Second Semester

Computer Studies

(دراسات کمبیوتر)

(Questions)





امتحان دبلوم التعليم العام

لكلية الحرس السلطاني العماني التقنية (ثنائية اللغة)

للعام الدراسي ١٤٤٥/١٤٤٦ هـ - ٢٠٢٣ / ٢٠٢٤ م - الفصل الدراسي الثاني - الدور الأول

تنبيه:
- المادة: دراسات الكمبيوتر.
- الأسئلة في (١٢) صفحات.
- زمن الإجابة: ساعتان ونصف.
- الإجابة في الورقة نفسها.

تعليمات مهمة:

- يجب الحضور إلى قاعة الامتحان قبل عشر دقائق على الأقل من بدء زمن الامتحان.
- يجب إحضار أصل ما يثبت الهوية وإبرازها للعاملين بالامتحانات.
- يجب الالتزام بالزي (الدشداشة البيضاء والمصر أو الكمة للذكور) والزي المدرسي للطالبات ، ويستثنى من ذلك الدارسون من غير العمانيين بشرط الالتزام بالذوق العام، ويمنع على جميع المتقدمات ارتداء النقاب داخل المركز وقاعات الامتحان.
- يحظر على الممتحنين اصطحاب الهواتف النقالة وأجهزة النداء الآلي وآلات التصوير والحواسيب الشخصية والساعات الرقمية الذكية والآلات الحاسبة ذات الصفة التخزينية والمجلات والصحف والكتب الدراسية والدفاتر والمذكرات والحقائب اليدوية والآلات الحادة أو الأسلحة أياً كان نوعها وأي شيء له علاقة بالامتحان.
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س – عاصمة سلطنة عمان هي:

○ القاهرة ○ الدوحة

● مسقط ○ أبوظبي

ملاحظة: يتم تظليل الشكل (●) باستخدام القلم الرصاص وعند الخطأ، امسح بعناية لإجراء التغيير.

صحيح ● **غير صحيح** ▭ ◉ ◒ ☒ ☑

مُسَوَّدَة، لا يتم تصحيحها

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Question One: Multiple Choice (Items 1 – 6) (6 Marks)

Shade in the bubble (○) next to the **correct** answer for each of the following items.

1. Which method is used to get the user input?

- ○ Read( )
- ○ InputLine( )
- ○ ReadLine( )
- ○ Read( );Line( )

2. Which operator is used to increment a variable by 1 in C#?

- ○ A ++
- ○ A +2
- ○ A -1
- ○ A + A

3. All the following sentences about the switch statement are correct except:

- ○ The switch expression is evaluated multiple times.
- ○ The switch statement contains multiple case labels.
- ○ The switch statement can include cases with string values.
- ○ The default case executes when no case satisfies the expression.

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Question One Continued

4. What does the following loop do?

```
int i = 0;
while (i < 10)
{
 Console.WriteLine(i);
 i += 2;
}
```

- ☐ Prints only even numbers from 0 to 10.
- ☐ Prints only odd numbers from 0 to 10.
- ☐ Prints only even numbers from 0 to 8.
- ☐ Prints all numbers from 0 to 8.

5. What is the correct syntax for declaring an array in C#?

- ☐ int[]numbers = {1;2;3;4};
- ☐ int[] numbers = {1, 2, 3, 4};
- ☐ Array numbers = {1, 2, 3, 4}
- ☐ array() numbers = {1, 2, 3, 4};

6. Which option is the correct syntax for declaring a method in C#?

- ☐ MyMethod void() {}
- ☐ method MyMethod() {}
- ☐ Function MyMethod() {}
- ☐ static void MyMethod() {}

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Question Two: Extended Response (Items 7–13) (24 Marks)

Answer ALL question in the space provided

7. In C# language:

a. Compare the uses of *WriteLine* and *Write* keywords? (1 mark)

_____

_____

_____

_____

b. When do we use each of the following signals in the C#: (1 mark)

Signal	Uses
//	_____
/* */	_____

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Question Two Continued

c. Study the program below and answer the following question:

```
using System;
public class AreaOfCircle
{
   const double Pi = 3.14;

    public static void Main(string[] args)
    {
        double radius = 5.0;
        double area = Pi * radius * radius;
        Console.WriteLine("The area of a circle with radius " + radius + " is " + area);
    }
}
```

Why is **Pi** declared as a constant? (1 mark)

8. In C# loop:

a. List the syntax of **TWO** correct loop statements using **while**. (2 marks)

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Question Two Continued

b. **Rewrite** the following code by correcting the two errors, to print the even numbers from (2 to 20). (2 marks)

```
for ( int i=1; i<=10; i+ )
{
      Console.ReadLine ( i * 2 );
}
```

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Question Two Continued

9. Complete the following C# program by using a **for loop** to find the maximum and minimum elements in an array. (2 marks)

```
using System;
public class program {
  public static void Main() {
    int[] arr = new int[5] {99, 95, 93, 89, 87};
    int i, max, min, n;
    n = 5; // Length of the array
    max = arr[0];
    min = arr[0];
    _____
    _____
    _____
    _____
    _____
    _____
    Console.Write("Maximum element = " + max);
    Console.Write(" Minimum element = " + min);
   }
}
```

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Question Two Continued

10. Answer the questions below:

a. Why are methods used in C#? (1 mark)

b. Study the following program and then answer the questions in the table: (2 marks)

```
using System;
namespace MyApplication
{
  class Program
  {
    static void Oman( string region)
    {
      Console.WriteLine(region +"_Oman");
    }

    static void Main(string[] args)
    {
      Oman("Muscat");
     Oman("North Batinah");
     Oman("Al Dhahirah");
    }
  }
}
```

What is the name of the method used in the code?	
What is the output of the code?	

