

(FOR THE CANDIDATES ADMITTED

SUBJECT CODE **25 UBC 204**

DURING THE ACADEMIC YEAR 2025-26 ONLY)

REG.NO.

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : MAY– 2026

B.C.A.

MAXIMUM MARKS: 75

II SEMESTER

TIME : 3 HOURS

PART – III

OBJECT ORIENTED PROGRAMMING WITH C++

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. Which OOP feature allows the same function name to have different meanings?

- a) Inheritance b) Abstraction c) Polymorphism d) Encapsulation

2. Which of the following is a valid identifier?

- a) 2sum b) sum-1 c) total_sum d) float

3. Which symbol is used to declare a reference variable?

- a) * b) # c) & d) @

4. Which operator cannot be overloaded in C++?

- a) + b) == c) :: d) []

5. Which function is used for unformatted input?

- a) getline() b) get() c) put() d) write()

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.

(K2)

6. Which concept hides the internal details of an object?

7. Write the role of new and delete keywords.

8. Define inline function.

9. Describe null pointer.

10. Which class is used to read files?

SECTION – B

(5 X 5 = 25 MARKS)

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

(K3)

11. a) Explain the applications of Object-Oriented Programming

(OR)

b) Elucidate the features of OOP.

12. a) Discuss the data types in C++.

(OR)

b) Explain manipulators in C++.

(CONTD 2)

13. a) Elucidate “call by reference” with an example
(OR)
b) Illustrate function overloading
14. a) Elucidate the types of inheritance
(OR)
b) Develop a program to demonstrate overloading the ‘+’ operator
15. a) Demonstrate output manipulators.
(OR)
b) Enumerate the modes to open a files.

SECTION – C

(5 X 8 = 40 MARKS)

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

(K4 (Or) K5)

16. a) Discuss the steps involved in Object Oriented Analysis (OOA) and Object-Oriented Design (OOD).
(OR)
b) Differentiate between Procedure Oriented Programming and Object Oriented Programming
17. a) Explain scope resolution operator, member dereferencing operator, and memory management operators with example programs
(OR)
b) Demonstrate the control structures in C++.
18. a) Explain virtual functions and runtime polymorphism.
(OR)
b) Develop a program implementing friend function using two classes.
19. a) Develop a program to illustrate the modification of the pointer values
(OR)
b) Demonstrate polymorphism with an example program.
20. a) Elaborate on unformatted I/O operations in C++
(OR)
b) Discuss C++ stream classes.