نماذج الاختبارات الشهرية

تجميع :

نور الجفري & فاطمة عاشور

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HADHRAMAUT UNIVERSITY
COLLEGE OF COMPUTERS & INFORMATION TECHNOLOGY
FINAL EXAMINATION

Academic year: 2021-2022
Day and Date: 27/2/2022
Examiner: Mrs. Al-Rashedi, Qamar Taher
Time allowed one hours

Semester: First
Level: level Second
Department: IT
Subject: OOP

Student Name:

Question One (10 points): Choose the correct answer.

1) Which feature of OOPS derives the class from another class?
   a) Data hiding
   b) Encapsulation
   c) Inheritance
   d) Polymorphism

2) In an inheritance, chain which of the following members of base class are accessible to the derived class members(1-static, 2-protected, 3-private, 4- public, 5-internal)
   a) 1,2
   b) 1,2,5
   c) 1,3,4
   d) 2,4,5

3) If base class consist of two private integers, one static integer and derived class consist of two static integers and one private integer. What would be the size of derived class object?
   a) size of object depends on sizes of its non static data members
   b) size of object is calculated using sizeof() method
   c) Objects in the programming languages do not have any size
   d) none of the mentioned

4) Which among the following is not a necessary condition for constructors?
   a) Its name must be same as that of class
   b) It must not have any return type
   c) It must contain a definition body
   d) It can contains arguments

5) What happens if non static members are used in static member function?
   a) Executes if that member function is not used
   b) Runtime error
   c) Executes fine
   d) Compile time error

uestion two (10 points): Point out the correct statement.

) a) Inheritance uses the existing functionality of base class
   b) inheritance overrides the existing functionality of base class
   c) inheritance Implements new functionality in derived class
   d) All of the mentioned

) a) Static functions is necessary to initialize static data.
   b) this reference is passed to static functions.
   c) Static functions can access only static data.
   d) None of these

) a) If we provide a one-argument constructor then the compiler still provides a zero-argument constructor.
   b) If we do not provide a constructor, then the compiler provides a zero-argument constructor.
   c) Constructors return any value.
   d) Constructors cannot be overloaded

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9) a) Static methods are outside the class scope
b) Static methods can access static data as well as instance data
c) Static methods are invoked using objects of a class.
d) Static methods are invoked using class

10) a) Class_1 Object_1 = new Class_10;
b) Class_1 Object_1 = new Class_1;
c) Object_1 = new Class_10;
d) Class_1 Object_1 new = Class_10;

Question three (10 points):

11) What will be the output of the following C# code?

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

```
class A
{
   public int i;
   protected int j;
}
class B : A
{
   public int j;
   public void display()
   {
      base.j = 3;
      Console.WriteLine(i + " " + j);
   }
}
class Program
{
   static void Main(string[] args)
   {
      B obj = new B();
      obj.i = 1;
      obj.j = 2;
      obj.display();
   }
}
```

12) Which is most appropriate comment on following program?

a) Code runs successfully prints nothing
b) Compile Time error
c) Code runs successfully prints ClassA Display
d) None of the mentioned

```
class ClassA
{ public int x = 100;
  public void Display1()
 { Console.WriteLine("ClassA Display");  }
}
class ClassB : ClassB A
{ public void Display2()
  { Console.WriteLine("ClassB Display"); }
}
class Program
{
   void Main(string[] args)
 { ClassA a = new ClassA();
   a.Display2
  }
}
```

