

USN

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10CS/IS761

Seventh Semester B.E. Degree Examination, July/August 2022
C# Programming and .NET

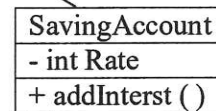
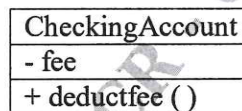
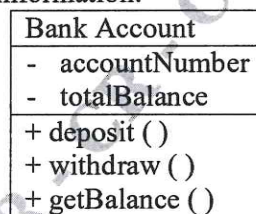
Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

PART - A

- 1 a. What is CTS? Explain in detail CTS types with suitable example. (10 Marks)
b. What is an Assembly Differentiate Single file Assembly and Multifile assembly? (05 Marks)
c. What are the key features of C# language? (05 Marks)
2 a. Explain the working of mscorlib.dll (07 Marks)
b. List and explain the various output options available with C# compiler. Also illustrate how to compile multiple source files. (08 Marks)
c. What is response file? Explain the working of csc.exe response files? (05 Marks)
3 a. Explain the following terms :
(i) Static class
(ii) Static constructor.
(iii) Params keyword
(iv) Unboxing. (10 Marks)
b. Differentiate Value types and Reference types with suitable code for assignment operation. (10 Marks)
4 a. What is property in C#? Explain in detail read-only, write-only and static property with example. (10 Marks)
b. Write a program for the following inheritance hierarchy :
(i) Declare objects of checking account and savings account.
(ii) Initialize the members using suitable constructor.
(iii) Read and display all the information.



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(10 Marks)

PART - B

- 5 a. List and explain the members of System.GC type. (05 Marks)
b. Explain how garbage collection is optimized in .NET platform. (05 Marks)
c. What is exception in C#? Illustrate the use of System.Exception base class in throwing generic exception. (10 Marks)

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.

- 6 a. Explain different ways of invoking interface members at object level. (10 Marks)
b. Distinguish between shallow and deep copy as applied to cloning. Write suitable program to demonstrate a custom class using Icloneable interface. (10 Marks)
- 7 a. What do you understand by Delegates and events in C#. Explain with suitable examples. (10 Marks)
b. Write a C# program to overload binary '+' and '-' operators and perform addition and subtraction program on objects. (10 Marks)
- 8 Explain the following terms:
a. Generic Classes.
b. Strong Names.
c. Building Multifile assembly.
d. System.Collections.Generic Namespace. (20 Marks)

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