socrative by MasteryConnect

Module 1: Object Oriented Programming ... 100%

1. Inheritance models what kind of relationships?
   - A "is-a"
   - B "has-a"
   - C "wants-a"
   - D "gotta"

2. In an inheritance chain which of the following members from the base class are accessible to sub classes?
   - A protected
   - B private
   - C public
   - D static

3. C# Classes can inherit from more than one base class.
   - A True
   - B False

4. C# Classes can implement more than one interface.
   - A True
   - B False

5. C# classes can both inherit from a base class and implement an interface within the same declaration.
   - A True
   - B False

6. In addition to instance methods, classes can also contain static methods.
   - A True
   - B False

7. Which keyword is used to mark a class method as overridable?

   virtual

8. Which of the below answers represents the way to properly invoke the method ConvertLbsToOunces in this class?

```
public static class WeightConverter
{
public static double ConvertLbsToOunces(int lbs)
{
return lbs * 16.0;
}
}
```

A
```
WeightConverter wc = new WeightConverter();
double result = wc.ConvertLbsToOunces(4);
```

B
```
double result = WeightConverter.ConvertLbsToOunces(4);
```

C
```
WeightConverter wc = new WeightConverter();
wc.ConvertLbsToOunces(4);
double result = wc.Result;
```

D The method cannot be invoked.

9. Given the following class, which of the below are valid constructor definitions for it? (choose all that apply)

```
public class Vehicle
{
public string VIN { get; private set; }
}
```

A
```
public Vehicle()
{

}
```

B
```
public void Vehicle(string vin)
{

}
```

C
```
public CreateVehicle(string vin)
{

}
```

D
```
public Vehicle(string vin)
{

}
```

10. Which keyword is used to invoke instance member variables within the same class?

this

11. Which of the below definitions best represents an abstract class?

A An abstract class cannot be inherited.

B An abstract class is any class that cannot be instantiated and must be inherited.

C An abstract class is any base class that has more than one subclass.

D I don't know.

12. Which of the below definitions best represents an abstract method?

- (A) Abstract methods have an implementation that cannot be overridden.
- (B) Abstract methods only work on system.object.
- (C) An abstract method can have multiple parameters.
- (D) **Abstract methods are declared abstract and do not have an implementation.**

13. An abstract class can contain both abstract methods and non-abstract methods.

- (A) **True**
- (B) False

14. Why would you choose an abstract class over an interface?

- (A) **With an abstract class you can share implemented behavior. With an interface each class must implement the interface.**
- (B) You cannot guarantee that all classes implement the interface whereas with abstract classes each class is forced to implement abstract methods.
- (C) If you want to provide multiple constructors for an object.
- (D) You wouldn't. It is pretty much up to the developer and based on personal preference.

15. What is the advantage of polymorphism?

- (A) You can save memory by using the same variables.
- (B) Reusing properties from other classes saves developers time.
- (C) **The same program logic can be used on objects of different types.**

16. Which keyword is used to invoke the constructor in the superclass?

- (A) **base**
- (B) this
- (C) super
- (D) parent

17. Does a subclass which inherits from an abstract class need to provide implementation for all abstract methods belonging to the super class?

- (A) **No as long as the subclass is declared abstract as well.**
- (B) Yes, every class which inherits an abstract class must provide implementation for all abstract methods.
- (C) I don't know.

18. An abstract class can be marked as sealed.

- (A) True
- (B) **False**

✓ 19. Which of the following are the basic concepts of object oriented programming?

(A) Abstract

B Encapsulation

C Inheritance

D Polymorphism

✓ 20. Any reference type has a default value of what?

null