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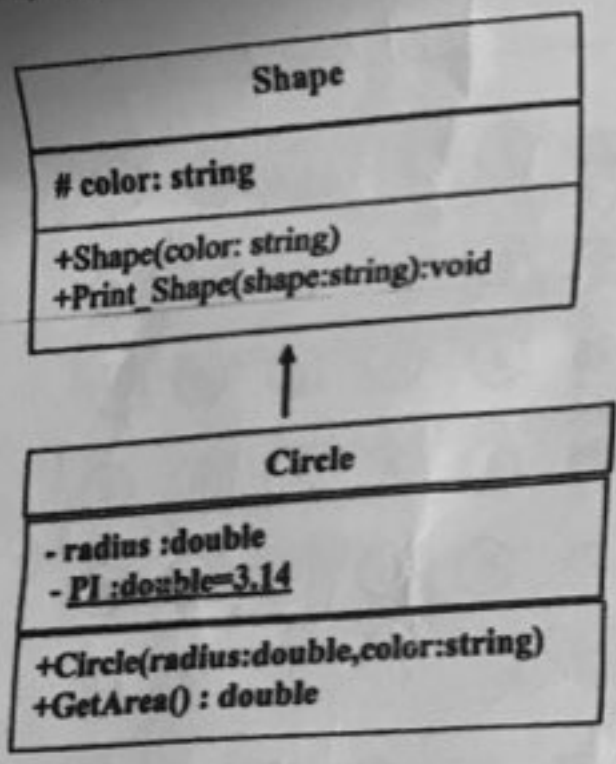
13) Write the code for the following class diagram [2]




```
Class shape
{ protected string color;
  Public shape(string color);
  {this.color = color
  }
  Public void Print-Shape(string shape)
  {
  }
}
```

```
Class Circle : shape
{ Private double radius;
  Private static double = 3.14;
  Public circle(double radius, string color))
                                    :base("c
  {
  }
  Public double GetArea()
  {
  }
}
```

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allowed one hours
ent Name:

Department: IT
Subject: OOP

tion One (10 points): Choose the correct answer.

Which is not feature of OOP in general definitions?

a) Code reusability
b) Reduce complexity
c) Efficient Code
d) Duplicate/Redundant data

) Which feature of OOPS described the reusability of code

a) Abstraction
b) Polymorphism
c) Inheritance
d) Encapsulation

3) A single program of OOPS contains _____ classes?

a) Any number
b) Only 1
c) Only 100
d) Only 999

4) If class C inherits class B. And B has inherited class A. Then while creating the object of class C, what will be the sequence of constructors getting called?

a) Constructor of A then B, finally C
b) Constructor of C then B, finally of A
c) Constructor of C then A, finally B
d) Constructor of A then C, finally of B

5) What happens if non-static members are used in static member function?

a) Executes fine
b) Runtime error
c) Compile time error
d) Executes if that member function is not use

Question two (10 points): Point out the correct statement.

6) a) A derived class object contains all the base class data
b) 2. Inheritance cannot suppress أخفى the base class functionality.
c) Inheritance cannot extend توسع the base class functionality.
d) All of the mentioned

7) a) Encapsulation is the mechanism that keeps data safe from misuse
b) Encapsulation is implemented by using access modifiers
c) Encapsulation = Information Hiding
d) All of the mentioned

8) a) Class_name Obj1 = new Obj1();
b) Class_name Obj1 = new Class_name();
c) Obj1 = new Class_name;
d) Class_name Obj1 = Class_name;

9) a) Destructors have a return value
b) Destructor can be overloaded.
c) A class can have more than one destructor
d) Destructors are not called directly in the source code

10) a) Static methods are invoked using objects of a class.
b) Static methods can access static data as well as instance data
b) Static methods are outside the class scope
d) Static methods are invoked using class

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Question three (10 points):

11) What will be the output of the following C# code?

```
class test
{
   public void print()
   {
      Console.WriteLine("Csharp:");
   }
}
class Program
{
    static void Main(string[] args)
    {
       test t;
       t.print();
       Console.ReadLine();
    }
}
```