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Question Two Continued

11. Write a C# program that asks the user to input his type of car as a string variable and its price into an integer variable. Then, the program should print the phrase "The price of (*car type*) is (*price*)". (4 marks)

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Question Two Continued

12. Study this program and answer the following questions:

```
using System;
namespace Averagenum
{
 class Program
 {
  static void Main(string[ ] args)
  {
int num1, num2, num3;
double average;

Console.WriteLine("Enter your numbers:");
num1 = Convert.ToInt32(Console.ReadLine());
num2 = Convert.ToInt32(Console.ReadLine());
num3 = Convert.ToInt32(Console.ReadLine());

average = (num1 + num2 + num3) / 3.0;

Console.WriteLine("");
Console.WriteLine("The average is: " + average);
  }
 }
}
```

a. If the user enters a non-integer value when prompted for the inputs, what will be the output? (1 mark)

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Question Two Continued

b. Modify the program to calculate the average of **FIVE** numbers? (2 marks)

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Question Two Continued

c. Discuss the implications of using double as the type for the average variable instead of the integer? (1 mark)

13. According to this description:

Number of angles	Shape type
0	Circle
1	Line
3	Triangle
4	Quadrilateral

a. Write a C# switch statement that determines the type of shape based on the number of its angles. Assume the user will use the variable **numberOfAngles** to represent the number of angles as an input variable to get the shape type as a string. (2 marks)

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Question Two Continued

b. Discuss the advantages of using a switch statement in C#. (1 mark)

c. What is the purpose of using a break keyword in a switch statement? (1 mark)

[End of Examination]

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سلطنة عمان
وزارة التربية والتعليم

مركز القياس والتقويم التربوي
The Center for Educational Assessment and Measurement (CEAM)

امتحان دبلوم التعليم العام
لكلية الحرس السلطاني العماني التقنية (ثنائية اللغة)
للعام الدراسي ١٤٤٥ / ١٤٤٦ هـ - ٢٠٢٣ / ٢٠٢٤ م - الفصل الدراسي الثاني - الدور الثاني

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صحيح ▬ **غير صحيح** ▭ ◉ ◒ ☒ ☑

مُسَوَّدَة، لا يتم تصحيحها

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Question One: Multiple Choice (Items 1 – 6) (6 marks)

Shade in the bubble (○) next to the **correct** answer for each of the following items.

1. Which of the following is **not** a valid C# data type?

- ○ int
- ○ string
- ○ double
- ○ character

2. If variable A holds 50 and variable B holds 100, which of the following relation operators is **true**?

- ○ A > B
- ○ A != B
- ○ A == B
- ○ A >= B

3. Which of the following is **true** about the code below?

```
int x = 3;
 if ( x > 2 )
    x = x * 2;
 if ( x > 4 )
    x = 0;
 Console.WriteLine(x);
```

- ○ x will be 3 after this code executes.
- ○ x will be 0 after this code executes.
- ○ x will be doubled after this code executes.
- ○ x will equal 0 after this code executes for any value of x.

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Question One Continued

4. What is the **correct** syntax for a for loop in C#?

- ☐ for (i = 0 to 10)
- ☐ for (i = 0, i < 10, i++)
- ☐ for (int i = 0; i < 10; i++)
- ☐ for (i = 0; i <= 10; i += 1)

5. How do you access the value of the **first** element of an array named **books** in C#?

- ☐ books[1]
- ☐ books(0)
- ☐ books[0]
- ☐ books.First()

6. Determine the purpose of the "void" keyword in a function declaration.

- ☐ Denotes the function as static.
- ☐ Defines the function's return type as null.
- ☐ Indicates the beginning of the function's body.
- ☐ Specifies that the function does not return any value.

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Question Two: Extended Response (Items 7–13) (24 marks)

Write your answer for each of the following questions in the space provided.

7. In C# programming language:

a. Write two different statements to print "welcome Ahmed!" on the same line and on a new line. (2 marks)

b. The Console.ReadLine() method cannot get information from the data type "int", How can this issue be solved using **int** Phone Number = **Console**.ReadLine(); (1 mark)

8. Answer the questions below:

a. What is the difference between a while loop and a do-while loop in C#? (1 mark)

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Question Two Continued

b. Rewrite the following code by correcting all the errors. Then write the output of the code: (3 marks)

```
int i = 10;
do
{
   Console.ReadLine(i);
   i-;
}
while ( i >= 0 );
```

The correct code:

the outputs:

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Do not write in this space

Do not write in this space

Question Two Continued

9. Use the fruits names (banana, apples, orange, watermelon, mango) to Create an array called (**fruits**) and write a program that prints the array's elements.

(2 marks)

10. Answer the questions below:

a. What is the main feature of methods? (1 mark)

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Question Two Continued

b. Study the following program and then complete the table: (2 marks)

```
static void avg(int x, int y)
  {
    int z= (x + y)/2;
    Console.WriteLine(z);
  }
  static void Main(string[] args)
  {
    avg(15,8);
  }
```

Method's name	_____
Purpose of program	_____
Input Data	_____
Expected Output	_____

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Question Two Continued

11. Write a C# program that prompts the user to enter their favorite sport and then display a message " Your favorite sport is: " confirming their choice. Use appropriate variable names and add comments to explain each part of your code. (4 marks)

```
using System;
namespace FavoriteSportProgram
{
   class Program
   {
     static void Main(string[ ] args)
     {
          ……
          ……
          ……
          ……
     }
   }
}
```

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Do not write in this space

Question Two Continued

12. Study the program below and answer the following questions:

```
static void Main(string[] args)
  {
    int a = 160;
    int b = 159;
    Console.WriteLine( a==b );
  }
```

a. What type of operators are used in this program? (1 mark)

b. Rewrite the program above to reverse the output result in the above program. (1 mark)

c. Ahmed wants to buy a washing machine from an electronics store. The price of the washing machine is 350 OMR, and there is a discount of 45%. Write a C# code to calculate the price of the washing machine after the discount. (2 marks)

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Question Two Continued

13. Study the following program and then answer the questions below:

```
int mark = Convert.ToInt32( Console.ReadLine() );
if ( mark>60 )
{
Console.WriteLine("Pass");
 }
else if ( mark < 50 )
{
Console.WriteLine("Fail");
 }
```

a. Rewrite the above program adding the condition (50<=mark <= 60) then the output will be (" you need training to pass ") (2 marks)

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Question Two Continued

b. Write the program result if the user enters the mark in the table below:

(1 mark)

Mark = 60	
Mark = 52	

c. Which statement is used to specify many alternative blocks of code to be executed. (1 mark)

[End of Examination]

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امتحان دبلوم التعليم العام

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صحيح ● **غير صحيح** ▭ ◉ ◒ ☒ ☑

مُسَوَّدَة، لا يتم تصحيحها

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Question One: Multiple Choice (Items 1 – 6) (6 marks)

There are 6 multiple-choice items worth one mark each.
Shade in the bubble (○) next to the **correct** answer for each of the following items.

