## PROGRAMMING IN C++

Time: Three hours

Maximum: 100 marks

PART A  $-(6 \times 5 = 30 \text{ marks})$ 

Answer any SIX questions.

- 1. Explain about any two basic concepts of OOP.
- 2. Explain various arithmetic operators with example.
- 3. Explain the concept of object with suitable example.
- 4. Explain this pointer with example.
- 5. Explain the basic elements of a function with suitable example.
- Explain an two types of storage classes supported in C++.
- 7. Explain the purpose of overloading operators.
- 8. Explain runtime polymorphism.
- 9. What is the use of inheritance? Explain
- Explain the concept of virtual base classes.

PART B - (4 × 10 = 40 marks)

Answer any FOUR questions.

- 11. Explain I/O operations in C++
- 12. Compare break and continue statements with examples.
- 13. Illustrate the reference arguments with programming example.
- 14. Write a C++ program to add two complex numbers.
- 15. Explain the types of base classes with suitable examples.
- 16. Explain the use of friend function with suitable programming example.

PART C  $-(2 \times 15 = 30 \text{ marks})$ 

Answer any TWO questions.

- 17. Write an essay on various control statements available in C++ with suitable syntax and examples.
- 18. Explain overloading of operators in C++. Write a program to over load a binary operator.

- 19. Write note on
  - (a) Function overloading
  - (b) Virtual destructor
  - (c) Inline function