Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$

Answer any TEN questions.

- 1. Give the general form of inline function.
- 2. What is an object?
- 3. Write down the use of "this" pointer?
- 4. Give the syntax for specifying a class.
- 5. What is the use of "new" operator?
- 6. Differentiate between the constructor and destructor.
- 7. Define: "Inheritance".
- 8. What do you mean by dynamic object?.
- 9. What is exception?
- 10. Define: "Polymorphism".
- 11. What are the different file modes?
- 12. Write down the use of Template.

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer any FIVE questions.

- 13. Write a C++ program to perform arithmetic operations using Inline function.
- 14. Explain the purpose of Switch case statement in C++.
- 15. Write the general form of a class declaration and how to create objects for a class.
- 16. Distinguish between the Multiple and Hierarchical inheritance.
- 17. How will you declare a virtual function? Explain.
- 18. Write a C++ program to find the Biggest among the N numbers.
- 19. Write note on exception handling mechanism.

PART C —
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions.

- 20. Compare the for loop and while loop statements in C++.
- 21. Write a C++ program to perform function overloading for finding area of different shapes.

- 22. Elaborate the need of Virtual base Classes in C++.
- 23. Discuss the pointers to derived classes and Base classes with example.
- 24. How will you declaring and Initializing string objects? Explain.