1) All of the following variables' names are correct **except**

- ○ st_name
- ○ Mark1
- ○ a1234
- ○ yourName

2) The result of executing the code int x=7; Console.WriteLine (!(x>3 && x<10)); is:

- ○ True
- ○ False
- ○ 4 5 6 7 8 9
- ○ Error

3) Which one of the following represents the **else if** statement?:

- ○ Used to specify a block of code to be executed if a condition is true
- ○ Used to specify a block of code to be executed if a condition is false
- ○ Used to specify a new condition to be checked if the previous condition is false
- ○ Used to select one of many code blocks to be executed

4) The purpose of using methods is to:

- ○ Define a code one time.
- ○ Break a loop
- ○ Reuse a code many times
- ○ A and C are correct.

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Question One continued

5) How many times will the loop run after executing the following statements?

```
int i = 5;
    while (i < 8)
    {
        Console.WriteLine(i);
     i++;
}
```

- ☐ One time
- ☐ Two times
- ☐ Three times
- ☐ Four times

6) The expected output of the following program is:

```
Static void Main ( string [] args)
  {
int sum=0;
  for (int j = 1; j < 10; j++)
     {
       sum = sum + j;
    }
    Console.Write(sum);
    }
```

- ☐ 10
- ☐ 36
- ☐ 45
- ☐ 55

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Question Two: Fill in the Blank (Items 7 – 12) (6 marks)

7) The type of variable that holds the value (77.6) is _____.

8) The logical operator that returns a true value if and only if both of the operands are non-zero is _____.

9) In C#, the _____ statement is used to replace multiple if statements.

10) When a match is found in a Switch case statement, the _____ keyword is used to stop the case testing inside the block.

11) The value of (i) after executing the following statements is _____.

```
int i = 0;
do
{
    i = i +2 *  3 - 1;
}
while ( i < 10);
Console.WriteLine( i );
```

12) The method (School) will be called _____ times in the following code.

```
static void School()
{
   Console.WriteLine("Sultan Qaboos school");
}
Static void Main(string[]args)
{
   School();
   School();
   School();
}
```

Do not write in this space

Question Three: Extended Response -1 (Items 13–15) (6 marks)

13) C# is an object-oriented programming language created by Microsoft that runs on the .Net frameworks. List **four** uses for this programming language.

14) A typical C# program consists of several different parts. Write the purpose of the following two parts:

A. Namespace

B. Console

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Question Three continued

15) Compare the variable and constant in terms of:

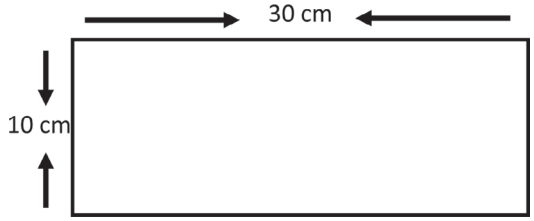
A. Similarities:

B. Differences:

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Question Four: Extended Response -2 (Items 16–18) (6 marks)

16) Write a program to get the total area for the corresponding figure:
(Rectangle area = Height * Width):



17) You are at a roundabout, and you have four exits. Referring to the following table, write a program to specify the exit and the corresponding destination using **switch statement.**

Exit	Destination
1	Go to Muscat
2	Go to Salalah
3	Go to Sohar
4	Go to Ibri

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Question Four continued

18) Study the following program, then answer the questions in the table below

```
using System;
namespace MyApplication
{
    class Program
    {
    static void Oman( string region)
    {
    Console.WriteLine(region+ "_Oman");
    }
    static void Main(string[] args)
    {
    Oman("Aldhahera");
    Oman("North Batinah");
    Oman("Alburaimi");
    }
    }
    }
```

a. What is the name of the method used in the code?	
b. What is the output of the code?	

Do not write in this space

Question Five: Extended Response -3 (Items 19–21) (6 marks)

19) Use the students' names (Ahmed, Noor, Sarah, Ali, Salim) to:

A. Create an array called (names) and write a program that displays the length of the array

B. Write a program to replace (Noor) by (Abeer) in the array and print the new array.

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Do not write in this space

Question Five continued

20) Study the following program and then complete the table:

```
using System;
public class program
{
  public static void Main()
  {
    int[] arr = {99, 95, 93, 89, 87};
    int i, max, min, n;
    n = 5;
    max = arr[0];
    min = arr[0];
    for(i=1; i<n; i++)
    {
      if(arr[i]>max)
      {
        max = arr[i];
      }
      if(arr[i]<min)
      {
        min = arr[i];
      }
    }
    Console.Write("Maximum element = "+ max);
    Console.Write(" Minimum element = "+ min);
  }
}
```

Purpose	Finding the maximum and minimum elements in "arr" array
Input Data	_____ _____
Expected Output	_____ _____

Do not write in this space

Question Five continued

21) Write a program that calls a function named (sum). This method accepts two input parameters called (x, y) and should return a sum for two given numbers.

[End of the Examination]

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سلطنة عمان
وزارة التربية والتعليم

مركز القياس والتقويم التربوي
The Center for Educational Assessment and Measurement (CEAM)

امتحان دبلوم التعليم العام
لكلية الحرس السلطاني العماني التقنية (ثنائية اللغة)
للعام الدراسي ١٤٤٤ هـ - ٢٠٢٢ / ٢٠٢٣ م - الدور الثاني - الفصل الدراسي الثاني

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س – عاصمة سلطنة عمان هي:
○ القاهرة ○ الدوحة
● مسقط ○ أبوظبي

ملاحظة: يتم تظليل الشكل (●) باستخدام القلم الرصاص وعند الخطأ، امسح بعناية لإجراء التغيير.

صحيح ● **غير صحيح** ▭ ◉ ◒ ✗ ✓

مُسَوَّدَة، لا يتم تصحيحها

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Question One: Multiple Choice (Items 1 – 6) (6 marks)

There are 6 multiple-choice items worth one mark each.
Shade in the bubble (⬭) next to the **correct** answer for each of the following items.

1. Which of the following values can be stored in an integer variable?

- ⬭ 221
- ⬭ -10.1
- ⬭ mARK3
- ⬭ d

2. The result of executing the code int x = 7; int y = 8; Console. WriteLine (!(x++ != y)); is:

- ⬭ True
- ⬭ False
- ⬭ 8=8
- ⬭ 8≠8

3. The statement that is used to specify a block of code to be executed if the condition is True is:

- ⬭ Switch
- ⬭ Else If
- ⬭ Else
- ⬭ If

4. A block of code only runs when it is, referred to as:

- ⬭ switch statements
- ⬭ parameters
- ⬭ method
- ⬭ array

Do not write in this space

Question One continued

5. The expected output of the following program is:

- ☐ 5678910
- ☐ 109876
- ☐ 12345
- ☐ 1098765

```
for (int i=10; i>5; i--)
    {
       Console.Write(i);
    }
```

6. The expected output of the following program is:

- ☐ Ahmed Ali Omar
- ☐ Ahmed Ali Mazin
- ☐ Ali Omar
- ☐ Ali Mazin

```
static void Main(string[] args)
  {
    string[] st_name = { "Ahmed", "Ali", " Omar"}
    st_name[2] = "Mazin";
     for ( int  i=1;  i<st_name.Length; i++)
         {
             Console.Write(" " + st_name[i] );
          }
```

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Do not write in this space

Question Two: Fill in the Blanks (Items 7 – 12) (6 Marks)

Fill in the blank using the correct word.