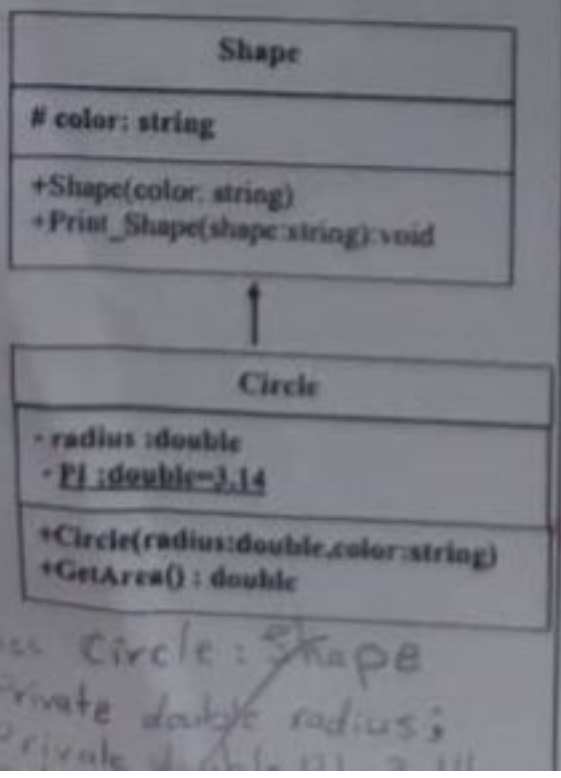
a) Code runs successfully prints nothing
b) Code runs and prints "Csharp"
c) Syntax error as t is unassigned variable which is never used
d) None of the mentioned

12) Select the statement which should be added to the current C# code to get the output as: red yellow

```
class baseclass
{
   protected string s= " yellow";
}
class derived : baseclass
{
   String s = "red";
   public void math()
   {
      /* add code here */
}
```

a) Console.Writeline(s + " " + this.s);
b) Console.Writeline(s + " " + base.s);
c) Console.Writeline(mybase.s + " " + s);
d) Console.Writeline(base.s + " " + s);

13) Write the code for the following class diagram




```
class Shape
{
protected string color;
public Shape(string color)
{
}
public void Print_Shape(string shape)
{
}
```

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HADHRAMAUT UNIVERSITY
COLLEGE OF COMPUTERS & INFORMATION TECHNOLOGY
FINAL EXAMINATION

Academic year: 2021-2022
Day and Date: 3/2/2022
Examiner: Mrs. Al-Rashedi, Qamar Taher
Time allowed one hours

B

Semester: First
Level: level Second
Department: IT
Subject: OOP

Student Name: _____

Question One (10 points): Choose the correct answer.

1) Which is not feature of OOP in general definitions?
   a) Code reusability
   b) Reduce complexity
   c) Efficient Code
   d) Duplicate/Redundant data

2) Which feature of OOPS described the reusability of code
   a) Abstraction
   b) Polymorphism
   c) Inheritance
   d) Encapsulation

3) What is the implicit return type of constructor?
   a) A class object in which it is defined
   b) No return type
   c) void
   d) None of the mentioned

4) Which of the following functions can be inherited from the base class?
   a) constructor
   b) Static
   c) Destructor
   d) None of the mentioned

5) What happens if static members are used in the instance member function?
   a) Executes fine
   b) Runtime error
   c) Compile time error
   d) Executes if that member function is not use

Question two (10 points): Point out the correct statement.

6)
   a) A derived class object contains all the base class data
   b) 2. Inheritance cannot suppress لغي the base class functionality.
   c) Inheritance cannot extend توسع the base class functionality.
   d) All of the mentioned

7)
   a) Encapsulation is the mechanism that keeps data safe from misuse
   b) Encapsulation is implemented by using access modifiers
   c) Encapsulation = Information Hiding
   d) All of the mentioned

8)
   a) Object Oriented Programming paradigm stresses on dividing the logic into smaller parts and writing procedures for each part.
   b) Procedural Programming paradigm is different than structured programming paradigm
   c) Object Oriented Programming paradigm gives equal importance to data and the procedures that work on the data
   d) Classes and objects are corner stones of structured programming paradigm.

