

B.Sc. Third Year (Information Technology) CBCS Pattern Semester-V  
**001 - Elective Paper-I - .NET Framework and C# .NET**

P. Pages : 2

Time : Three Hours



**GUG/W/23/13130**

Max. Marks : 40

- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw well labelled diagram wherever necessary.
  3. Avoid vague answers.

**Either:**

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|----|----|--|---|
| 1. | a) | Explain Common Language Runtime (CLR). | 4 |
|    | b) | Write a note on MSIL.                  | 4 |

**OR**

- |  |    |  |   |
|--|----|--|---|
|  | c) | Discuss the origin of .NET Technology. | 4 |
|  | d) | Explain Common Type System in detail.  | 4 |

**Either:**

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|----|----|--|---|
| 2. | a) | What is C#? Explain in detail features of C#.  | 4 |
|    | b) | Write a program in C# to calculate sum of all integers that are 100 and less than 200 that are divisible by 7. | 4 |

**OR**

- |  |     |  |   |
|--|-----|--|---|
|  | c)  | What is object and class? Explain with simple program. | 4 |
|  | d)  | Explain following:                                     | 4 |
|  | i)  | Inheritance.   |   |
|  | ii) | Polymorphism.  |   |

**Either:**

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|----|----|--|---|
| 3. | a) | What is event? Explain types of Event.               | 4 |
|    | b) | Explain double buffering technique in windows forms. | 4 |

**OR**

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|--|----|---|---|
|  | c) | What do you mean by delegates? Explain its types. | 4 |
|  | d) | Explain various namespace in C#.                  | 4 |

**Either:**

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|-----------|----|--|----------|
| <b>4.</b> | a) | Give the difference between web services and windows services. | <b>4</b> |
|           | b) | Explain features and structure of Assemblies.                  | <b>4</b> |

**OR**

- |           |     |  |          |
|-----------|-----|--|----------|
|           | c)  | Discuss Distributed application in C#.     | <b>4</b> |
|           | d)  | Explain following.                         | <b>4</b> |
|           | i)  | Remote data object.                        |          |
|           | ii) | Data access object.                        |          |
| <b>5.</b> |     | Solve all the questions.                   |          |
|           | a)  | Explain Just-In-Time Compilation in short. | <b>2</b> |
|           | b)  | Explain Type conversion in C#.             | <b>2</b> |
|           | c)  | Write a short note on Error handling.      | <b>2</b> |
|           | d)  | Explain Unsafe mode in C#.                 | <b>2</b> |

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