7. In C#, the single line comments start with _____.

8. The arithmetic operator that divides the numerator by the de-numerator is:

_____.

9. The statement that is used to specify a block of code to be executed if a condition is false is called _____.

10. The optional keyword that specifies some codes to run if there is no case match is called _____.

11. In the following program, the loop will run _____ times.

```
int i=1;
while (i<8)
{
   Console.WriteLine(i);
   i++;
}
```

12. The result after executing the following statements is: _____.

```
static void MyMethod( int x)
{
     Console.WriteLine(10+ x);
}
static void Main(string[] args)
{
  MyMethod(10);
}
```

Do not write in this space

Question Three: Extended Response (Items 13-21) (18 Marks)

Answer all the following question in the space provided.

13. Write the variable type for the following examples in the table: (2 marks)

Variable Type	Example
	121
	'j'
	"BOOK"
	False

14. Write the main difference between the writeline() and the write() methods. (1 mark)

_____

_____

15. Rewrite the following identifiers' names correctly. (2 marks)

Identifier name	The correction
KmPerHour	
st-Oman	
user Name	
1Time	

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Do not write in this space

Question Three continued

16. Write a C# program that will calculate the price of 30 boxes of water bottles, if the price of one box is (1.200 OMR). (1.5 mark)

17. Write a program that asks the user to enter his mark in the English test and output his result (pass or fail) according to the following conditions: (3.5 marks)

Condition	Statements
>= 80	Pass
<= 79	Fail

Do not write in this space

Question Three continued

18. Study the following program that prints a series of numbers. Diagnose the error, and then answer the questions below: (2.5 marks)

a. Rewrite the code correctly:

```
using System;
namespace MyApplication
{
 class Program
 {
  static void Main(string[] args)
  {
   string i = 20;
   while (i < 22)
   {
    Console.ReadLine(i);
    i++;
   }
  }
 }
}
```

b. Write the output of the program:

Do not write in this space

Do not write in this space

Do not write in this space

Question Three continued

19. Study the following program, then answer the questions in the table: (2 marks)

```
using System;

namespace MyApplication
{
  class Program
  {
    static void Main(string[] args)
    {
      int[] num = {66, 70};
      for (int i = 0; i < num.Length; i++)
      {
        Console.WriteLine(num[i]);
      }
    }
  }
}
```

How many times will the loop run?	
What is the output of the program?	

Do not write in this space

Question Three continued

20. Study the following program then complete the table: (1.5 mark)

```
static void Main(string[] args)
   {
    int[]  num1 = { 1,2,3,4,5,6,7,8,9,10};


          for (int i = 0; i < num1.Length; i++)
             {
                 if (num1[i]%2==1)
                 Console.Write (num1[i]);


              }
   }
```

Purpose of program	
Input Data	
Expected Output	

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Do not write in this space

Do not write in this space

Question Three continued

21. Identify the output of the following code which calculates the sum of two numbers using functions in C#. (2 marks)

```
static int SumNum(int n1 , int n2)
   {
   int total = n1+n2;
    return total;
   }
   static void Main(string[] args)
   {
    int num1=13;
    int num2=22;
    Console.Write(" Number 1 : "+ num1);
    Console.Write(" Number 2 : "+ num2);
    int sum = SumNum(num1,num2);
    Console.Write( " the sum of two numbers is:  "+ sum);
   }
```

Output:

[End of Examination]

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سلطنة عمان
وزارة التربية والتعليم

مركز القياس والتقويم التربوي
The Center for Educational Assessment and Measurement (CEAM)

امتحان دبلوم التعليم العام
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صحيح ■ **غير صحيح** ▭ ◉ ◔ ✗ ✓

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Question One: Multiple Choice Items (1 – 6) (6 marks)

There are 6 multiple-choice items worth one mark each.
Shade in the bubble (○) next to the **correct** answer for each of the following items.

1) Which method is used to print the output on a new line?

- ○ OutputLine ( )
- ○ Write ( )
- ○ PrintLine ( )
- ○ WriteLine ( )

2) What is the reason for having an error when executing the following code?

```
Const int num=20;
Console.WriteLine(num)
```

- ○ Missed curly braces {}
- ○ Spelling mistake
- ○ Missed semicolon ;
- ○ The order of statements

3) The default value that ReadLine(); return is always :

- ○ string
- ○ char
- ○ int
- ○ double

4) The operators that return Boolean value is:

- ○ *
- ○ ++
- ○ %
- ○ &&

Do not write in this space

Question One continued

5) How many times will the loop run in the next program?

```
int i=5
while (i<6)
{
Console.WriteLine(i);
i++;
}
```

- ☐ One time
- ☐ Two times
- ☐ Three times
- ☐ Four times

6) The output of the code is:

```
Static void MyMethod (int x)
 {
console.writeine(x+5);
}
Static void Main(string [ ] args)
{
MyMethod (4);
MyMethod (5);
MyMethod (6);
}
}
```

- ☐ 6 5 4
- ☐ 9 10 11
- ☐ 4 5 6
- ☐ 10 20 30

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Do not write in this space

Question Two: Fill the gaps Items (7–12) (6 marks)

7) The keyword used to declare an unchangeable variable is _____.

8) The method used to print the output on a new line is _____.

9) The output of the following code is _____.

```
string x = "123";
Console.WriteLine (x+4);
```

10) If a = 3, and b = 3, the result of !(a > 0 && b < 5) is _____.

11) The result of executing the following code if x = 12 _____.

```
If (x<18)
{
Console.WriteLine("20 is greater than 18);
}
else
{
Console.WriteLine("20 is smaller than 18);
}
```

12) The result after executing the following statements is _____.

```
static void MyMethod( int x)
{
    Console.WriteLine(5 + x);
}
static void Main(string[] args)
{
  MyMethod(10);
}
```

Do not write in this space

Question Three: Extended Response -1 (6 marks)

13) Write the variable type for the following examples in the table:

Variable Type	Example
_____	6.5
_____	True
_____	"Oman"
_____	"A"

14) Write a suitable operator for the following examples.