9)
   a) Destructors have a return value
   b) Destructor can be overloaded.
   c) A class can have more than one destructor
   d) Destructors are not called directly in the source code

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10) a) Static methods are invoked using objects of a class.
b) Static methods can access static data as well as instance data
c) Static methods are outside the class scope
d) Static methods are invoked using class

Question three (10 points):

11) What will be the output of the following C# code?

a) 10 2
5 10

b) 10 2
10 2

c) 5 10
5 10

d) 5 10
10 2

```
class Sample
    {
        int x, y;
        public void SetData(int x, int y)
        {
            this.x = x;
            this.y = y;
        }
      public void Display()
      {
        Console.WriteLine("{0} {1}",x,y);
      }
    }
    class Program
    {
        static void Main(string[] args)
        {
            Sample s1 = new Sample();
            s1.SetData(10, 2);
            Sample s2 = new Sample();
            s2.SetData(5, 10);
            s2 = s1;
             s1.Display();
             s2.Display();
            Console.ReadKey();
        }
    }
```

12) Which is most appropriate comment on following program?

a) The code will not compile since we cannot explicitly use *this*.

b) Using *this* in this program is not necessary to properly set the values in the object.

c) The call to *SetData()* is wrong since we have not explicitly passed the *this* reference to it

d) None of the mentioned

```
class Sample
    {
        int i, j;
        public void SetData(int ii, int jj)
        {
            this.i = ii;
            this.j = jj;
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            Sample s1 = new Sample();
            s1.SetData(10, 2);
            Sample s2 = new Sample();
            s2.SetData(5, 10);
            Console.ReadKey();
        }
    }
```

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HADHRAMAUT UNIVERSITY
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FINAL EXAMINATION

Academic year: 2021-2022
Day and Date: Sunday 3/3/2022
Examiner: Mrs. Al-Rashedi, Qamar Taher
Time allowed: one hours

A

Semester: First
Level: level Second
Department: IT
Subject: OOP

Student Name:

Question One (10 points): Choose the correct answer.

1) How can the concept of encapsulation be achieved in the program?
   a) By using the concept of Abstraction
   b) By using only private members
   c) By using the Access specifiers
   d) By using the concept of Inheritance

2) What does the access modifier do in C#
   a) To maintain the syntax
   b) To define a variable inside the class
   c) To access the variables defined inside the class
   d) To control the visibility of class members

3) Total types of constructors in c# are?
   a) 1
   b) 3
   c) 2
   d) 4

4) When is the object created with a new keyword?
   a) At run time
   b) Depends on the code
   c) At compile time
   d) None of the mentioned

5) What is the implicit return type of constructor?
   a) No return type
   b) A class object in which it is defined
   c) void
   d) None of the mentioned

Question two (10 points): Point out the wrong statement

6) a) In inheritance chain, object construction begins from base class towards derived class
   b) Inheritance cannot extend base class functionality
   c) A derived class may not be able to access all the base class data.
   d) All of the mentioned

7) a) Static functions can access only static data.
   b) It is necessary to initialize static data.
   c) Static functions cannot call instance functions.
   d) Instance functions can call static functions and access static data.

8) a) If we provide a one-argument constructor then the compiler still provides a zero-argument constructor.
   b) If we do not provide a constructor, then the compiler provides a zero-argument constructor.
   c) Constructors can be overloaded.
   d) Constructors are never called explicitly.

9) a) A private function of a class can access a public function within the same class
   b) Member function of a class are by default private.
   c) Member functions of a class are by default public
   d) None of the mentioned

10) a) to apply a sealed keyword on a method
   b) to apply a sealed keyword on a filed
   c) to apply a sealed keyword on a filed
   d) None of the mentioned

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Question three (10 points):

11) What will be the output of the following C# code?

a) 10 2
5 10

b) 10 2
10 2

c) 5 10
5 10

d) 5 10
10 2

```
class Sample
    {
        int x, y;
        public void SetData(int x, int y)
        {
            this.x = x;
            this.y = y;
        }
      public void Display()
      {
         Console.WriteLine("{0} {1}",x,y);
      }
    }
    class Program
    {
        static void Main(string[] args)
        {
            Sample s1 = new Sample();
            s1.SetData(10, 2);
            Sample s2 = new Sample();
            s2.SetData(5, 10);
            s2 = s1;
             s1.Display();
             s2.Display();
            Console.ReadKey();
        }
    }
```

