

(6 pages)

Reg. No. :

Code No. : 20420 E Sub. Code : CMCA 21

B.C.A (CBCS) DEGREE EXAMINATION,
NOVEMBER 2022.

Second Semester

Computer Application — Core

OBJECT ORIENTED PROGRAMMING WITH C++

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Insulation of data from direct access of the program is known as _____.
(a) Message passing
(b) Data hiding
(c) Data abstraction
(d) Polymorphism

2. Void is a _____.
(a) User defined data type
(b) Built-in data type
(c) Derived data type
(d) Floating type
3. _____ binds data and its associated function together
(a) Class (b) Object
(c) Function (d) All
4. Members that can be accessed from anywhere outside the class is _____.
(a) Private (b) Protected
(c) Public (d) Inherited
5. The constructors that can take _____ are called as parameterized constructors
(a) Arguments (b) Void
(c) Class (d) Function
6. The type conversion is automatic for _____ data types
(a) Built-in (b) Integer
(c) User defined (d) All

7. In _____ inheritance multiple classes are derived from a single base class

- (a) Multiple (b) Multi-level
- (c) Hybrid (d) Hierarchical

8. _____ class contains atleast one pure virtual function in it

- (a) Abstract
- (b) Derived class
- (c) Sub class
- (d) Super class

9. The >> operator is overloaded in the _____ class as an extraction operator.

- (a) istream
- (b) Ostream
- (c) Both (a) and (b)
- (d) None

10. The get() function handle _____ i/o operations

- (a) Single character
- (b) Block
- (c) Float
- (d) All

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Write about the basic concepts of object oriented programming.

Or

(b) What are the type cast operators? Give example.

12. (a) What are Inline functions in C++? Give example.

Or

(b) How will you pass objects as function arguments in C++? Give example.

13. (a) What are parameterized constructors? Give example.

Or

(b) Write a program in C++ for overloading Unary operators.

14. (a) Explain the concept of multiple inheritance in C++.

Or

(b) Explain the concept of abstract classes in C++.

15. (a) Write notes on C++ streams.

Or

- (b) How will you detect end of file while working with files in C++?

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Write a C++ program to show the class structure and explain it.

Or

- (b) Describe the scope resolution operator and member de-referencing operators in C++

17. (a) Describe the following concepts used in C++
(i) Default arguments (ii) CONST arguments.

Or

- (b) Explain the concept of function overloading.

18. (a) What are constructors? In C++ how will you declare and define a constructor? Explain.

Or

- (b) Describe operator overloading in C++ with example.

Page 5 Code No. : 20420E

19. (a) Describe how will you make a private member inheritable.

Or

- (b) Explain the concept of multi level inheritance in C++

20. (a) Write notes on the following functions in C++ (i) put () and get () (ii) Get lined () and write ()

Or

- (b) Describe the error handling functions used in C++

Page 6 Code No. : 20420E