"A" _____ "A" = True

5 _____ 10 = False

6 _____ 6 = False

7.8 _____ 8.7 = True

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Do not write in this space

Do not write in this space

Question Three continued

15) Write a program that asks the user to enter an uppercase letter from A to D using (switch statement). The output for each letter will be as follows:

Letter	A	B	R	D
output	Ahmed	Bader	Carlos	Dawood

Do not write in this space

Question Four: Extended Response -2 (6 marks)

16) Write a c# program to test a variable named (time) if it is less than 12, print "good morning" else print "good evening".

17) Rewrite the following code so that it can display uncountable numbers starting from 15.

```
int i = 15;
while (i < 20)
{
  Console.WriteLine (i);
  i++;
}
```

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Do not write in this space

Do not write in this space

Question Four continued

18) Write C# program to find the odd numbers of the first 10 natural numbers and store them in a variable named (oddsum). Then, find the even numbers and store them in a variable named (evensum).

Do not write in this space

Question Five: Extended Response -3 (6 marks)

19) Study the following program and then complete the table:

```
Static void Main(string[] args)
{
 int[] = set1 = { 2, 4, 6, 8, 10, 9 };
 int[] = set1 = { 10, 8, 6, 2, 4 };
 if ( set1.Length == set2.Length )
 {
 Console.WriteLine( " both sets are equal" );
 }
 else
{
 Console.WriteLine( "  set1 not equal  to set2" );
 }
```

Purpose	_____
Input Data	_____
Expected Output	_____

Do not write in this space

Do not write in this space

Do not write in this space

Question Five continued

20) Replace "Ahmed" with "Assad" in the following array, Then print the new array

String[] name = {"Ali","Ahmed",Oman"};

21) Study the following program and then answer the questions in the table below:

```
using System;
namespace MyApplication
{
 class Program
 {
  static void Oman( string region)
  {
   Console.WriteLine(region "_Oman");
  }

  static void Main(string[] args)
  {
   Oman(“Dofar”);
   Oman(“North Batinah”);
   Oman(“Musandam”);
  }
 }
}
```

What is the name of the method used in the code?	_____
What is the output of the code?	_____

[End of the Examination]

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امتحان دبلوم التعليم العام
لكلية الحرس السلطاني العماني التقنية (ثنائية اللغة)
للعام الدراسي ١٤٤٣ هـ - ٢٠٢١ / ٢٠٢٢ م - الدور الثاني - الفصل الدراسي الثاني

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- يجب إحضار أصل ما يثبت الهوية وإبرازها للعاملين بالامتحانات.
- يجب الالتزام بالزي (الدشداشة البيضاء والمصر أو الكمة للذكور) والزي المدرسي للطالبات ، ويستثنى من ذلك الدارسون من غير العمانيين بشرط الالتزام بالذوق العام، ويمنع على جميع المتقدمات ارتداء النقاب داخل المركز وقاعات الامتحان.
- يحظر على الممتحنين اصطحاب الهواتف النقالة وأجهزة النداء الآلي وآلات التصوير والحواسيب الشخصية والساعات الرقمية الذكية والآلات الحاسبة ذات الصفة التخزينية والمجلات والصحف والكتب الدراسية والدفاتر والمذكرات والحقائب اليدوية والآلات الحادة أو الأسلحة أياً كان نوعها وأي شيء له علاقة بالامتحان.
- يجب على الممتحن الامتثال لإجراءات التفتيش داخل المركز طوال أيام الامتحان.
- يجب على الممتحن التأكد من استلام دفتر امتحانه، مغلفاً بغلاف بلاستيكي شفاف وغير ممزق ، وهو مسؤول عنه حتى يسلمه لمراقبي اللجنة بعد الانتهاء من الإجابة.
- يجب الالتزام بضوابط إدارة امتحانات دبلوم التعليم العام وما في مستواه وأية مخالفة لهذه الضوابط تعرضك للتدابير والإجراءات والعقوبات المنصوص عليها بالقرار الوزاري رقم ٥٨٨ / ٢٠١٥.
- يقوم المتقدم بالإجابة عن أسئلة الامتحان المقالية بقلم الحبر (الأزرق أو الأسود).
- يقوم المتقدم بالإجابة عن أسئلة الاختيار من متعدد بتظليل الشكل (○) وفق النموذج الآتي:

س - عاصمة سلطنة عمان هي:

○ القاهرة ○ الدوحة
● مسقط ○ أبوظبي

ملاحظة: يتم تظليل الشكل (●) باستخدام القلم الرصاص وعند الخطأ، امسح بعناية لإجراء التغيير.

صحيح ● **غير صحيح** ⊖ ◉ ◔ ⊗ ☑

مُسَوَّدَة، لا يتم تصحيحها

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Question One: Multiple Choice Items (1 – 6) (6 marks)

There are 6 multiple-choice items worth one mark each.
Shade in the bubble (○) next to the **correct** answer for each of the following items.

1) All of the following variables' names are correct except:

- ○ st_name
- ○ Mark1
- ○ a1234
- ○ yourName

2) Which of the following could solve the error in the code

```
console.writeLine("Enter your ID Number:");
int ID_Number=console.Readline();
console. writeLine ("your age is: +age");
```

- ○ int ID = convert.Toint32 (Console.ReadLine());
- ○ int ID = convert.Toint32 (Console.ReadLine();
- ○ int ID = convert.Toint32 (Console.writeLine());
- ○ int ID = console.Toint32 (Console.ReadLine());

3) What is the correct variable identifier?

- ○ int X_1 = 20;
- ○ string name = “Ali”;
- ○ int 1x = 20;
- ○ Both a and b are true.

4) If variable A holds 50 and variable B holds 100, which of the following relation operators is true?

- ○ A ! = B
- ○ A = = B
- ○ A > = B
- ○ A > B

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Question One continued

5) The output of the code for (int i = 10; i > 5; i--) is:

- ☐ 5-10
- ☐ 10-6
- ☐ 1-5
- ☐ 10-5

6) A block of code which only runs when it is called is referred to as:

- ☐ switch statements
- ☐ array
- ☐ method
- ☐ parameters

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Question Two: Fill the gaps Items (7–12) (6 marks)

7) The type of variable that holds the value (77.6) is _____.

8) Static _____ be used as a variable name.

