



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER II  
SESSION 2023/2024**

- COURSE NAME : DOTNET PROGRAMMING
- COURSE CODE : BIE 33103
- PROGRAMME CODE : BIW
- EXAMINATION DATE : JULY 2024
- DURATION : 3 HOURS
- INSTRUCTIONS :
1. ANSWER ALL QUESTIONS
  2. THIS FINAL EXAMINATION IS CONDUCTED VIA
    - Open book
    - Closed book
  3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK

THIS QUESTION PAPER CONSISTS OF ELEVEN (11) PAGES

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**PART A**

**Instructions: Choose the BEST answer.**

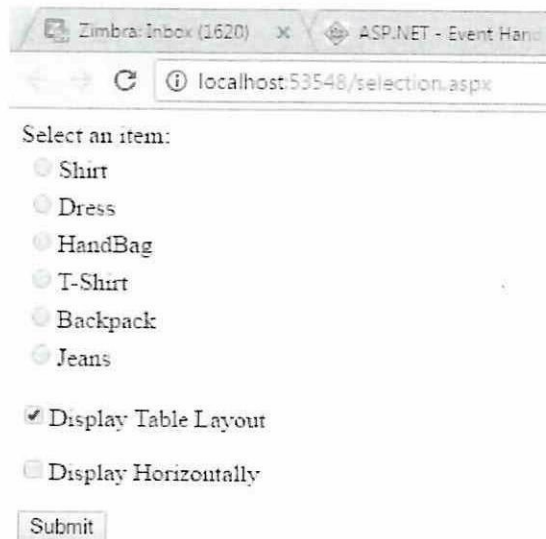
**Q1** Which of the following is supported form controls format.

- I. Text Boxes and Password Boxes
  - II. Check Boxes
  - III. Radio Button
  - IV. Image Submit Button
- (a) I, II and III  
(b) I, II and IV  
(c) II, III and IV  
(d) All of the above

(1 mark)

**Q2** Based on the image **Figure Q2.1**, which type of form control format is used.

- I. Text Boxes and Password Boxes
- II. Check Boxes
- III. Radio Button



**Figure Q2.1**

(1 mark)

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- (a) I, II and III
- (b) I and II
- (c) II and III
- (d) I and III

(1 mark)

**Q3** Which of the following statement is **TRUE** on default event for page object.

- (a) Default Event for page object is load event.
- (b) Default Event for page object is streaming and buffering.
- (c) Default Event for page object is on site editing and formatting for user.
- (d) Default Event for page object is fetching default variable value from the database.

(1 mark)

**Q4** Which of the following is common validation control.

- I. Range Validator
- II. Custom Validator
- III. Design Validator
- IV. Regular Expression Validator

- (a) I, II and III
- (b) I, II and IV
- (c) II, III and IV
- (d) All of the above

(1 mark)

**Q5** What is the advantage of multi-threading in .NET.

- I. Perform operations that consume a large amount of time without stopping the rest of the application.
- II. Maintain responsive user interface while background tasks are executing.
- III. Saves wastage of CPU cycle
- IV. Distinguish tasks of varying priority

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- (a) I, II and III
- (b) I, II and IV
- (c) II, III and IV
- (d) All of the above

(1 mark)

Q6 Based on the following program how many times does thread 1 and 2 will print.

```
using System;
using System.Threading;

class Program
{
    static void Main()
    {
        // Creating two threads
        Thread thread1 = new Thread(DoWork);
        Thread thread2 = new Thread(DoWork);

        // Starting the threads
        thread1.Start("Thread 1");
        thread2.Start("Thread 2");
    }

    static void DoWork(object threadName)
    {
        // Simulating some work
        for (int i = 0; i < 5; i++)
        {
            Console.WriteLine($"Doing work in {threadName} -
Iteration {i + 1}");
            Thread.Sleep(1000); // Sleep for 1 second
        }
    }
}
```

- (a) 3
- (b) 7
- (c) 4
- (d) 5

(1 mark)

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**Q7** Based on the program in **Q6**, why do we need sleep for each multi thread.

