

**QUESTION BANK**  
**MODULE NAME: Building Applications Using C#**

**Category - Simple**

**1) Fill in the blank with single option:**

\_\_\_\_\_ are a set of rules that any .NET language should follow to create applications that are interoperable with other languages.

- ☒ **a)** Common Language Specification (CLS)
- ☐ **b)** Common Type System (CTS)
- ☐ **c)** .NET Framework Class Library (FCL)
- ☐ **d)** Code Access Security

**2)** \_\_\_\_\_ is a 16-bit character set that contains all of the characters commonly used in information processing.

- ☒ **a)** Unicode
- ☐ **b)** Bytecode
- ☐ **c)** Executable Code
- ☐ **d)** ASCII Code

**3)** A \_\_\_\_\_ is a multi-dimensional array where one of the specified dimensions can have varying sizes.

- ☐ **a)** One-dimensional array
- ☒ **b)** Jagged array
- ☐ **c)** Two-dimensional array
- ☐ **d)** Structures

**4)** The \_\_\_\_\_ statement allows you to directly execute a labeled statement, or a labeled block of statements.

- ☐ **a)** break
- ☒ **b)** goto
- ☐ **c)** default

☐ d) continue

5) \_\_\_\_\_ class provides useful methods to convert any built-in data type to another built-in data type.

☐ a) System.Console

☒ b) System.Convert

☐ c) System.Text

☐ d) System.Data

### Category - Average

1) **Select the correct answer with single option:**

Which of the following statements are true about Dynamic Language Run-time?

☐ a) Describes how data types are declared, used, and managed in the run-time and facilitates the use of types across various languages.

☐ b) In DLR, compiler converts the source code into executable code that can be run by the users.

☐ c) DLR is the foundation of the .NET Framework. The run-time manages the code at the execution time and performs operations such as memory management, thread management, and remoting.

☒ d) DLR is a run-time environment built on top of the CLR to enable interoperability of dynamic languages such as Ruby and Python with the .NET Framework.

2) **Select the correct answer with multiple options:**

Which of these statements about the language features of C# are true?

☒ a) C# application programming uses objects so that code written once can be reused.

☐ b) The garbage collector allocates and de-allocates memory using automatic memory management.

- ☒ c) Automatic memory management decreases the quality of the code and reduces the performance and productivity.
- ☐ d) Developers create mobile applications for pocket PCs, PDAs, and cell phones using the C# language.

**3) Select the correct answer with single option:**

Identify the type of multi-line comment type used in C#.

- ☐ a) // This is a new comment
- ☐ b) / This is a new comment
- ☒ c) /\* This is a new comment \*/
- ☐ d) /\*\* This is a new comment \*\*/

**4) Select the correct answer with single option:**

Identify the type of XML comment used in C#.

- ☐ a) /\* This is a comment \*/
- ☐ b) /\*\* This is a comment \*\*/
- ☒ c) /// This is a comment
- ☐ d) // This is a comment

**5) Match the following:**

Characters	Description
A) \000	1) Backslash, needed for string literals.
B) \\	2) Matches an ASCII character using a three-digit octal character code.
C) \r	3) Unicode character 0.
D) \0	4) Carriage return.

- ☐ a) A-4, B-2, D-1, C-3

- ☒ **b)** A-2, B-1, C-4, D-3
- ☐ **c)** A-1, B-2, C-3, D-4
- ☐ **d)** A-3, B-2, C-4, D-1

### Category – Difficult

#### 1) Select the correct answer with single option:

Identify the correct output for following code.

```
int num = 456;
Console.WriteLine("{0:C}", num);
Console.WriteLine("{0:D}", num);
Console.WriteLine("{0:E}", num);
```

- ☐ **a)** A compile time error will occur
- ☐ **b)** 456.00  
456  
4.56
- ☒ **c)** \$456.00  
456  
4.560000E+002
- ☐ **d)** \$456  
456.00  
4.560000

#### 2) Select the correct answer with single option:

Identify the correct output.

```
int number, result;
number = 5;
result = 100 * number;
Console.WriteLine("Result is {0} when 100 is multiplied by {1}", result,
number);
result = 150 / number;
Console.WriteLine("Result is {0} when 150 is divided by {1}", +result,
number);
```

- ☐ **a)** Result is 30 when 150 is divided by 5

- ☒ **b)** Result is 500 when 100 is multiplied by 5  
Result is 30 when 150 is divided by 5
- ☐ **c)** A compile time error will occur.
- ☐ **d)** Code will be successfully get compiled, with run-time error.

**3) Select the correct answer with single option:**

Identify the method used by Array class which allows you to create single and multi-dimensional arrays.

- ☐ **a)** Rank()
- ☐ **b)** CreateArray()
- ☒ **c)** CreateInstance()
- ☐ **d)** SyncRoot

**4) Identify the correct code that displays the use of explicit conversion for calculating the area of a square.**

- ☐ **a)**
- ```
double side = 10.5;
int area;
area = (int)(side # side);
Console.WriteLine("Area of the square = {0}", area);
```
- ☐ **b)**
- ```
double side = 10.5;
int area;
area = (int)(side % side);
Console.WriteLine("Area of the square = {0}", area);
```
- ☐ **c)**
- ```
double side = 10.5;
int area;
area = (int)(side + side);
Console.WriteLine("Area of the square = {0}", area);
```
- ☒ **d)**
- ```
double side = 10.5;
int area;
area = (int)(side * side);
Console.WriteLine("Area of the square = {0}", area);
```

**5) Select the correct answer with single option:**

Identify correct output for following code.

```
int valueOne = 10;  
Console.WriteLine((4 * 5 - 3 ) / 6 + 7 - 8 % 5);  
Console.WriteLine((32 < 4) || (8 == 8));  
Console.WriteLine(((valueOne *= 6) > (valueOne += 5)) &&  
((valueOne /= 2) != (valueOne -= 5)));
```

☐ **a)** 10  
False  
True

☐ **b)** 6  
True  
True

☒ **c)** 6  
True  
False

☐ **d)** 8  
False  
False