9) The Output of the following code is _____.

```
String name= "Mohammed";
Console.write("welcome"+name);
```

10) After executing the following statement x = 5-2*3 + (4-3), the variable x = _____.

11) The _____ statement is used to specify a block of code to be executed if the condition is False.

12) _____ are used as variables inside the method in order to pass information.

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Question Three: Extended Response -1 (6 marks)

13) List **four** general rules when naming a variable?

14) Write a C# program that will calculate the price of 30 boxes of water bottles, if the price of one box is (1.000 OMR).

15) You are at a roundabout, and you have four exits. Referring to the following table, write a program to specify the exit and the corresponding destination using switch statement.

Exit	Destination
1	Go to Muscat
2	Go to Salalah
3	Go to Sohar
4	Go to Ibri

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Question Four: Extended Response -2 (6 marks)

16) Study the following program then answer the questions below:

```
int temperature = 20;
if ( temperature < 20)
{
  Console.WriteLine( "cold" );
}
else if ( temperature >= 20 && temperature <= 30)
{
  Console.WriteLine( "warm" );
}
else
{
  Console.WriteLine( "hot" );
}
```

a. Identify the conditions and their corresponding statements:

Condition	Output statement

b. What is the expected output if the user enters a temperature equal to 25?

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Question Four continued

17) Analyze the following c# program, then complete the table.

```
Static void Main ( string [] args)
  {
int sum=0;
     for (int j = 1; j < 10; j++)
         sum = sum + j;
    }
    Console.Write(sum);
  }
}
```

Purpose	
Expected output	
How many times will the loop be repeated?	
Variable type	

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Question Four continued

18) Study the following program, diagnose the error, then answer the questions below:

a. Rewrite the code correctly:

```
using System;
namespace MyApplication
{
 class Program
 {
  static void Main(string[] args)
  {
   string i = 20;
   while (i < 30)
   {
    Console.ReadLine(i);
    i++;
   }
  }
 }
}
```

b. Write the output of the program:

Do not write in this space

Question Five: Extended Response -3 (6 marks)

19) Use the students name (Reem, Ahmed, Noor, Sarah, Ali, Salim) to:

a. Create an array called (names) and write a program that display the length of the array.

b. Write a program to replace (Noor) with (Abeer) in the array and print the new array.

20) Write the output of the following program:

```
string[] fruits = { "banana", "apple", "orange", "watermelon", " mango"};
Console.WriteLine( fruits.Length );
Console.WriteLine( fruits[3] );
fruits[3] = "blueberry";
for ( int  i=0;  i<fruits.Length; i++)
  {
   Console.WriteLine( fruits[i] );
  }
```

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Question Five continued

21) Identify the output of the following code which calculates the sum of two numbers using functions in C#.

```
class Program
   {
      public static int SumNum(int n1,int n2)
      {
         int total = n1 + n2;
         return total;
      }
      static void Main(string[ ] args)
      {
         int num1=13, num2=22,sum;
         Console.Write("Number 1: "num1);
         Console.Write("Number 2: "num2);
         sum = SumNum(num1, num2);
         Console.WriteLine("The sum of two numbers is:,sum);

      }
   }
```

Output:

[End of the Examination]

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مُسَوَّدَة

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Second Semester

Computer Studies

(دراسات کمبیوتر)

(Answer)

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Note: There are 6 pages in this guide

First: Answers of the Multiple-Choice Items (6 Marks):

Item N.	Answer	Mark	Page(s)	Learning Outcome	Learning Level
1	C	1	12		Knowledge
2	A	1	17		Knowledge
3	A	1	26		Knowledge
4	C	1	31		Knowledge
5	B	1	36		Knowledge
6	D	1	41		Knowledge

Question Two: Extended Response (7 - 13)

<table>
<tr><th>Item N.</th><th>Answer</th><th>Mark</th><th>Page(s)</th><th>Learning Outcome</th><th>Learning Level</th></tr>
<tr><td rowspan="3">7</td><td>A.
• Console.WriteLine() is used to output on a new line each time.
• Console.Write () is used to print the output on the same line.</td><td>1</td><td>8</td><td></td><td>Knowledge</td></tr>
<tr><td>B.<table><tr><th>Signal</th><th>uses</th></tr><tr><td>//</td><td>is used in Single-line comments. or part of line</td></tr><tr><td>/*
*/</td><td>is used in Multi-line comments</td></tr></table></td><td>1</td><td>13</td><td></td><td>Knowledge</td></tr>
<tr><td>C.
By declaring Pi as a constant with a value of 3.14, the code can easily use this value whenever it needs to perform calculations involving circles, like finding the area. This makes the code clearer and easier to understand, rather than repeatedly typing out the value of π each time it's needed.</td><td>1</td><td>10</td><td></td><td>Reasoning</td></tr>
<tr><td rowspan="2">8</td><td>A.
1. while (condition)
{
}

2. do
{
}
While (condition);</td><td>1

1</td><td>31-32</td><td></td><td>Knowledge</td></tr>
<tr><td>B.
for (int i=1; i<=10; i++)
{
Console.WriteLine (i * 2);
}</td><td>2</td><td>33</td><td></td><td>Application</td></tr>
</table>

9	for(i=1; i<n; i++) {
	if(arr[i]>max) {
	max = arr[i];
	}
	if(arr[i]<min) {
	min = arr[i];
	}
	}
		2	38-39	تراعى بقية الاجابات	Application

10	A. To reuse code. Define the code once and use it many times.	1	41		Knowledge
	B. • Oman • Muscat _Oman North Batinah_Oman Al Dhahirah _Oman	2	41-43		Application

11	static void Main()
	{
	Console.Write("Enter the type of your car: ");
	string carType = Console.ReadLine();
	
	Console.Write("Enter the price of your car: ");
	int carPrice = Convert.ToInt32(Console.ReadLine());
	
	Console.WriteLine("The price of " + carType + " is " + carPrice);
	}
		4	12	تراعى بقية الإجابات	Application

	A. If a user enters a non-integer value, the program will display an error message and stop running.	1			Knowledge

12	**B.** To calculate the average of five numbers, you need to add two more variables and divide the sum by 5.0.
	
	static void Main(string[] args)
	{
	int num1, num2, num3, num4, num5;
	double average;
	
	Console.WriteLine("Enter your numbers:");
	num1 = Convert.ToInt32(Console.ReadLine());
	num2 = Convert.ToInt32(Console.ReadLine());
	num3 = Convert.ToInt32(Console.ReadLine());
	num4 = Convert.ToInt32(Console.ReadLine());
	num5 = Convert.ToInt32(Console.ReadLine());
	
	average = (num1 + num2 + num3 + num4 + num5) / 5.0;
	Console.WriteLine("");
	Console.WriteLine("The average is: " + average);
	}
		2	20		Application

