion? Mentions the methods of converting data types with example.

# Section B

### Part A

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

- 9. Illustrate control statement in C++ with example.
- 10. State the rules of friend function. Include all rules in the example.
- 11. List out different types of constructors in C++. Explain copy constructors with suitable example
- 12. Discuss briefly the error handling functions during file operations in C++ .

#### Part B

Compulsory question  $(1 \times 10 = 10 \text{ Marks})$ 

13. Sketch the different types of Inheritance in C++. Compare and write Multiple and multilevel inheritance with example.

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