K24U 1691

Reg. No. :

Name :

Second Semester B.C.A. Degree (CBCSS – OBE – Regular/ Supplementary/ Improvement) Examination, April 2024 (2019 Admission Onwards) Core Course 2B03BCA : OBJECT ORIENTED PROGRAMMING USING C++

Time : 3 Hours

Max. Marks: 40

 $(6 \times 1 = 6)$

PART - A : Short Answer

Answer all questions. Each question carries 1 mark.

- 1. Name any two OOP concepts.
- 2. What is a symbolic constant ?
- _____ operator dynamically allocates memory in C++.
- 4. Write syntax to define a sub class in C++.
- 5. Name a statement in C++ that is used to exit from a loop.
- When parameters are passed by pass by reference mechanism, any changes to parameters in the function will not affect original parameter values. True/False

PART - B : Short Essay

Answer any 6 questions. Each question carries 2 marks.

- 7. Write the syntax of switch statement in C++.
- 8. Explain any 4 Math library functions in C++.
- 9. Write note on friend function in C++.
- 10. Write C++ program to perform any two string operations.

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K24U 1691

11. Mention features of copy constructor in C++.

12. Write need of inheritance in C++.

13. What is a virtual function in C++ ?

14. Write about file input stream and file output stream.

PART - C: Essay

Answer any 4 questions. Each question carries 3 marks.

15. Briefly explain C++ data types.

16. Write note on static data members.

17. Compare private and protected member variables in C++.

18. Short note on operator overloading in C++ with an example.

19. Write a C++ program to implement virtual base class.

20. Short note on any 3 I/O functions in C++.

PART - D : Long Essay

Answer any 2 questions. Each question carries 5 marks.

21. Explain various operators in C++."

22. Explain constructors and destructors in C++ in detail.

23. Describe various types of inheritance in C++ in detail.

24. Explain various C++ classes for file stream operations.

 $(4 \times 3 = 12)$

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 $(2 \times 5 = 10)$