

17CS564

Fifth Semester B.E. Degree Examination, Dec.2019/Jan.2020 **Dot Net Framework for Application Development**

Time: 3 hrs. Max. Marks: 100

Note: Answer FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain namespaces with programming example. (05 Marks)
 - b. Define variable. Explain the details of variable like declaration, initialization, accepting the value and also rules for it. Give simple examples. (07 Marks)
 - c. Explain the method with syntax. Write a C# program for method overloading and also give explaination for overloading. (08 Marks)

OR

- 2 a. Write a C# program for factorial of a given number using while and for loop. (06 Marks)
 - b. Explain conditional logical operators and write C# program for the same. (06 Marks)
 - c. Describe the try, catch, finally and throw keywords with a programming example. (08 Marks)

Module-2

- 3 a. Define constructors. Explain constructor overloading with programming example. (06 Marks)
 - b. Describe the Static class, Static method and data with an example.
 - c. Explain value type and reference type and boxing and unboxing with programming example.

 (08 Marks)

OR

a. Briefly explain "ref" and "out" keywords with examples.

(05 Marks)

(06 Marks)

- b. Define enumerations with syntax. Write C# program that display month name and its numeric value using enum. (07 Marks)
- c. Describe the structures and jagged arrays with examples.

(08 Marks)

Module-3

5 a. Explain the concept of params array with programming example.

(06 Marks)

- b. Define inheritance. Explain new methods virtual methods and override methods with examples in inheritance. (08 Marks)
- c. Explain the use of extension methods in C# with programming example.

(06 Marks)

OR

- 6 a. Define interface. Demonstrate implementation of an interface with programming example.

 (06 Marks)
 - b. Explain abstract class and abstract method, with syntax and programming example.

(06 Marks)

c. Explain the garbage collector along with working procedure. And also explain the managing system resources by garbage collector. (08 Marks)

Module-4

- 7 a. Describe the implementation of encapsulation by using methods and properties in a class with programming example. (08 Marks)
 - b. List and explain the properly restrictions in C# encapsulation. (05 Marks)
 - c. Define indexer. Demonstrate the use of indexers in C# with programming example.

(07 Marks)

OR

- 8 a. Define Generic. Write a C# program for swapping of two numbers using generic method.

 (06 Marks)
 - b. Define binary tree. Build a binary class by using generics. (05 Marks)
 - c. Define collection class. List different collection classes and explain any one in detail.

(09 Marks)

Module-5

- 9 a. Explain implementation of an enumerator by using iterator. (06 Marks)
 - b. Define delegate. Explain the use of delegate in C# with an programming example. (06 Marks)
 - c. Explain declaring, subscribing, unsubscribing and raising with respect to an event. (08 Marks)

OR

- 10 a. Define LINQ. Explain LINQ to selecting, filtering and ordering data with an example.

 (10 Marks)
 - b. Explain operator overloading constraints. Write a C# program for operator + overloading.
 (10 Marks)

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