- (a) Content stabilization
- (b) To prevent crashes when executing the project.
- (c) For multiple event handling
- (d) None of the above.

(1 mark)

**Q8** Which keyword is used to sort the result set in ascending order?

- (a) Sort
- (b) Order
- (c) Order By
- (d) Sort By

(1 mark)

**Q9** Which of the following is not a reserved Keyword in C#?

- (a) Only
- (b) Void
- (c) base
- (d) switch

(1 mark)

**Q10** What would be the result of the following SQL query: `SELECT UPPER('mysql');`?

- (a) Mysql
- (b) MYSQL
- (c) UPPER
- (d) mysql

(1 mark)

**Q11** Which keyword defines a primary key constraint on a table in MySQL?

- (a) PRIMARY
- (b) MAIN
- (c) UNIQUE
- (d) PRIMARY KEY

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(1 mark)

**Q12** What is the primary purpose of creating an index on a MySQL column?

- (a) To consume more disk space.
- (b) To slow down SELECT query performance.
- (c) To improve the speed of retrieval operations.
- (d) To ensure item is sorted in order.

(1 mark)

**Q13** Based on the code segment below what will be the output?

```
str1='101'  
x=int(str1)  
z=x+400  
print(z)
```

- (a) 101400
- (b) X400
- (c) 501
- (d) X+400

(1 mark)

**Q14** What does the term 'immutable' means in term of string objects?

- (a) We can modify characters included in the string.
- (b) We cannot modify characters contained in the string.
- (c) We cannot perform various operation of comparison, inserting, appending etc.
- (d) None of the above.

(1 mark)

**Q15** To perform comparison operation on strings supported operations are \_\_\_\_\_

- (a) Compare()
- (b) Equals()
- (c) Assignment "=" operator
- (d) All of the above

(1 mark)

**Q16** What will be the output of the following C# program?

```
static void Main(string[] args)
```



```
{  
    String obj = "hello";  
    String obj1 = "world";  
    String obj2 = obj;  
    string s = obj+" "+obj1;  
    Console.WriteLine(s.IndexOf('r'));  
    Console.ReadLine();  
}
```

- (a) 7
- (b) 8
- (c) 9
- (d) 10

(1 mark)

**Q17** What will be the output of the following C# program?

```
static void Main(string[] args)  
{  
    String obj = "hello";  
    String obj1 = "worn";  
    String obj2 = obj;  
    Console.WriteLine(obj + " " + (obj1.Replace('w' , 'c')));  
    Console.ReadLine();  
}
```

- (a) hello hello
- (b) hello worn
- (c) hello corn
- (d) hello

(1 mark)

**Q18** Which of the following is **TRUE** about function?

- I. Function call
- II. Pass and Receive Argument
- III. Return Value

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- (a) I only
- (b) I and II
- (c) I and III
- (d) I, II and III

(1 mark)

**Q19** Why do we use Classes in C#?

- I. Help to manage complex program easier
- II. Useful in information access management
- III. Increase Complexity of overall code
- IV. Provide Reusability

- (a) I, II AND III
- (b) I, III AND IV
- (c) I, II AND IV
- (d) I, II, III AND IV

(1 mark)

**Q20** Which access modifier allow only the class or derived class to access the class or member?

- (a) Protected
- (b) Public
- (c) Private
- (d) Internal

(1 mark)

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**PART B**

**Q21** Answer the following questions.

- (a) Write a C# code segment to save a user's input into a database as in **FigureQ21.1**. Assume that **Table Q21.1** has been created in the database.

**Figure Q21.1**

**Table Q21.1**

ColumnName	Data Type
name	varchar (30)
gender	tinyint (1)
email	varchar (50)
phone_no	varchar (15)

(18 marks)

- (b) Write ASP code segment in the `<form>` `</form>` to produce the output in

**Figure Q21.1.**

(12 marks)

**Q22** Write a C# Code Console Application program to determine whether a given number is a perfect square or not using `if-else` statements.

