

(FOR THE CANDIDATES ADMITTED

SUBJECT CODE

24 UEC 308

DURING THE ACADEMIC YEAR 2024-25 ONLY)

REG.NO.

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : NOVEMBER – 2025

B.Com. – E.COMMERCE

MAXIMUM MARKS: 75

III 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 concept allows you to reuse the written code?
a) Encapsulation b) Abstraction c) Inheritance d) Polymorphism
2. A function call mechanism that passes arguments to a function by passing a copy of values of the arguments is _____.
a) Call by name b) Call by value
c) Call by reference d) Call by value result
3. Operator overloading is also called -----polymorphism.
a) run time b) initial time c) compile time d) completion time
4. Which access specifier allows derived classes to access the base class members, but not from outside?
a) Public b) Private c) Protected d) Internal
5. _____stream class is used for both input and output file operations.
a) ifstream b) ofstream c) fstream d) iostream

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. Differentiate between C and C++.
7. Define a reference variable in C++.
8. Explain a copy constructor in C++.
9. Interpret the meaning of a pure virtual function in C++.
10. Illustrate the use of ifstream and ofstream in C++.

SECTION – B

(5 X 5 = 25 MARKS)

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

(K3)

11. a) Compare procedural and object-oriented programming.

(OR)

- b) Show the features and application of C programming.

(CONTD 2)

12. a) Describe the structure of a basic C++ program.
(OR)
b) Apply the concept of friend function in C++ to access private members.
13. a) Describe the process of dynamic object creation using constructors.
(OR)
b) Sketch a function overloading example using different argument types.
14. a) Compute the accessibility of members in different inheritance modes.
(OR)
b) Show function overriding in a base and derived class using virtual function.
15. a) Sketch the hierarchy of stream classes in C++.
(OR)
b) Describe how to open and close a file using file stream classes.

SECTION – C

(5 X 8 = 40 MARKS)

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

(K4 (Or) K5)

16. a) Outline the history of the C programming language.
(OR)
b) Summarize the Basic Concepts of Object Oriented Programming.
17. a) Develop a program using class and friend function to add two complex numbers.
(OR)
b) Categorize the types of control structures in C++.
18. a) Classify the types of type conversions in C++. Give an example.
(OR)
b) Examine the rules for operator overloading.
19. a) Categorize the types of inheritance and give one example for each.
(OR)
b) Construct a program that demonstrates hybrid inheritance and use of virtual functions.
20. a) Outline the steps involved in reading a file line-by-line using if stream.
(OR)
b) Construct a C++ program to copy contents from one file to another using file streams.