12) Which is most appropriate comment on following program?

a) The code will not compile since we cannot explicitly use *this*.

b) Using *this* in this program is not necessary to properly set the values in the object.

c) The call to *SetData()* is wrong since we have not explicitly passed the *this* reference to it

d) None of the mentioned

```
class Sample
    {
        int i, j;
        public void SetData(int ii, int jj)
        {
            this.i = ii;
            this.j = jj;
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            Sample s1 = new Sample();
            s1.SetData(10, 2);
            Sample s2 = new Sample();
            s2.SetData(5, 10);
            Console.ReadKey();
        }
    }
```

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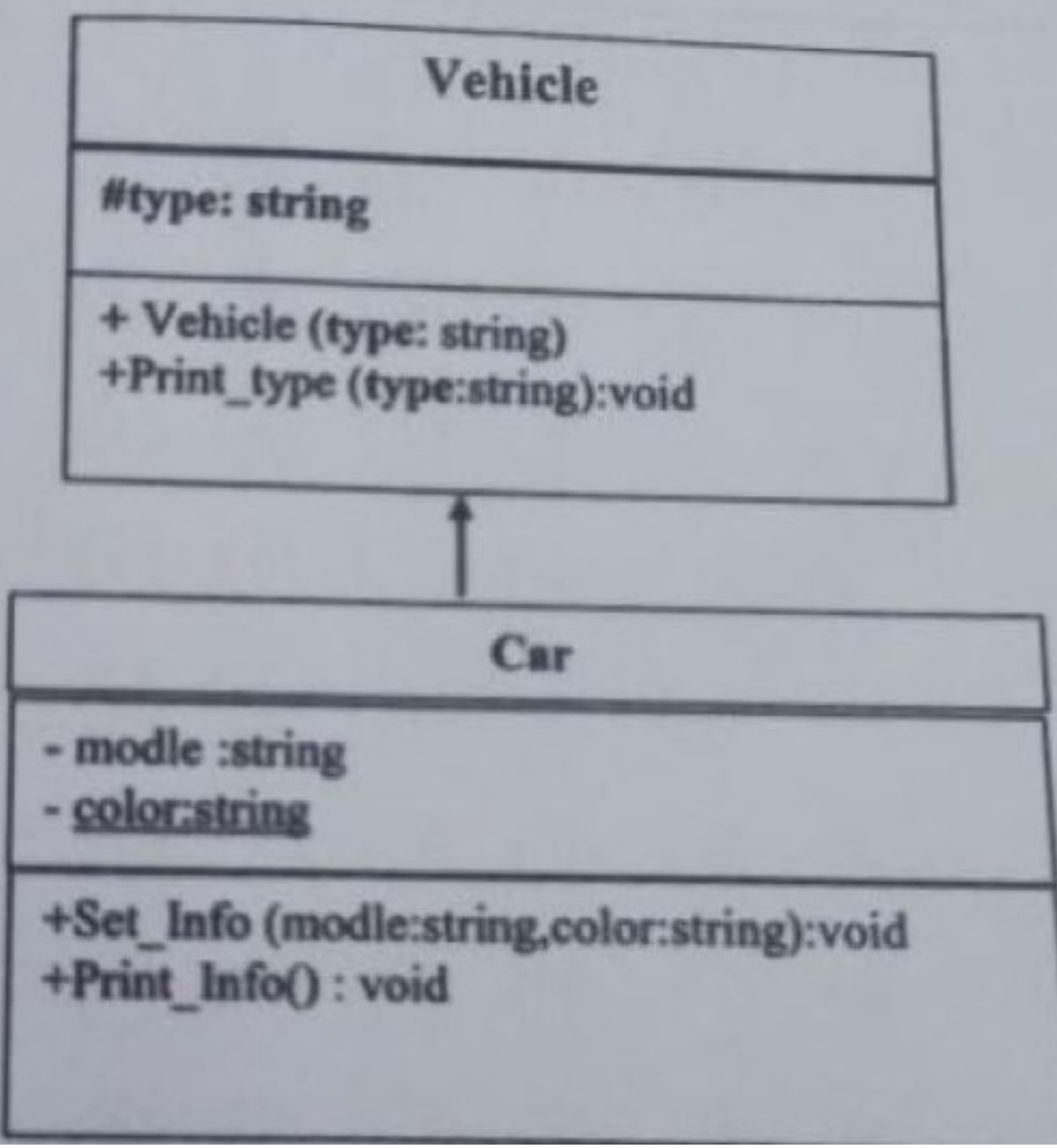
13) Write the code for the following class diagram



