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Reg. No. :

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Question Paper Code: 59208

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

Elective

Computer Science and Engineering

15UCS908- C# AND .NET FRAMEWORK

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (5x 1 = 5 Marks)

- Which of the following utilities can be used to compile managed assemblies into processor-specific native code? CO1 -R
(a) gacutil (b) ngen (c) sn (d) dumpbin
- Which of the following .NET components can be used to remove unused references from the managed heap? CO1 -R
(a) Common Language Infrastructure (b) CLR
(c) Garbage Collector (d) Class Loader
- Code that targets the Common Language Runtime is known as CO1 -R
(a) Unmanaged (b) Distributed (c) Legacy (d) Managed Code
- A derived class can stop virtual inheritance by declaring an override as CO2 -R
(a) Inherits (b) Extends (c) Sealed (d) Inheritable
- What is the connection string's key / value pair for using Windows Authentication in SQL Server 2000 and SQL Server 2005? CO5 -R
(a) 1, 2 (b) 1, 2, 3 (c) 2, 3 (d) 1, 4

PART – B (5 x 3= 15Marks)

- Explain nullable types in C#. CO1- U
- Write a program in C# Sharp to declare a simple structure. CO1 -U

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| 8. | What is Managed or Unmanaged Code? | CO1 -U |
| 9. | Define subscriber design pattern with an example. | CO2 -R |
| 10. | Develop a web application to display Registration number. | CO5 -App |

PART – C (5 x 16= 80Marks)

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| 11. | (a) Write a C# program that determines a student's grade. The program will read three types of scores (quiz score, mid-term score, and final score) and determine the grade based on the following rules: (i) If the average score $\geq 90\%$ \Rightarrow grade=A (ii) If the average score $\geq 70\%$ and grade=B (iii) If the average score $\geq 50\%$ and grade=C (iv) If the average score grade=F. | CO1- App | (16) |
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Or

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| | (b) Write a C# program to find the minimum and maximum element of an array. The array should have both positive and negative elements. Irrespective of the elements, your program should find maximum number when all numbers are made positive and minimum number when all numbers are made negative. | CO1- App | (16) |
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| 12. | (a) Explain various operator overloading in C# with example program. | CO2 -U | (16) |
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| | (b) Discuss about constructors and its types with example programs. | CO2 -U | (16) |
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| 13. | (a) Write a program to accept a number from the user and throw an exception if the number is not an even number. | CO3 -App | (16) |
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| | (b) Consider a student class with feet and inches as attributes which describes the height of the student. Write a C# program to overload the + operator and to find the average of N students. | CO3- App | (16) |
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| 14. | (a) Develop the window application for user valid Login ID using handling exception. | CO4 -App | (16) |
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| | (b) Write a Program to create web based application for adding controls and events in asp.net. | CO4 -App | (16) |
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15. (a) Develop a menu-driven application using File Menu option and about Menu Option. Demonstrate the execution model using an example. CO5 -App (16)

Or

- (b) Create an application How is the book ASP.NET with c# by Vipul Prakashan?" Give the user three choices. CO5 -App (16)
- (i) Good
 - (ii) Satisfactory
 - (iii) Bad. Provide a VOTE button. After user votes, present the result in percentage using labels next to the choices.

