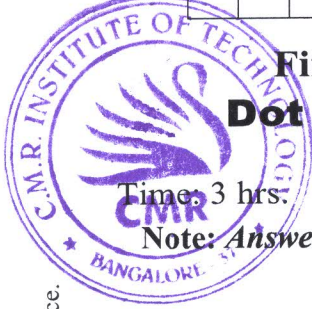


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Fifth Semester B.E. Degree Examination, June/July 2024

Dot Net Framework for Application Development

Time: 3 hrs.

Max. Marks: 100

Note: Answer any 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 explanation 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 encapsulation. Explain the purpose of encapsulation with an example. (05 Marks)
- b. What is a constructor? Explain the necessity of constructor. Write a program to demonstrate the constructor overloading. (10 Marks)
- c. Explain the differences between a structure and class with example. (05 Marks)

OR

- 4 a. Illustrate with the program how to control the accessibility of members by using the public and private keywords. (06 Marks)
- b. Explain with an example how to create a multidimensional array. Distinguish how jagged arrays are better than multidimensional arrays with example. (08 Marks)
- c. Illustrate with neat diagram what is boxing and unboxing. (06 Marks)

Module-3

- 5 a. Define a params array. List out the restrictions on params array with suitable example. (10 Marks)
- b. What is the need for virtual functions? Explain with example. (10 Marks)

OR

- 6 a. Write a C# program to demonstrate multiple interfaces. (08 Marks)
- b. Write a C# program to demonstrate garbage collector. (08 Marks)
- c. Explain in detail dispose method and IDisposable interface. (04 Marks)

Module-4

- 7 a. Define properties. Explain how to create and use properties to provide controlled access to data in an object with example. (06 Marks)
- b. What are the problems with the object type? How can you solve these problems using generic class with example? (08 Marks)
- c. Explain how to create automatic properties. (06 Marks)

OR

- 8 a. Define an indexer. List and explain set of operators provided by a C# that can be used to access and manipulate bits in a int. (10 Marks)
- b. What is generic method? Implement a generic method which is independent of the type of data on which it operates to swap two data. In Main() method display the value of data before swapping and after swapping. Demonstrate program for 'char' and int type values. (10 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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