B.E. DEGREE EXAMINATIONS: APRIL / MAY 2009

Fourth Semester

ELECTRICAL AND ELECTRONICS ENGINEERING

U07EE403 Object Oriented Programming

Time: Three Hours   Maximum Marks: 100

Answer ALL the Questions:-

PART A (20 x 1 = 20 Marks)

1. Which characteristic is not relevant to procedure oriented programming?

   A. Emphasis is on doing things   B. Functions share global data

   C. Data is hidden   D. Top-down approach in program design

2. Which of the following is not a keyword in C++?

   A. inline   B. Identify   C. Friend   D. continue

3. Identify the derived data type from the list given below.

   A. Pointer   B. Union   C. Enumeration   D. Structure

4. Which of the following expression is illegal?

   A. x * y/10   B. x<=y   C. a>b && x == 10   D. float a = b = 12.34

5. Which of the following is correct with respect to private member functions?

   A. Private function can be invoked using the dot operator

   B. Private function can be called by any function

   C. Private function can be called by the function which is a member of its class.

   D. Private functions are not hidden.

6. Which of the following is not relevant to static data member?

   A. It is initialized to zero when the first object of its class created.

   B. Only one copy of that member is created for the entire class.

   C. The copy of the member is not shared by all the objects of that class

   D. It is visible only within the class.

7. The member function which enables an object to initialize itself when it is created, is called as

   A. Friendly function   B. Private Member function C. Destructor   D. Constructors

8. Which of the following operator is used for Allocation of memory to objects at the time of their construction?

   A. new   B. Scope resolution   C. Dot   D. Unary operator

9. Which of the following operator can not be overloaded?

    A. Unary   B. Conditional operator   C. Binary   D. Input/ Output operators

10. Consider the following conversion function

```
Vector : : operator double( )
{
    double sum = 0;
    for (int i = 0; i < size; i++)
    sum = sum + v(i) * v(i);
    return sqrt (sum);
}
```

    It is an example for which type of the following conversion.

    A. Basic type to Basic type   B. Basic type to class type

    C. Class type to Basic type   D. One class type to another class type

11. In private derivation, which one of the following is correct in accessibility of ba members in the derived class?

    A. Public becomes private   B. Protected becomes private

    C. Private becomes private   D. Private is not inherited

12. Which one of the following is an example for pure virtual function?

    A. friend int show (delta, gamma)   B. static void show count ( )

    C. virtual void show ( )   D. virtual void show ( ) = 0

13. Which of the following c++ feature is not supported by java?

    A.operator overloading   B.Dynamic binding

    C. Data abstraction   D. polymorphism

14. Which of the following is not a java tokens?

    A. identifiers   B. Literals   C. operators   D. finalizer

15. The operator used to create objects in java is

    A. new   B. this   C. scope resolution   D. (type)

16. Which of the following statement is not valid for creating an array?

    A. number = new int [5]   B. number [4] = 19

    C. average = new float [10]   D. int number [ ] = new int [5]

17. Which of the following class is not available in the java.Lang package?

    A. String   B. math   C. thread   D. vector

18. Which of the following thread method is not used in blocking a thread?

    A. sleep ( )   B. suspend ( )   C. stop ( )   D. wait ( )

19. Which of the following is not a run-time error?

A. missing semicolons   B. attempting to use a negative size for an array

C. misspelling of identifiers and keywords   D. use of undeclared variables.

20. Which of the following applet tags is legal to embed an applet class named "Test" into a web page?

A. < applet

      code = Test . class width = 200 height = 100 >

      < /applet>

B. < applet

      class = Test   width = 200 height = 100>

      < /applet>

C. < applet>

      code = Test . class width = 200 height = 100>

      < /applet>

D. < applet

      param = Test . class width = 200 height = 100>

      < /applet>

PART B (5 x 16 = 80 Marks)

21. a) Explain the basic concepts and benefits of object oriented Programming

(OR)

21. b) i) Explain the structure of if statement , and if .... else statement with suitable example   (8)

    ii) Give the prototype of a function. Explain the concept of parameters passing to the functions by reference   (8)

22. a) i) Explain the various ways of defining member functions.   (8)

    ii) Write a C++ Program which gives the 100 employees details (Name and Age) under a manager.   (8)

(OR)

22. b) Explain the significance of multiple constructors in a class. Write a C++ program to add two complex numbers using the concept multiple constructors

23. a) What is meant by operator overloading? Give the general form of operator overloading. Write a program of your own in C++ to implement binary operator overloading.

(OR)

23. b) i) Explain the concept of multilevel inheritance by writing a suitable program in C++. (10)

    ii) What is a pointer? Describe the declaration and initialization of pointers. (6)

24. a) i) Draw and explain the general structure of a Java Program (10)

    ii) Describe in detail the steps involved in implementing a stand-alone Java program. (6)

(OR)

24. b) i) Explain the concept of overloading with a suitable example in Java. (8)

    ii) Discuss the difference levels of access protection available in Java (8)

25. a) i) Describe the various forms of implementing interfaces. (8)

    ii) Explain the process of creating, accessing and using a package with suitable Java code. (8)

(OR)

25. b) i) Explain the syntax of exception handling code. (8)

    ii) Describe the different stages in life cycle of an applet. (8)

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