(5 marks)

**Q23** Write a C# Code Console Application program that calculates the factorial of a given number using a `for` loop.

(5 marks)

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Q24 Draw a form in design view based on Figure Q24.1.

```

        <asp:RequiredFieldValidator
ID="RequiredFieldValidator2" runat="server" ErrorMessage="Last Name
Required" ForeColor="Red" ControlToValidate="Lastname"
ViewStateMode="Enabled"></asp:RequiredFieldValidator>
    </td>
</tr>
<tr>
    <td>
        <asp:Label ID="Label4" runat="server"
Text="Email:"></asp:Label>
    </td>
    <td>
        <asp:TextBox ID="email"
runat="server"></asp:TextBox>
    </td>
    <td>
        <asp:RequiredFieldValidator
ID="RequiredFieldValidator3" runat="server" ErrorMessage="Please
enter a valid email" ForeColor="Red"
ControlToValidate="email"></asp:RequiredFieldValidator>
    </td>
</tr>
<tr>
    <td>
        <asp:Label ID="Label5" runat="server"
Text="From:"></asp:Label>
    </td>
    <td>
        <asp:DropDownList ID="DropDownList1"
runat="server">
            <asp:ListItem>1</asp:ListItem>
            <asp:ListItem>2</asp:ListItem>
            <asp:ListItem>3</asp:ListItem>
        </asp:DropDownList>
        <asp:DropDownList ID="DropDownList2"
runat="server">
            <asp:ListItem>11</asp:ListItem>
            <asp:ListItem>12</asp:ListItem>
            <asp:ListItem>1</asp:ListItem>
        </asp:DropDownList>
        <asp:DropDownList ID="DropDownList3"
runat="server">
            <asp:ListItem>2022</asp:ListItem>
            <asp:ListItem>2023</asp:ListItem>
        </asp:DropDownList>
    </td>
</tr>
<tr>
    <td>
        <asp:Label ID="Label6" runat="server"
Text="To:"></asp:Label>
    </td>
    <td>
        <asp:DropDownList ID="DropDownList4"
runat="server">
    
```

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```

        <asp:ListItem>2</asp:ListItem>
        <asp:ListItem>3</asp:ListItem>
        <asp:ListItem>4</asp:ListItem>
    </asp:DropDownList>
    <asp:DropDownList ID="DropDownList5"
runat="server">
        <asp:ListItem>11</asp:ListItem>
        <asp:ListItem>12</asp:ListItem>
        <asp:ListItem>1</asp:ListItem>
    </asp:DropDownList>
    <asp:DropDownList ID="DropDownList6"
runat="server">
        <asp:ListItem>2022</asp:ListItem>
        <asp:ListItem>2023</asp:ListItem>
    </asp:DropDownList>
    </td>
</tr>
<tr>
    <td>
        <asp:Label ID="Label7" runat="server"
Text="Room type:"></asp:Label>
    </td>
    <td>
        <asp:RadioButtonList ID="RadioButtonList1"
runat="server">
            <asp:ListItem>Single</asp:ListItem>
            <asp:ListItem>Couple</asp:ListItem>
        </asp:RadioButtonList>
    </td>
</tr>
<tr>
    <td>
        <asp:Label ID="Label8" runat="server"
Text="Extra Bedding:"></asp:Label>
    </td>
    <td>
        <asp:CheckBoxList ID="CheckBoxList1"
runat="server">
            <asp:ListItem>Yes</asp:ListItem>
            <asp:ListItem>No</asp:ListItem>
        </asp:CheckBoxList>
    </td>
</tr>
<tr>
    <td>
        <asp:Button ID="Button1" runat="server"
Text="Submit" Width="60px" />
        <asp:Button ID="Button2" runat="server"
Text="Reset" Width="60px" />
    </td>
</tr>
</table>
</div>
</form>
</body>
</html>

```

Figure Q24.1

(10 marks)

- END OF QUESTIONS -

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