

# **KAMARAJ COLLEGE (Autonomous)**

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

THOOTHUKUDI – 628 003

**(5 Pages)**

**Reg. No: .....**

**Question Code No : 25002008**

**Sub Code : 24UMCA21**

**UG Degree - End Semester Examinations, November 2025**

**Second Semester**

**B.C.A**

**Object Oriented Programming With C++**

**(For those who joined in July 2024 onwards)**

**Time : 3 Hours**

**Maximum : 75 Marks**

**PART – A (10 × 1 = 10 Marks)**

**Answer ALL Questions**

**Choose the correct answer :**

1. Which statement is used to get input from user?

(a) cin

(b) Cout

(c) Scanf

(d) printf

2. Which of the following fall under object oriented programming languages?

(a) C

(b) Html

- (c) C++ (d) All the above
3. \_\_\_\_\_ are prototype for the objects.
- (a) Class (b) Variables  
(c) Functions (d) All the above
4. Which member function is used to delete objects when it lost its scope?
- (a) Constructor (b) Destructor  
(c) Friend function (d) None of the above
5. What is function overloading in C++?
- (a) Using multiple functions with the same name but different return types  
(b) Using multiple functions with the same name but different parameter types  
(c) Using one function to call another function  
(d) Using templates to define functions
6. How is a friend function declared inside a class?
- (a) friend void myFunction();  
(b) void friend myFunction();  
(c) private friend void myFunction();  
(d) friend function myFunction();

7. \_\_\_\_\_ pointer is used to point the current object.
- (a) My (b) This  
(c) About (d) None of the above
8. Which of the following is not a type of polymorphism in C++?
- (a) Compile-time polymorphism (b) Run-time polymorphism  
(c) Operator overloading (d) None of the above
9. Which header file is required for file handling in C++?
- (a) #include <file.h> (b) #include <fstream>  
(c) #include <iostream> (d) #include <stdio.h>
10. Which mode is used to append data to an existing file?
- (a) ios::app (b) ios::add  
(c) ios::update (d) ios::continue

**PART - B (5 X 5 = 25 Marks)**

**Answer ALL Questions choosing either (a) or (b).**

**Answer should not exceed 250 words.**

11. (a) Explain in detail about the key concepts of object oriented programming.

**(OR)**

- (b) Explain in detail about C++ declarations.

12. (a) Write about destructor in detail.

**(OR)**

(b) Describe about array of objects.

13. (a) Describe about abstract class in detail.

**(OR)**

(b) Explain about virtual base class in detail.

14. (a) Explain about pointer to class and objects.

**(OR)**

(b) Write about memory models in detail.

15. (a) Explain about random access operation in detail.

**(OR)**

(b) Write about string attributes in detail.

**PART - C (5 X 8 = 40 Marks)**

**Answer ALL Questions choosing either (a) or (b).**

**Answer should not exceed 500 words.**

16. (a) Describe about while and do...while statements with example.

**(OR)**

(b) Write a C++ program to illustrate function overloading.

17. (a) Outline friend function.

**(OR)**

(b) Write about constructor in detail.

18. (a) Write a C++ program to illustrate inheritance.

**(OR)**

(b) Explain about binary operator overloading.

19. (a) Write about virtual functions in detail.

**(OR)**

(b) Discuss in detail about new and delete operator.

20. (a) Explain in detail about file modes.

**(OR)**

(b) Explain in detail about string functions.