	C. Using double for the average variable allows for fractional results, providing more accurate averages.	1	20		Reasoning

13	A.
	string shapeType;
	
	switch (numberOfAngles)
	{
	case 0:
	shapeType = "Circle";
	break;
	case 1:
	shapeType = "Line";
	break;
	case 3:
	shapeType = "Triangle";
	break;
	case 4:
	shapeType = "Quadrilateral";
	break;
	default:
	shapeType = "Unknown";
	break;
	}
	
	Other answers:
	
	string shapeType = "";
	
	switch (numberOfAngles)
	{
	case 0:
	shapeType = "Circle";
	break;
	case 1:
	shapeType = "Line";
	break;
	case 3:
	shapeType = "Triangle";
		2	26-28		Application

	break; case 4: shapeType = "Quadrilateral"; break; }				
	B. • Advantages: Readability for multiple conditions, potential performance gains, and ease of maintenance for adding or removing cases.	1		يكتفى بذكر إيجابية واحدة.	Knowledge
	C. when C# reaches a break keyword, it will break out of the switch block. Will stop the execution of more code and case testing inside the block. When a match is found, and the job is done it's time for a break. There is no need for more testing.	1	28		Knowledge

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The Center for Educational Assessment and Measurement (CEAM)

Note: There are 4 pages in this guide

First: Answers of the Multiple-Choice Items (6 Marks):

Item N.	Answer	Mark	Page(s)	Learning Outcome	Learning Level
1	D	1			Application
2	B	1			Application
3	B	1			Knowledge
4	C	1			Knowledge
5	C	1			Knowledge
6	D	1			Reasoning

Second: Answers of Extended Response Answer Items (24 Marks):

Item N.	Correct Answer	Mark	Page(s)	Learning Outcome	Learning Level
7	**A.** **Console.Write("welcome ");** **Console.Write("Ahmed!");** **Console.WriteLine("welcome Ahmed!");**	2			Knowledge
	B. **int** Phone Number= **Convert**.ToInt32(**Consol**.ReadLine());	1			Reasoning
8	A. A while loop checks the condition at the beginning of the loop, while a do-while loop checks the condition at the end of the loop. This means that a do-while loop will always execute at least once, even if the condition is false.	1			Knowledge
	B. **the code correctly: (2 marks)** **int i =10;** **do** **{** **Console.WriteLine(i);** **i--;** **}** **while (i >= 0);** **the outputs: (1 mark)** **10** **9** **8** **7** **6** **5** **4** **3** **2** **1** **0**	3			Application

Item N.	Description of the correct answer	Mark	Page(s)	Learning Outcome	Learning Level
9	**string[] fruits ={" banana", " apples", " orange", " watermelon"," mango"};** **for (int i = 0; i < fruits.Length; i++)** **{** **Console.WriteLine(fruits[i]);** **}**	**2**			Application
10	A. **used to perform certain actions Or To reuse code: define the code once, and use it many times.**	1			Knowledge
	B. avg Find two numbers average X=15 , y=8 11	2			Application

11	// Ask the user to enter their favorite sport
	Console.WriteLine("Please enter your favorite sport:");
	
	// Read the user's input from the console and store it in a variable
	string favoriteSport = Console.ReadLine();
	
	// Display a message confirming the user's choice
	Console.WriteLine("Your favorite sport is: " + favoriteSport);
		4			Application

12	**A.** Relational operators	1			Knowledge

	B.
	int a = 160;
	int b = 159;
	Console.WriteLine(!(a==b)); or a!=b
		1			Application

	C.
	double price = 350;
	double discountAmount = price * 45 / 100 ;
	double AfterDis = price - discountAmount;
	Console.WriteLine(AfterDis + " OR");
		2			Reasoning

Item N.	Description of the correct answer	Mark	Page(s)	Learning Outcome	Learning Level

13	*A.*
	int mark = Convert.ToInt32(Console.ReadLine( ))
	if (mark>60)
	{
	Console.WriteLine("Pass");
	}
	else if (mark >= 50 && mark <= 60)
	{
	Console.WriteLine("you need training to pass");
	}
	else if (mark < 50)
	{
	Console.WriteLine("Fail");
	}
		2			Application

	B. you need training to pass you need training to pass	1			Knowledge
	C. switch	1			Knowledge

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First: Answers for the Multiple-Choice Items (6 Marks):

Item N.	Answer	Mark	Page(s)	Learning Outcome	Learning Level
1	B	1			Application
2	B	1			Application
3	C	1			Knowledge
4	D	1			Knowledge
5	C	1			Knowledge
6	C	1			Reasoning

Second: Answers for the Fill in the Blank Items (6 Marks):

Item N.	Answer	Mark	Page(s)	Learning Outcome	Learning Level
7	double	1			Knowledge
8	&&	1			Knowledge
9	switch case	1			Knowledge
10	break	1			Knowledge
11	10	1			Application
12	3	1			Application

Third: Answers for the Extended Response Items (18 Marks):

Item N.	Correct Answer	Mark	Page(s)	Learning Outcome	Learning Level
13	*The answer should include four of the following uses. Each correct use must be awarded 0.5 marks each (0.5*4=2 Marks)* • Mobile Application • Desktop Applications • Web Applications • Websites • Games • Database Applications	2			Knowledge
14	A. Namespace: used to organize the code, and it is a container for classes and other namespaces	1			Knowledge
	B. Console: a class of the system namespace, which has a WriteLine() method that is used to output/print text.	1			
15	A. Similarities: Both are containers that are used to store a value.	1			Knowledge
	B. Differences: Variables are temporary and the values of the variables may be changed during the execution While constants are permanent, and the values are always fixed according to its declaration.	1			
16	int length=10; ***(0.5 Mark)*** int width=30; ***(0.5 Mark)*** int rec_area = length* width; ***(0.5 Mark)*** Console.WriteLine(rec_area); ***(0.5 Mark)***	2			Application

Item N.	Description of the Correct Answer	Mark	Page(s)	Learning Outcome	Learning Level

17	switch (exit) ***(0.5 Mark)***
	{
	case 1: ***(0.5 Mark)***
	Console.WriteLine("Go to Muscat");
	(0.5 Mark)
	break; ***(0.5 Mark)***
	case 2:
	Console.WriteLine("Go to Salalah");
	break;
	case 3:
	Console.WriteLine("Go to Sohar");
	break;
	case 4:
	Console.WriteLine("Go to Ibri");
	break;
	}
		2			Application

