Class Test on MS .NET- PGDAC 2022

Total points   36/45

Email *

_____

✓   1. Which of the following statements are TRUE about the .NET CLR?   *1/1

1. It provides a language-neutral development & execution environment.
2. It ensures that an application would not be able to access memory that it is not authorized to access.
3.It provides services to run "managed" applications.
4.The resources are garbage collected.
5.It provides services to run "unmanaged" applications.

○ Only 1 and 2

○ Only 1, 2 and 4

◉ 1, 2, 3, 4   ✓

○ Only 4 and 5

○ Only 3 and 4

✓   2. Which of the following statements is correct about Managed Code? *   1/1

○ Managed code is the code that is compiled by the JIT compilers.

○ Managed code is the code where resources are Garbage Collected.

○ Managed code is the code that runs on top of Windows.

◉ Managed code is the code that is written to target the services of the CLR.   ✓

○ Managed code is the code that can run on top of Linux.

✓   3. Code that targets the Common Language Runtime is known as *   1/1

○ Unmanaged

○ Distributed

○ Legacy

◉ Managed Code   ✓

○ Native Code

✓   4. Which of the following is the root of the .NET type hierarchy? *   1/1

◉ System.Object   ✓

○ System.Type

○ System.Base

○ System.Parent

○ System.Root

✕ 5. A function returns a value, whereas a subroutine cannot return a value. * 0/1

○ True

⦿ False   ✕

Correct answer

⦿ True

✓ 6. Which of the following statements are correct about functions and   *1/1
subroutines used in C#.NET?

1. A function cannot be called from a subroutine.
2. The ref keyword causes arguments to be passed by reference.
3. While using ref keyword any changes made to the parameter in the
method will be reflected in that variable when control passes back to the
calling method.
4. A subroutine cannot be called from a function.
5. Functions and subroutines can be called recursively.

○ 1, 2, 4

⦿ 2, 3, 5   ✓

○ 3, 5

○ 4, 5

○ None of these

✓ 7. *   1/1

Which of the following will be the correct output for the C#.NET program given below?

```
namespace CanarysConsoleApplication
{
    class SampleProgram
    {
        static void Main(string[] args)
        {
            int a = 5;
            int s = 0, c = 0;
            Proc(a, ref s, ref c);
            Console.WriteLine(s + " " + c);
        }
        static void Proc(int x, ref int ss, ref int cc)
        {
            ss = x * x;
            cc = x * x * x;
        }
    }
}
```

○ 0 0

○ 25 25

○ 125 125

◉ 25 125   ✓

○ None of the above

✕ 8. Which of the following statements are correct about functions used in   *0/1
C#.NET?

1. Function definitions cannot be nested.
2. Functions can be called recursively.
3. If we do not return a value from a function then a value -1 gets
returned.
4. To return the control from middle of a function exit function should be
used.
5. Function calls can be nested.

○ 1, 2, 5

○ 2, 3, 5

◉ 2, 3   ✕

○ 4, 5

○ None of these

Correct answer

◉ 1, 2, 5

✓ 9. *   1/1

```
class Program
 {
     static void Main(string[] args)
     {
         int i = 5;
         int j;
         method1(ref i);
         method2(out j);
         Console.writeline(i + "   " + j);
     }
     static void method1(ref int x)
     {
         x = x + x;
     }
     static void method2(out int x)
     {
         x = 6;
         x = x * x;
     }
 }
```

○ a) 36, 10

◉ b) 10, 36   ✓

○ c) 0, 0

○ d) 36, 0

✓   10.Boxing converts a value type on the stack to an _____ on the heap. *   1/1

○ a) Bool type

○ b) Instance type

○ c) Class type

⊙ d) Object type   ✓

✓   11.C# has _____ operator, useful for making two way decisions. *   1/1

○ a) Looping

○ b) Functional

○ c) Exponential

⊙ d) Conditional   ✓

✗   12.Correct statement about constructors in C#.NET is? *   0/1

○ a) Constructors can be overloaded

○ b) Constructors are never called explicitly

⊙ c) Constructors have same name as name of the class   ✗

○ d) All of the mentioned

Correct answer

⊙ d) All of the mentioned

✕   13.Which among the following is the correct statement: Constructors are *0/1
     used to?

