

CBCS SCHEME

17CS564



Fifth Semester B.E. Degree Examination, July/August 2021 Dot Net Framework for Application Development

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

- 1 a. What is Namespace? How namespace is used to solve name-clashing problem. Explain with example. (06 Marks)
- b. Explain the following with examples:
 - (i) Statements
 - (ii) Identifiers
 - (iii) Keywords(06 Marks)
- c. Write a C# program to find first 'N' Fibonacci Numbers. (08 Marks)
- 2 a. Define scope of a variable. Explain the following with example.
 - (i) Local scope
 - (ii) Class scope(10 Marks)
- b. Write a C# program for adding two numbers using try and catch for the following exceptions:
 - (i) Format exception
 - (ii) Overflow exception(10 Marks)
- 3 a. Differentiate between structure and class with an example. (04 Marks)
- b. Write a C# program for swapping two numbers using overloading concept. (08 Marks)
- c. Explain how arguments are passed as method parameters by using the following:
 - (i) The REF keyword
 - (ii) OUT keyword(08 Marks)
- 4 a. Define an array. Write a C# program to sort the given 'N' numbers in ascending orders using arrays. (10 Marks)
- b. Write a C# program for adding two matrices and store the sum in another matrix. (10 Marks)
- 5 a. Define a params arrays. 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)
- 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)
- 7 a. What are properties? Write a C# program to demonstrate properties considering Class Name: customer, fields as int custid, bool status, string Cname, double Balance. (10 Marks)
- b. Define Indexers. Write a C# program to demonstrate indexers considering Class Name: Employee and fields as int ENo, double salary, string Ename, Job, Dname, Location. (10 Marks)

- 8 a. Define generics. Write a C# program to compare two parameters using generics method. (10 Marks)
- b. List out differences between arrays and collections. (05 Marks)
- c. List out important design consequences of Dictionary <Tkey, Tvalue> class. (05 Marks)
- 9 a. What is an iterator? Write a C# program to implement an enumerator by using an iterator. (10 Marks)
- b. What is a delegate? Explain with example. (05 Marks)
- c. What is an event? Explain with example. (05 Marks)
- 10 a. What is LINQ? Write a C# program that illustrate selecting, filtering and ordering data using LINQ. (10 Marks)
- b. Write a C# program to overload '+' operator to add 2 instances of a class. (10 Marks)

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