

(6 Pages)

Reg. No. :

**Code No. : 20689 E Sub. Code : SMCA 21/
AMCA 21**

B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Second Semester

Computer Application — Core

OBJECT ORIENTED PROGRAMMING WITH C++

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 1 = 10$ marks)

Answer ALL questions.

Choose the correct answer :

1. Default value of static variable is _____
 - (a) 0
 - (b) 1
 - (c) Garbage value
 - (d) Compiler

2. _____ are the basic run time entities in an object-oriented system.
- (a) Classes (b) Objects
- (c) Data base (d) Data values
3. _____ are used to format the data display in C++.
- (a) Iterates (b) Punctuators
- (c) Manipulators (d) Allocators
4. To check more than one condition we can use _____ statement.
- (a) Else if ladder (b) if else
- (c) switch statement (d) both (a) and (c)
5. To perform file I/O operations, we must use _____ header file.
- (a) <ifstream> (b) <of stream>
- (c) <fstream> (d) any of one

6. _____ can't be overloaded.
- (a) Classes (b) Function
(c) Constructors (d) Destructors
7. While overloading binary operators using member function, it requires _____ arguments.
- (a) 0 (b) 1
(c) 2 (d) 3
8. Parent class is also called as
- (a) First (b) Derived class
(c) Base class (d) Either (a) or (c)
9. If a class contains pure virtual function, then it is termed as _____
- (a) Abstract class (b) Pure local class
(c) Virtual function (d) Virtual class
10. The _____ operator is used to de allocate memory.
- (a) Static (b) Delete
(c) New (d) None of these

PART B — ($5 \times 5 = 25$ marks)

Answer ALL the questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write about benefits of OOPS.

Or

- (b) Explain the evolution of C++.

12. (a) Write short notes on object as function argument.

Or

- (b) Explain do.....while statement with example.

13. (a) Explain Friend functions with example.

Or

- (b) What is dynamic constructor? Explain.

14. (a) Write a program to overload - operator.

Or

- (b) Write short notes on multiple inheritances.

15. (a) What is unformatted I/O operations? Explain.

Or

- (b) Write short notes on Error handling functions.

PART C — ($5 \times 8 = 40$ marks)

Answer ALL the questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the basic concepts of oops programming with suitable example.

Or

- (b) Write a program to perform basic arithmetic operation using arithmetic operators.

17. (a) Explain about nesting and private member function in detail with an example.

Or

- (b) What is function overloading? Explain with an example.

18. (a) Explain the characteristics of Constructors and Destructors.

Or

- (b) Explain the overloading binary operators using friends.

19. (a) Write a program to multiple inheritance.

Or

(b) Explain the types of inheritances. Explain it.

20. (a) Explain managing console I/O operations.

Or

(b) Write a program to demonstrate dynamic objects in C++.
