10CS/IS761

Seventh Semester B.E. Degree Examination, Dec.2018/Jan.2019
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? Give the relationship between •Net runtime layer and base class library. **(08 Marks)**
   b. Explain the role of assembly manifest. **(04 Marks)**
   c. Explain CTS, briefly explain any three types defined by the CTS, with example. **(08 Marks)**

2 a. Explain output centric options of the C# complier. **(05 Marks)**
   b. Explain C# preprocessor directives, with examples. **(06 Marks)**
   c. What is command line debugger? Write a C# program to display the following information using system environment class.
   i) Current directory of application
   ii) Operating system version
   iii) Logical drives
   iv) Host name
   v) •Net version. **(09 Marks)**

3 a. Explain the following terms, with an example, with reference to C#
   i) for each   ii) ref   iii) params   iv) out   v) do/while loop. **(10 Marks)**
   b. Explain boxing and unboxing with examples. **(06 Marks)**
   c. Explain core members of system object. **(04 Marks)**

4 a. Explain the three pillars of object oriented programming in C# with an example. **(12 Marks)**
   b. Explain with examples, static properties in C#. **(04 Marks)**
   c. Write a note on abstract classes. **(04 Marks)**

PART – B

5 a. Explain core members of system exception type. **(08 Marks)**
   b. What is meant by object life time? Explain the garbage collection optimization process in C#. **(08 Marks)**
   c. Write C# application to illustrate multiple exceptions. **(04 Marks)**

6 a. What is an interface? Explain the three methods to obtain interface references. **(08 Marks)**
   b. How to build cloneable and comparable objects in C#. **(06 Marks)**
   c. With an example explain any four inter faces of system collection. **(06 Marks)**

7 a. With an example, discuss the advanced keywords of C# : checked, unchecked unsafe. Stack alloc and size of. **(10 Marks)**
   b. What are delegates? Explain the members of system multicast delegates : write a sample program to implement delegate. **(10 Marks)**

8 a. Explain the C# support for cross language inheritance, with example. **(06 Marks)**
   b. Write a short note on process a multifile assembly. **(06 Marks)**
   c. With an example. Explain the role of delayed signing. **(08 Marks)**

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