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Reg. No. :

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2021

Third Semester

Computer Science and Business System

19UCB303 - Object Oriented Programming

(Regulation 2019)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. How much bytes are occupied by int?   CO1- R

    (a) 4   (b) 2   (c) 8   (d) 16

2. Which of the following approach is followed by the c++   CO1- R

    (a) top-down   (b) top-bottom   (c) bottom-up   (d) Procedural

3. The member in class by default are   CO1- U

    (a) Protected   (b) Private   (c) Public   (d) Static

4. Which one of the following is not a member of the class?   CO2- R

    (a) Static Function   (b) Virtual Function   (c) Constant Function   (d) Friend Function

5. How many parameters does a default constructor require?   CO1- R

    (a) 1   (b) 2   (c) 0   (d) 3

6. How many Destructors are allowed in a Class?   CO1- U

    (a) 1   (b) 2   (c) 3   (d) Any number

7. Function overloading is also similar to which of the following?   CO1- R

    (a) operator overloading   (b) constructor overloading

    (c) destructor overloading   (d) function overloading

8. Virtual functions are mainly used to achieve _____   CO1- R

    (a) Compile time polymorphism   (b) Interpreter polymorphism

    (c) Runtime polymorphism   (d) Functions code polymorphism

9. Which of the following is used for generic programming? CO1- R

   (a) Virtual functions   (b) Modules   (c) Templates   (d) Abstract Classes

10. Which keyword is used to throw an exception? CO1- R

    (a) try   (b) throw   (c) throws   (d) except

PART – B (5 x 2= 10 Marks)

11. Define object oriented programming CO1- U

12. Describe Classes in C++ with example. CO1- U

13. Write program to implement constructor overloading. CO3- U

14. What is operator overloading? CO1- U

15. Distinguish between the terms class template and template class. CO3- Ana

PART – C (5 x 16= 80 Marks)

16. (a) Explain the feature of Object oriented programming in detail. CO1- U   (16)

    Or

    (b) Explain the Control structures in C++ with an examples? CO1- U   (16)

17. (a) Identify the concepts of function prototyping and inline function CO2- Ana   (16)
    with appropriate C++ program.

    Or

    (b) Explain about the Arrays of Objects, Objects as Function Arguments CO2 -Ana   (16)
    and Friend Functions with example program.

18. (a) Identify the difference between constructors and destructors How CO2- Ana   (16)
    many types of constructor? Write program to implement the copy
    constructor.

    Or

    (b) What is inheritances? Discuss the syntax and rules of Types of CO3- Ana   (16)
    inheritances in C++. How can you pass parameters to the
    constructors of base classes in multiple inheritances? Demonstrate
    with suitable example.

93C04

19. (a) List the operators that cannot be overloaded and explain in detail about operator overloading with example. CO4- App (16)

Or

(b) Define polymorphism and Explain Virtual functions with example. Identify the difference between static & dynamic binding? CO4- App (16)

20. (a) Explain with example how can a class template be created. CO1- U (16)

Or

(b) What is exception handling? Explain types of exception handling and explain suitable example. CO5- U (16)

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