



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Fifth Semester, Master of Computer Applications (MCA)

Semester End Examination; Dec - 2017/Jan - 2018

Programming using C# & .NET

Time: 3 hrs

Max. Marks: 100

Note: Answer **FIVE** full questions, selecting **ONE** full question from each unit.

UNIT - I

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|------|--|----|
| 1 a. | Explain the features of .NET framework. | 10 |
| | b. Explain the following : | |
| | i) CLR ii) .NET class library iii) Metadata and assemblies. | 10 |
| 2 a. | List out the differences between value type and reference type. | 5 |
| | b. With the help of a general syntax, explain the working of switch statement. Give suitable example. | 5 |
| | c. With the help of a general syntax, explain the working of for-each loop structure. Give suitable example. | 5 |
| | d. Explain different data types used in C#. | 5 |

UNIT - II

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|------|---|----|
| 3 a. | Write the purpose of any five namespaces. | 5 |
| | b. Explain different types of method parameters modifiers. | 10 |
| | c. Explain the static property. | 5 |
| 4 a. | Write a C# program to count the number which is divisible by 5 and 8 given in a matrix. | 10 |
| | b. With the help of a general syntax, explain structs. | 5 |
| | c. What is the need of constructors? Illustrate parameterized constructors. | 5 |

UNIT - III

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|------|---|----|
| 5 a. | With the help of a suitable example, explain accessors and mutators. | 10 |
| | b. With the help of a suitable example, explain sealed class and sealed method. | 10 |
| 6 a. | With the help of a suitable example, explain overloading and overriding. | 10 |
| | b. Explain the following with simple examples : | |
| | i) throw ii) try-catch iii) try-finally. | 10 |

UNIT - IV

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|------|---|----|
| 7 a. | What is meant by events? Design a simple event driven GUI. | 10 |
| | b. Explain the following components: | |
| | i) Label ii) TextBox iii) Button iv) CheckBox. | 10 |
| 8 a. | Write a note on control properties and layout. | 10 |
| | b. Write a menu-driven application to change text font and color. | 10 |

UNIT - V

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| 9 a. | What is DataSet? Explain its components. | 10 |
| | b. Explain the steps required to retrieve the data from SQL server. | 10 |
| 10 a. | Explain the steps required to build the Webtime application. | 10 |
| | b. Write a note on cookies and session. | 10 |

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