K23U 1947

Reg. No.	:	
Name :		

II Semester B.C.A. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, April 2023 (2019 Admission Onwards) Core Course 2B03BCA : OBJECT ORIENTED PROGRAMMING USING C++

Time: 3 Hours

Max. Marks: 40

PART – A Short Answer

Answer all questions.

- 1. While overloading binary operators using member function, it requires argument/s.
- 2. How many parameters does a default constructor require ?
- ______ header file is used for manipulators.
- 4. _____ operator is used to dynamically allocate space for array in memory.
- 5. A _____ is an example of run time polymorphism which does not have any body.
- When a base class is privately inherited by a derived class public members of the base class become ______ of the derived class.

PART – B Short Essay

Answer any 6 questions.

- 7. What are symbolic constants ?
- 8. What do you mean by nested if statements ?
- 9. Distinguish between formal parameter and actual parameter.

(6×1=6)

 $(6 \times 2 = 12)$

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- 10. What is the primary use of destructors ? Give an example.
- 11. What is the syntax for implementing a class as virtual base class ?
- 12. What is a pure virtual function ?
- 13. Define setw() and setprecision() manipulator functions.
- 14. What is file input stream and output stream ?

PART – C

Answer any 4 questions.

- 15. What is an array ? How arrays are implemented in C++ ?
- 16. Explain call by reference and call by value type of parameter passing.
- 17. Explain static keyword. What are the characteristics of static data members ?
- Illustrate the difference between unary operator overloading and binary operator overloading.
- 19. Explain tellg() and tellp() with an example.
- 20. What is hybrid inheritance ? List the ambiguities of hybrid inheritance.

PART – D Long Essay

Answer any two questions.

- 21. Explain the concepts of object oriented programming.
- 22. Write a program using class concept to enter details of 10 students and calculate the pass percentage using a friend function.
- 23. What is a file mode ? Describe the various file mode options available.
- 24. What is a constructor ? Which are the different types of constructors available in C++ ? Explain with examples.

 $(2 \times 5 = 10)$

(4×3=12)