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(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2024 ONLY)

24UBC204

REG.NO. :

**B.C.A
SEMESTER: II**

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : MAY-2025**

**MAXIMUM MARKS: 75
TIME : 3 HOURS**

PART - III

OBJECT ORIENTED PROGRAMMING WITH C++

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

MULTIPLE CHOICE QUESTIONS.

K1

1. Which of the following is a feature of Object-Oriented Programming?
a) Encapsulation b) Procedural abstraction c) Global variables d) Sequential execution
2. Which operator is used for scope resolution in C++?
a) :: b) -> c) ** d) ::=>
3. What is the return type of a constructor in C++?
a) void b) int c) None d) Constructor
4. In Inheritance, the base class members are inherited by the derived class using the _____.
a) : operator b) :: operator c) -> operator d) + operator
5. Which of the following is not a stream class in C++?
a) ifstream b) ofstream c) iostream d) conostream

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.

K2

6. Define Object-Oriented Programming.
7. What is a reference variable in C++?
8. What is a friend function in C++?
9. What is the purpose of a virtual function?
10. What are manipulators in C++?

SECTION – B

(5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. K3

11. a) Explain the basic concepts of Object-Oriented Programming.

(OR)

- b) List the benefits of Object-Oriented Programming.

(CONTD.....2)

12. a) Explain the use of scope resolution and type cast operators in C++.

(OR)

b) Write a short note on memory management operators in C++.

13. a) Describe inline functions with an example.

(OR)

b) Explain function overloading with a suitable example.

14. a) Explain inheritance and its types in C++.

(OR)

b) Discuss the concept of operator overloading in C++.

15. a) Explain formatted and unformatted I/O operations in C++.

(OR)

b) Write a short note on file handling in C++.

SECTION – C

(5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K4 &K5)

16. a) Explain the steps involved in Object-Oriented Analysis and Object-Oriented Design.

(OR)

b) Discuss the various applications of Object-Oriented Programming.

17. a) Explain the types of data types and operators in C++ with examples.

(OR)

b) Write a detailed note on control structures in C++.

18. a) Explain constructors and destructors with suitable examples.

(OR)

b) Write a detailed note on friend functions and virtual functions in C++.

19. a) What is polymorphism? Explain runtime polymorphism with an example.

(OR)

b) Discuss the concept of pointers in C++ with examples.

20. a) Explain the stream classes in C++ and their uses in managing console I/O operations.

(OR)

b) Describe the process of file handling in C++ with examples.