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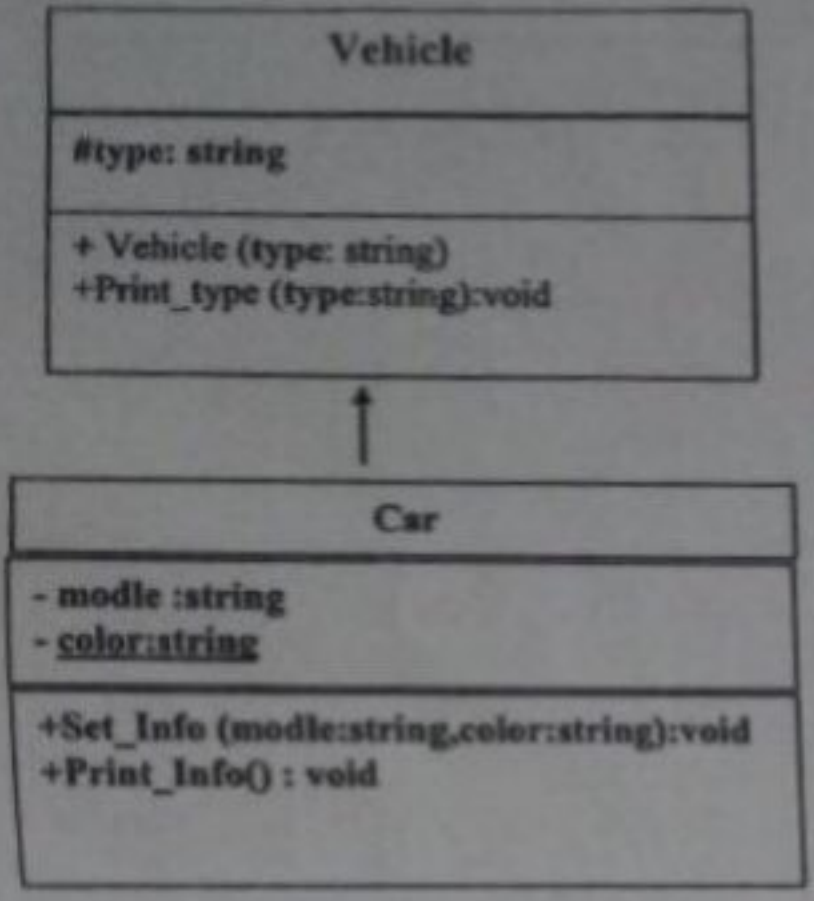
13) Write the code for the following class diagram



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FINAL EXAMINATION

Academic year: 2021-2022
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Examiner: Mrs. Al-Rashedi, Qamar Taher
Time allowed one hours

B

Semester: *First*
Level: level Second
Department: IT
Subject: OOP

Student Name:

Question One (10 points): Choose the correct answer.

1) Which is not feature of OOP in general definitions?
   a) Code reusability
   b) Reduce complexity
   c) Efficient Code
   d) Duplicate/Redundant data

2) Which feature of OOPS described the reusability of code
   a) Abstraction
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   c) Inheritance
   d) Encapsulation

3) What is the implicit return type of constructor?
   a) A class object in which it is defined
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4) Which of the following functions can be inherited from the base class?
   a) constructor
   b) Static
   c) Destructor
   d) None of the mentioned

5) What happens if static members are used in the instance member function?
   a) Executes fine
   b) Runtime error
   c) Compile time error
   d) Executes if that member function is not use

Question two (10 points): Point out the correct statement.

