9215/A22 **OCTOBER 2009**

PROGRAMMING IN C++.

Time : Three hours Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. Describe about Data abstraction and encapsulation.

2. Describe about input Streams in C++.

3. How dynamic initialization of objects be handled in C++? Explain.

4. What is a constructor? How it is declared and defined? Explain.

5. Outline the advantages of functions.

6. Classify the different types of storage classes.

7. Describe about hierarchical inheritance.

8. Describe the operators that cannot be overloaded.

9. How the polymorphism be achieved? Explain.

10. What is virtual function? How can we define it? Explain.

PART B — (4 × 10 = 40 marks)

Answer any FOUR questions.

11. Describe the different forms of 'if' statement in detail.

12. Discuss the importance of Destructor.

13. Describe the different types of parameter passing schemes.

14. Describe the various C++ operators with examples.

15. Write a C++ program which overloading Binary Operators using Friends.

16. Discuss the benefits of object oriented programming.

PART C — (2 × 15 = 30 marks)

Answer any TWO questions.

17. Describe the uses of 'Do-while' and 'while' statements in C++. Outline the rules to be followed. Compare them with 'for' statement. (15)

18. (a) With suitable example C++ program, explain the concept of multilevel inheritance. (10)

(b) Discuss the needs and uses of recursive function. (5)

19. (a) Describe the uses of 'this' pointer in detail. (7)

(b) Outline rules to be followed while using virtual functions. (8)

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