18	Oman	0.5			Application
	Aldhahera_Oman North Batinah_Oman Alburaimi_Oman	1.5			
19	String[] names={"Ahmed", "Noor", "Sarah", "Ali", "Salim"}; ***(0.5 Mark)*** Console.WriteLine(names.Length); ***(0.5 Mark)***	1			Application

	names[1]="Abeer";
	for (int i = 0; i < names.Length; i++) ***(0.5 Mark)***
	{
	Console.WriteLine(names[i]); ***(0.5 Mark)***
		1			

20	arr array values *OR* arr = {99, 95, 93, 89, 87};	1			Reasoning
	Maximum element = 99 ***(0.5 Mark)*** Minimum element = 87 ***(0.5 Mark)***	1			

21	static void sum(int x , int y)
	{
	Console.WriteLine(x + y);
	}
	static void Main(string[] args)
	{
	sum(10 , 7);
	}
	OR
	static void sum(int x , int y)
	{
	int z= x+y;
	Console.WriteLine(z);
	}
	static void Main(string[] args)
	{
	sum(10 , 7);
	}
	OR
		2			Application

```
static int sum(int x, int y)
  {
    return x + y;
  }
  static void Main(string[] args)
  {
    Console.WriteLine(sum(10, 7));
  }
```

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First: Answers for the Multiple-Choice Items (6 Marks):

Item N.	Answer	Mark	Page(s)	Learning Outcome	Learning Level
1	A	1			Application
2	B	1			Application
3	D	1			Knowledge
4	C	1			Knowledge
5	B	1			Knowledge
6	D	1			Reasoning

Second: Answers for the Fill in the Blank Items (6 Marks):

Item N.	Answer	Mark	Page(s)	Learning Outcome	Learning Level
7	//	1			Knowledge
8	/	1			Knowledge
9	else	1			Knowledge
10	Default	1			Knowledge
11	7	1			Application
12	20	1			Application

Third: Answers for the Extended Response Answer Items (18 Marks):

Item N.	Correct Answer	Mark	Page(s)	Learning Outcome	Learning Level
13	Int *(0.5 Mark)* Char *(0.5 Mark)* String *(0.5 Mark)* Bool *(0.5 Mark)*	2			Knowledge
14	• Writeline() prints the output on a new line each time *(0.5 Mark)* • Write() prints the output on the same line *(0.5 Mark)*	1			Knowledge
15	kmPerHour *(0.5 Mark)* st_Oman *(0.5 Mark)* username *(0.5 Mark)* onetime *(0.5 Mark)*	2			Knowledge
16	int x = 30; *(0.5 Mark)* double y = 1.200; *(0.5 Mark)* Console.WriteLine(x * y); *(0.5 Mark)*	1.5			Application

17	int mark; *(0.5 Mark)*
	Console.Write("enter your mark: "); *(0.5 Mark)*
	mark= Convert.ToInt32(Console.ReadLine()); *(0.5 Mark)*
	if (mark >= 80) *(0.5 Mark)*
	{
	Console.WriteLine("pass"); *(0.5 Mark)*
	}
	else *(0.5 Mark)*
	{
	Console.WriteLine("Fail"); *(0.5 Mark)*
	}
		3.5			Application

Item N.	Description of the correct Answer	Mark	Page(s)	Learning Outcome	Learning Level

18	int i = 20;
	while (i < 30) ***(0.5 Mark)***
	{
	Console.WriteLine(i); ***(0.5 Mark)***
	i++; ***(0.5 Mark)***
	}
		1.5			Application

	20 21	1			
19	**4 times** **66** **70**	2			Application
20	Print the odd numbers that are in num1 array. ***(0.5 Mark)*** Num1 array values *Or* num1 = { 1,2,3,4,5,6,7,8,9,10} ***(0.5 Mark)*** 13579 ***(0.5 Mark)***	1.5			Reasoning
21	Output: Number1: 13 Number 2 : 22 the sum of two numbers is: 35	2			Application

General Technical Diploma for Royal Guard of Oman Technical College

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Second Semester

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2021/2022

Marks Scheme

Answers One: Multiple Choice [6 Marks]

Item	1	2	3	4	5	6
Answers	D	C	A	D	A	B

Answers Two: Filling the Gaps [6 Marks]

Item	Answers
7	const
8	Writeline
9	1234
10	false
11	Console.WriteLine("20 is greater than 18);
12	15

Answers THREE: Extended Response -1 [6 Marks]

13. (2 marks)

double
bool
string
char

14. (2 marks)

"A"	==	"A" = True
5	> >=	10 = False
6	!=	6 = False
7.8	<= <	8.7 = True

15. (2 Marks)

```
Console.WriteLine("Choice a capital letter from A to D : ");
string latter = Console.ReadLine();
  switch (latter)
  {
    case "A:"
      Console.WriteLine("Ahmed");
      break;
      case "B:"
      Console.WriteLine("Bader");
      break;
      case "C:"
      Console.WriteLine("Carlos");
      break;
      case "D:"
      Console.WriteLine("Dawood");
      break;
  }
```

Answers Four: Extended Response -2 [6 Marks]

16. (2 marks)

```
Int time = 13;
If (time < 12)
{
Console.WriteLine("Good morning");
}
Else
{
Console.WriteLine("Good evening");
}
```

17. (2 marks)

Answer 1:

```
int i = 15;
while (i > 0)
{
  Console.WriteLine (i);
   i++;
}
```

Answer 2:

```
int i = 15;
while (i < 20)
{
  Console.WriteLine (i);
   i--;
}
```

18. (2 marks)

```
int evensum = 0;
int oddsum = 0;
for ( int i = 1; i <= 10; i++ )
{
   if ( i % 2 == 0)
   {
        evensum = evensum + 1;
   }
   else
    {
        oddsum = oddsum + 1;
   }
}
Console.WriteLine( evensum );
Console.WriteLine( oddsum );
```

Answers Five: Extended Response -3 [6 Marks]

19. (2 marks)

Purpose	Check if the length of set1 and set2 are equal.
Input Data	The set1 and set2 arrays with their values
Expected Output	set1 is not equal to set2

20. (2 marks)

```
name [1] = "Assad";
Console.WriteLine( name);
```

21. (2 marks)

What is the name of the method used in the code?	Oman
What is the output of the code?	Dofar_Oman North Batinah_Oman Musandam_Oman