6) a) A derived class object contains all the base class data
   b) 2. Inheritance cannot suppress اخفى the base class functionality.
   c) Inheritance cannot extend توسع the base class functionality.
   d) All of the mentioned

a) Encapsulation is the mechanism that keeps data safe from misuse
b) Encapsulation is implemented by using access modifiers
c) Encapsulation = Information Hiding
d) All of the mentioned

a) Object Oriented Programming paradigm stresses on dividing the logic into smaller parts and writing procedures for each part.
b) Procedural Programming paradigm is different than structured programming paradigm

c) Object Oriented Programming paradigm gives equal importance to data and the procedures that work on the data
d) Classes and objects are corner stones of structured programming paradigm.

Destructors have a return value
b) Destructor can be overloaded.
A class can have more than one destructor
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10) a) Static methods are invoked using objects of a class.
b) Static methods can access static data as well as instance data
c) Static methods are outside the class scope
d) Static methods are invoked using class

Question three (10 points):

11) What will be the output of the following C# code?

a) 10 2
5 10

b) 10 2
10 2

c) 5 10
5 10

d) 5 10
10 2

```
class Sample
    {
        int x, y;
        public void SetData(int x, int y)
        {
            this.x = x;
            this.y = y;
        }
    public void Display()
    {
        Console.WriteLine("{0} {1}",x,y);
    }
}
class Program
{
    static void Main(string[] args)
    {
        Sample s1 = new Sample();
        s1.SetData(10, 2);
        Sample s2 = new Sample();
        s2.SetData(5, 10);
        s2 = s1;
        s1.Display();
        s2.Display();
        Console.ReadKey();
    }
}
```

12) Which is most appropriate comment on following program?

a) The code will not compile since we cannot explicitly use *this*.

b) Using *this* in this program is not necessary to properly set the values in the object.

) The call to *SetData()* is wrong since we have not explicitly passed the *this* reference to it

None of the mentioned

```
class Sample
    {
        int i, j;
        public void SetData(int ii, int jj)
        {
            this.i = ii;
            this.j = jj;
        }
}
class Program
{
    static void Main(string[] args)
    {
        Sample s1 = new Sample();
        s1.SetData(10, 2);
        Sample s2 = new Sample();
        s2.SetData(5, 10);
        Console.ReadKey();
    }
}
```

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Question one(10 points): Choose the correct answer.

1) Correct syntax of the do while loop is
   a) do{while(<Test>);<code to be looped>}
   b) do{<code to be looped>} while(<Test>);
   c) do{while(<Test>)<code to be looped>}
   d) do{<code to be looped>} while(<Test>)

2) The initialization of an object is called its
   a) creation
   b) construction
   c) destruction
   d) declaration

3) How many values does a methods return?
   a) 1
   b) 2
   c) 0
   d) any number of values

4) All C# applications begin execution by calling the _____ method
   a) Main()
   b) Class{}
   c) Submain()
   d) Namespace

5) Class's data members are _____ by default
   a) Default
   b) Protected
   c) Public
   d) Private

Question two (10 points): Point out the wrong statement.

1) a) A static method does not depend on an instance of the class.
   b) The static methods are typically used to create helper classes.
   c) Instance methods can call static methods and access static data.
   d) Static methods can access static data as well as instance data

2) a) A constructor be can be called many times.
   b) A constructor can have zero or more parameters.
   c) A constructor does not have an explicitly declared return type.
   d) Classes with no **constructor** have an **implicit constructor** called the **default constructor**

3) a) The this keyword is used to distinguish class members from other data.
   b) this reference is passed to static methods.
   c) The this keyword refers to the current object
   d) The this keyword is used inside the class

4) a) A class can have one destructor only
   b) Destructors cannot be inherited or overloaded
   c) Destructors can have modifiers
   d) All of above mentioned

5) a) To call another **constructor** from the same **class**, we use the **this** keyword.
   b) Both a & d
   c) Constructor Chaining is a very useful technique for avoiding data redundancy
   d) When a constructor invokes another constructor in the same class known as constructor chaining

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Question three (10 point) Which of the following statements are correct about the C#.NET cod

given below?