○ a) initialize the objects

◉ b) construct the data members   ✕

○ c) initialize the objects & construct the data members

○ d) none of the mentioned

Correct answer

◉ a) initialize the objects

✓   14.Which of the following statements is correct about constructors in   *1/1
     C#.NET?

○ a) A constructor cannot be declared as private

○ b) A constructor cannot be overloaded

◉ c) A constructor can be a static constructor   ✓

○ d) None of the mentioned

✓   15.What is the return type of constructors? *   1/1

○ a) int

○ b) float

○ c) void

◉ d) none of the mentioned   ✓

✓   16.What will be the output of the following C# code? *   1/1

```csharp
namespace Canarys_Abstract_Class
{
    abstract class A
    {
        int i;
        public  abstract void display();
    }
    class B: A
    {
        public  int j;
        public override void display()
        {
            Console.WriteLine(j);
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            B obj = new B();
            obj.j = 2;
            obj.display();
            Console.ReadLine();
        }
    }
}
```

○ a) 0

◉ b) 2   ✓

○ c) Compile time error

○ d) 1

✓   17.What will be the output of the following C# code? *   1/1

```csharp
namespace ConsoleApplication4
{
    abstract class A
    {
        public int i ;
        public int j ;
        public abstract void display();
    }
    class B: A
    {
        public int j = 5;
        public override void display()
        {
            this.j = 3;
            Console.WriteLine(i + " " + j);
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            B obj = new B();
            obj.i = 1;
            obj.display();
            Console.ReadLine();
        }
    }
}
```

○ a) 1, 5

○ b) 0, 5

○ c) 1, 0

◉ d) 1, 3   ✓

✓ 18. Which of the following modifiers is used when an abstract method is   *1/1
    redefined by a derived class?

○ a) Overloads

◉ b) Override   ✓

○ c) Base

○ d) Virtual

✓ 19. Which statement correctly defines Interfaces in C#.NET? *   1/1

○ a) Interfaces cannot be inherited

○ b) Interfaces consists of data static in nature and static methods

○ c) Interfaces consists of only method declaration

◉ d) None of the mentioned   ✓

✗ 20. Which of the following cannot be used to declare an interface   *0/1
    correctly?

○ a) Properties

○ b) Methods

○ c) Structures

◉ d) Events   ✗

Correct answer

◉ c) Structures

✗ 21.Which of the following keyword is used to change data and behavior   *0/1
   of a base class by replacing a member of the base class with a new
   derived member?

   ○ a) Overloads

   ◉ b) Overrides   ✗

   ○ c) new

   ○ d) base

Correct answer

   ◉ c) new

✓ 22.Choose the statements which makes use of essential properties   *1/1
   rather than making data member public in C#.NET?

   ○ a) Properties have their own access levels like private, public, protected etc. which
      allows it to have better control about managing read and write properties

   ○ b) Properties give us control about what values may be assigned to a member
      variable of a class they represent

   ○ c) Properties consist of set accessor inside which we can validate the value before
      assigning it to the data variable

   ◉ d) All of the mentioned   ✓

✓ 23.Where the properties can be declared? *   1/1

○ a) Class

○ b) Struct

○ c) Interface

◉ d) All of the mentioned   ✓

✓ 24.Choose the incorrect statement among the following about the   *1/1
delegate?

○ a) delegates are of reference types

○ b) delegates are object oriented

○ c) delegates are type safe

◉ d) none of the mentioned   ✓

✓ 25.Choose the incorrect statement about delegates? *   1/1

◉ a) delegates are not type safe   ✓

○ b) delegates can be used to implement callback notification

○ c) delegate is a user defined type

○ d) delegates permits execution of a method in an asynchronous manner

✓ 26.Which of the following statements is correct about a delegate? *   1/1

○ a) inheritance is a prerequisite for using delegates

○ b) delegates are not type safe

◉ c) delegates provides wrappers for function pointers   ✓

○ d) none of the mentioned

✓ 27.Which of the following statements are correct about the delegate   *1/1
declaration given below?

    delegate void del(int i);

1. On declaring the delegate a class called del will get created.
2. The signature of del need not be same as the signature of the method
that we intend to call using it.
3. The del class will be derived from the MulticastDelegate class.
4. The method that can be called using del should not be a static method.
5. The del class will contain a one-argument constructor and an Invoke()
method.

