Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May– 2017**

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| **Sub. Code:** | **14CS2054** | **Duration :** | **3hrs** |
| **Sub. Name :** | **C# AND .NET PROGRAMMING** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| Q. No. | Sub Div. | Questions | Course  Outcome | Marks |
| 1. | a. | Write a C# program to illustrate inheritance including abstract, virtual and override method. | CO1 | 15 |
|  | b. | How will you compensate the multiple inheritance concepts in C#? | CO1 | 5 |
| (OR) | | | | |
| 2. |  | Demonstrate overloading the operators +, \*, /, - , ==, implicit and explicit in the context of Vector class. | CO1 | 20 |
| 3. |  | What are the steps involved in creating delegates? Write a C# program to create a delegate which represents any four mathematical functions and all the functions to be done on a single object call. | CO1 | 20 |
| (OR) | | | | |
| 4. | a. | How will you handle exception in C#? Explain with suitable example. | CO1 | 14 |
|  | b. | What are the two ways to achieve pass by reference in C#? Differentiate both with suitable example. | CO1 | 6 |
| 5. | a. | What is a jagged array? Explain its use with simple example. | CO1 | 6 |
|  | b. | Create a custom attribute named ProgramName and VersionNumber. Write a C# program to apply and retrieve these attributes using reflection. | CO1 | 14 |
| (OR) | | | | |
| 6. |  | Explain the mechanism to allocate the memory for the various data types and for freeing of unmanaged resources with suitable diagrammatic representation. | CO1 | 20 |
| 7. |  | Elucidate in detail about synchronization mechanisms with appropriate examples. | CO1 | 20 |
| (OR) | | | | |
| 8. | a. | Explain about the master pages in ASP.NET. | CO2 | 10 |
|  | b. | Design a web page with ASP.NET validation controls and explain its syntax. | CO2 | 10 |
|  | | **Compulsory:** |  |  |
| 9. |  | Create a windows form application using ADO.NET for Students Information System. Insert only the marks which are greater than or equal to zero and less than or equal to hundred and permit updations only for the register numbers greater than 100. | CO2 | 20 |

ALL THE BEST