MOCK FINAL EXAM

Total Time: 3 Hrs

Total Marks: 100

I.   Short Questions (Best of 10) (Total Marks: 10x2 = 20)
1. Explain with example what is a thread?
2. Explain with example what is the difference between asynchronous programming and parallel programming?
3. What is the difference between normal throw and throwing the exception object?
4. How do you pass a parameter to a thread explain with example?
5. What are the key features of OOP?
6. What are distinct Types of SDLC models?
7. What is the order of execution if different constructors explain with code example?
8. Explain with code example the use of 'base' keyword?
9. Explain the order of execution in a try catch and finally block?
10. Explain with code example the use of 'finally' keyword?
11. Can a delegate be part of an interface declaration, explain?

II.   Objective Questions (30x2= 60 Marks)
1. Abstract class contains _____.
   A. Abstract methods
   B. Non-Abstract methods
   C. Both
   D. None

2. The default scope for the members of an interface is _____.
   A. private
   B. public
   C. protected
   D. internal

3. Which of the following statements is incorrect about delegate?
   A. Delegates are reference types.
   B. Delegates are object-oriented.
   C. Delegates are type safe.
   D. Only one method can be called using a delegate.

4. The space required for structure variables is allocated on the stack.

A. True
B. False
C. Maybe
D. Cannot say

5. Which of the following is incorrect about constructors?
   A. Defining of constructors can be implicit or explicit.
   B. The calling of constructors is explicit.
   C. Implicit constructors can be parameterized or parameter less.
   D. Explicit constructors can be parameterized or parameter less.

6. Reference is a ___.
   A. Copy of class which leads to memory allocation.
   B. Copy of class that is not initialized.
   C. Pre-defined data type.
   D. Copy of class creating by an existing instance.

7. The data members of a class by default are?
   A. protected, public
   B. private, public
   C. private
   D. public

8. What is the value returned by function compareTo () if the invoking string is less than the string compared?
   A. Zero
   B. A value of less than zero
   C. A value greater than zero
   D. None of the mentioned

9. Select the two types of threads mentioned in the concept of multithreading?
   A. Foreground
   B. Background
   C. Only foreground
   D. Both foreground and background

10. Choose the advantages of using generics?
   A. Generics facilitate type safety
   B. Generics facilitate improved performance and reduced code
   C. Generics promote the usage of parameterized types

D. All the mentioned

11. What is meant by the term generics?
    A. parameterized types
    B. class
    C. structure
    D. interface

12. Choose the wrong statement about properties used in C#.Net?
    A. Each property consists of accessor as getting and set.
    B. A property cannot be either read or write-only.
    C. Properties can be used to store and retrieve values to and from the data members of a class.
    D. Properties are like actual methods that work like data members.

13. Struct's data members are ___ by default.
    A. Protected
    B. Public
    C. Private
    D. Default

14. The point at which an exception is thrown is called the _____.
    A. Default point
    B. Invoking point
    C. Calling point
    D. Throw point

15. Which of the following statements are correct for C# language?
    A. Every derived class does not define its own version of the virtual method.
    B. By default, the access mode for all methods in C# is virtual.
    C. If a derived class, does not define its own version of the virtual method, then the one present in the base class gets used.
    D. All the above.

16. Which of the following keywords is used to refer base class constructor to subclass constructor?
    A. this
    B. static
    C. base
    D. extend

17. The methods that have the same name, but different parameter lists, and different definitions is called_____.
    A. Method Overloading
    B. Method Overriding
    C. Method Overwriting
    D. Method Overreading

18. _____ variables are visible only in the block they are declared.
    A. System
    B. Global
    C. Local
    D. Console

19. _____ parameters are used to pass results back to the calling method.
    A. Input
    B. Reference
    C. Value
    D. Output

20. An ____ is a group of contiguous or related data items that share a common name.
    A. Operator
    B. Integer
    C. Exponential
    D. Array

21. _____causes the loop to continue with the next iteration after skipping any statements in between.
    A. Loop
    B. Exit
    C. Break
    D. Continue

22. C# has _____ operator, useful for making two-way decisions.
    A. Looping
    B. Functional
    C. Exponential
    D. Conditional

23. In C#, all binary operators are _____.
    A. Centre-associative
    B. Right associative

C. Left-associative
D. Top-associative

24. Boxing converts a value type on the stack to an _____ on the heap.
    A. Bool type
    B. Instance type
    C. Class type
    D. Object type

25. _____ are reserved and cannot be used as identifiers.
    A. Keywords
    B. literal
    C. variables
    D. Identifiers

26. All C# applications begin execution by calling the _____ method.
    A. Class ()
    B. Main ()
    C. Submain ()
    D. Namespace

27. Inheritance is _____ in nature.
    A. Commutative
    B. Associative
    C. Transitive
    D. Iterative

28. C# treats the multiple catch statements like cases in a _____ statement.
    A. If
    B. Switch
    C. For
    D. While

29. C# supports a technique known as_____, which allows a method to specify explicitly the name of the interface it is implementing.
    A. Method Implementation
    B. Implicit Interface Implementation
    C. Explicit Interface Implementation
    D. Iterative Interface Implementation

30. _____parameters allow you to give a method parameter a default value so that you do not have to specify it every time you call the method.

A. optional
B. named
C. out
D. ref

III. Programming Questions (Answer any 2) – (10x2 = 20)

1. Given two numbers find the GCF (Greatest Common Factor) and LCM (Lowest Common Multiple) of the two numbers

2. Write a C# program which has a class called Line which has following characteristics (start point and end point).
   Each point is defined by a structure coordinate in a x-y plane (x is the x coordinate and y are the y coordinate).
   The class should provide two methods Display () which shows the starting and end point of the line and the slope ()- which displays the slope of the line. Additionally, Find out when two lines are parallel or not.

3. Write a program which removes all the duplicate characters from each word of a given string
   E.g., The name is Cuttack which is near the capital of state Odisha
   Would be converted to "The name is Cutak whic is near the capitl of stae Odisha"