11)

```
namespace IndiabixConsoleApplication
{
    class Sample
    {
        double i;
        bool j;
        public void SetData(double i, bool j)
        {
            i = i;
            j = j;
        }
        public void Display()
        {
            Console.WriteLine(i + " " + j);
        }
    }
    class MyProgram
    {
        static void Main(string[] args)
        {
            Sample s1 = new Sample();
            s1.SetData(10.5,true);
            s1.Display();
        }
    }
}
```

Output:

a) 10.5 ture
b) 10.500 ture
c) 10.5 false
d) 0 false
e) None of the above

12)

```
int i;
int j = new int();
i = 10;
j = 20;
String str;
str = i.ToString();
str = j.ToString();
```

a) This is a perfectly workable code snippet
b) Since int is a primitive, we cannot use new with it
c) Since an int is a primitive, we cannot call the method ToString() using it.
d) i will get created on stack, whereas j will get created on heap.
e) Both i and j will get created on heap

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Question one (10 points): Choose the correct answer

1) The default case in the switch statements is
   a) executed if any of the case is not executed
   b) never executed
   c) executed if all the cases execute successfully
   d) executed in some special cases

2) Implicit Conversion ?Follows the order of conversion as per compatibility of data type as
   a) float < char< int
   b) char < int < float
   c) int < char <float
   d) float < int < char

3) In c# the constructors are called using the keyword
   a) cons
   b) new
   c) void
   d) invoke

4) Correct syntax for do while loop is
   a) do; { statement; }while (condition);
   b) do(condition) { statement; }while;
   c) do { statement; }while (condition)
   d) do { statement; }while (condition);

5) There are two types of constructors in C#
   a) Default
   b) Built in
   c) Both a and d
   d) parameterized

Question two (10 points): Point out the correct statement.

6) a) Classes and objects are correct stones s procedures of programming paradigm
   b) Object Oriented Programming paradigm known as inline programming takes a top-down approach.
   c) Both a & b
   d) Object Oriented Programming paradigm gives equal importance to data and the procedures that work on the data

7) a) If we do not provide a constructor, then the compiler provides a zero-argument constructor
   b) A constructor cannot be overloaded
   c) Constructors are never called explicitly.
   d) If we provide a one-argument constructor then the compiler still provides a zero-argument constructor.

8) a) To call another **constructor** from the same **class**, we use the **new** keyword
   b) Constructor Chaining is a very useful technique for avoiding data redundancy.
   c) When a constructor invokes another constructor in the same class known as constructor chaining
   d) d) All of the mentioned

9) a) Destructors have a return value
   b) Destructors are not called directly in the source code
   c) Destructor can be overloaded.
   d) A class can have more than one destructor

10) a) Static methods are invoked using objects of a class.
   b) Static methods can access static data as well as instance data
   c) Static methods are outside the class scope
   d) Static methods are invoked using class

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Question three (10 point) Which of the following statements are correct about the C#.NET code snippets given below?

11)

```
class Sample
{
    private int i;
    public double j;
    private void DisplayData()
    {
        Console.WriteLine(i * 5 + j);
    }
    public void ShowData()
    {
        Console.WriteLine(i + 5 + j);
    }
}
```

a) i cannot be declared as public.
b) DisplayData() cannot access j
c) DisplayData() cannot be declared as private.
d) ShowData() cannot access to i.
e) There is no error in this class

12)

```
namespace InitialConsoleApplication
{
    class Sample
    {
        int i;
        double j;
        public void SetData(int i, double j)
        {
            i = i;
            j = j;
        }
        public void Display()
        {
            Console.WriteLine(i + " " + j);
        }
    }
    class MyProgram
    {
        static void Main(string[] args)
        {
            Sample s1 = new Sample();
            s1.SetData(10, 5.4);
            s1.Display();
        }
    }
}
```

Output:
a) 0 0
b) 10 5.4
c) 10 5.400000
d) 10 5
e) None of the above

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