○ a) 1, 2 and 3 only

◉ b) 1, 3 and 5 only   ✓

○ c) 2 and 4 only

○ d) 4 only

○ e) All of the above

✓   28.Which of the following statements are correct about delegates?   *1/1

1. Delegates are not type-safe.
2. Delegate is a user-defined type.
3. Only one method can be bound with one delegate object.
4. Delegates can be used to implement callback notification.
5. Delegates permit execution of a method on a secondary thread in an
asynchronous manner.

○ a). 1 and 2 only

○ b). 1, 2 and 3 only

◉ c). 2, 4 and 5 only   ✓

○ d). 4 and 5 only

○ e). All of the above

○ Option 6

✓   29.What is meant by the term generics? *   1/1

◉ a) parameterized types   ✓

○ b) class

○ c) structure

○ d) interface

✓ 30.Select the type argument of an open constructed type? *   1/1

○ a) Gen<int>

○ b) Gen<T>

◉ c) Gen<>   ✓

○ d) None of the mentioned

✓ 31.Which one of the following classes are present   *1/1
   System.Collections.Generic namespace?

   1) Stack
   2) Tree
   3) SortedDictionary
   4) SortedArray

○ a) 1 and 2 only

○ b) 2 and 4 only

◉ c) 1 and 3 only   ✓

○ d) All of the above

○ e) None of the above

✓   32.Which of the following statements are valid about generics in .NET   *1/1
    Framework?

    1. Generics is a language feature.
    2. We can create a generic class, however, we cannot create a generic
    interface in C#.NET.
    3. Generics delegates are not allowed in C#.NET.
    4. Generics are useful in collection classes in .NET framework.
    5. None of the above

    ◯ a) 1 and 2 Only

    ◯ b) 1, 2 and 3 Only

    ⦿ c) 1 and 4 Only   ✓

    ◯ d) All of the above

    ◯ e) None of the above

✓   33.Which of the following statements is valid about advantages of   *1/1
    generics?

    ◯ a) Generics shift the burden of type safety to the programmer rather than compiler.

    ◯ b) Generics require use of explicit type casting.

    ⦿ c) Generics provide type safety without the overhead of multiple   ✓
        implementations.

    ◯ d) Generics eliminate the possibility of run-time errors.

    ◯ e) None of the above.

✓   34. What is the extension of MVC view when using C# as programming   *1/1
    language ?

○   cs

◉   .cshtml   ✓

○   .vb

○   .vbhtml

✓   35. Which Namespace is required to use Data Annotations? *   1/1

○   System.ComponentModel

◉   System.ComponentModel.DataAnnotations   ✓

○   System.Web.MVC

○   System.Web.http

✓   36. Action verb used in Web API to update an item on the server IS   *1/1
    _____

○   GET

○   POST

◉   PUT   ✓

○   DELETE

✓ 37. HTML Helper used to add a hidden field to a form to prevent CSRF   *1/1
attack is _____

○ EditorFor( )

◉ AntiForgeryToken( )   ✓

○ DisplayFor ( )

○ ActionLink ( )

✕ 38. Asynchronous method of SqlConnection class to establish database   *0/1
connection is _____

○ Open()

◉ OpenSync( )   ✕

○ OpenAsync( )

○ None of these

Correct answer

◉ OpenAsync( )

✓ 39. Local (in memory) copy of the database is called _____ *   1/1

○ DataBase

○ DataStore

◉ DataSet   ✓

○ Data

✓   40. In EntityFramework _____ class represents the database *   1/1

  ⊙ DbContext   ✓

  ○ DbSetn 2

  ○ Entity

  ○ DbSession

✗   41. _____ is the process of designing applications that support   *0/1
      different cultures.

  ○ Globalization

  ○ Localization

  ○ Regionalization

  ⊙ Internationalization   ✗

  Correct answer

  ⊙ Globalization

✓   42. REST stands for _____ *   1/1

  ○ REactive STatus

  ○ REpresentational STatus

  ○ REactive State Transfer

  ⊙ REpresentational State Transfer   ✓

✕   43. Resouce files will have _____ extension *   0/1

○   .resource

○   .res

○   .resx

◉   .xml   ✕

Correct answer

◉   .resx

✓   44. Action Filter used for Exception Handling is _____ *   1/1

○   Option 1Exception

◉   HandleError   ✓

○   Except

○   None of These

✓   45. In a connection string ____ represents name of the database * 1/1

○   Data Source

◉   Initial Catalog   ✓

○   Catalog Initial

○   Database

Google Forms