

ONE TIME EXIT SCHEME

USN

1CRISCS406

CMRIT LIBRARY
BANGALORE - 560 037

10CS/IS761

Seventh Semester B.E. Degree Examination, April 2018

C# Programming and •NET

Time: 3 hrs.

Max. Marks:100

Note: Answer FIVE full questions, selecting atleast TWO questions from each part.

PART – A

- 1 a. What are the building blocks of •NET platform? Explain the relationship between •NET runtime layer and base class library. (10 Marks)
- b. Explain with a neat diagram the workflow that takes place between source code, given •NET compiler and •NET execution engine. (10 Marks)
- 2 a. Briefly explain the following with reference to compilation of C# program in command prompt. Referencing external assemblies compiling multiple source files with CSC.exe working with CSC.exe response files. Generating bug reports. (10 Marks)
- b. Explain C# preprocessor directives and given any 2 examples. (06 Marks)
- c. Write short notes on System.Environment class. (04 Marks)
- 3 a. Explain the four method parameter modifiers with an example for each. (10 Marks)
- b. Why System.Object is called Master Mode? List and explain any 3 cores members of System.Object. (06 Marks)
- c. Explain boxing and unboxing with suitable example. (04 Marks)
- 4 a. What are the two different role of 'this' keyword. Explain with an example. (06 Marks)
- b. Explain the characteristics of abstract class. (04 Marks)
- c. What is encapsulation? Discuss enforcing encapsulation methods with suitable example. (10 Marks)

CMRIT LIBRARY
BANGALORE - 560 037

PART – B

- 5 a. What is meant by object life time? Explain garbage collection optimization process in C#. (10 Marks)
- b. Write a program to illustrate custom exceptions in C#. (10 Marks)
- 6 a. Explain how to build ICloneable object in C# with example. (10 Marks)
- b. What is an interface? Explain any four interfaces of System.Collection. (10 Marks)
- 7 a. What are delegates in C#? Differentiate between synchronous and asynchronous delegates with an example. (10 Marks)
- b. Discuss the advanced keywords of C# :
i) checked ii) sizeof iii) unsafe iv) stackalloc. (10 Marks)
- 8 a. Describe the two conceptual views of net assembly with neat diagram. (10 Marks)
- b. Explain the steps involved in building multifile assembly with an example. (10 Marks)

CMRIT LIBRARY
BANGALORE - 560 037

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.