

15CS564 Fifth Semester B.E. Degree Examination, July/August 2022 **Dot NET Framework for Application Development** Max. Marks: 80 Note: Answer any FIVE full questions, choosing ONE full question from each module. Module-1 What is Namespace? How namespace is used to solve name - clashing problem. Explain (06 Marks) with example. b. Explain the following with example: i) Statements ii) Identifiers. (04 Marks) c. List out the rules to adhere with switch statement .write a C# program that switches on (06 Marks) string. OR 🐇 Define scope of a variable. Explain the following with an example: 2 (08 Marks) i) Local scope ii) Class scope. b. Write a C# program to add two numbers using try and catch for the following exceptions. (08 Marks) i) Format exception ii) overflow exception. Module-2 Explain overloading methods. Write a C# program for swapping of 2 numbers using 3 (08 Marks) overloading concept. Explain how arguments are passed as method parameters by using the following: ii) out keyword. (08 Marks) i) ref keyword OR Write a C# program to demonstrate boxing and unboxing. (04 Marks) b. Discuss the different ways to copy on array to another array. Give example. (06 Marks) Define Jagged array. Explain how waste memory can be overcome with jagged array. Give (06 Marks) example. Module-3 a. Define Params Array. List out the restrictions on params array with suitable example. (08 Marks) (08 Marks) What is the need for virtual function? Explain with an example. OR Write a C# program to demonstrate multiple interfaces. (06 Marks) Define garbage collection. Write a C# program to demonstrate garbage collector. (06 Marks) Explain in detail dispose method Idisposable interface. (04 Marks)

Module-4

- 7 a. What are properties? Write a C# program to demonstrate properties on considering class name as Customer and fields as int _Custid; bool _stauts; String _Cname; double _Balance.
 (08 Marks)
 - b. Define Indexers. Write a C# program to demonstrate indexer on considering class name as
 Employee and field as int Eno, double salary, String Ename, String Job, String Dname,
 String Location. (08 Marks)

OR

- Define generics. Write a C# program to compare two parameters using generics method. (08 Marks) List out different between arrays and collections. (04 Marks) b.
 - List out important design consequences of the Dictionary < Tkey, Tvalue > class. (04 Marks)

Module-5

- What is an iterator? Write a C# program to implement an enumerator by using an iterator. 9 (05 Marks)
 - What is a delegate? Write a C# program to add two number using delegate. (06 Marks) b.
 - What is an event? Write a C# program to subscribe unsubscribe and raise an event.

(05 Marks)

What is LINQ? Write a C# program that illustrate selecting, filtering and ordering data using 10 (08 Marks) LINQ. **CMRIT LIBRARY** (03 Marks) List out the C# program to overload constraints. BANGALORE - 560 037 (05 Marks) Write a C# program to overload '+' operator to add 2 instances of a class.