Roll No. | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (ECE) (Sem.–6)

C# AND .NET PROGRAMMING

Subject Code : BTEC-906D-18

M.Code : 79380

Date of Examination : 20-05-2025

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION - A

1. **Write briefly :**

a) What is an event listener in C#?

b) Explain the purpose of generics in C#.

c) Describe the difference between managed and unmanaged memory.

d) What is an abstract class?

e) Explain the purpose of localization in .NET.

f) Define ADO.NET and its key functions.

g) What is SAX and how does it differ from DOM?

h) What is an assembly in .NET?

i) Explain the concept of app domains in .NET.

j) Define bubbling and tunneling events.

SECTION - B

2. Discuss the role of delegates and events in C# with examples.

3. Explain the use of lambda expressions with multiple scenarios in C# programming.

4. Explain the concept of indexers in C# and provide an example of index overloading.

5. Describe threading in C# focusing on its advantages in concurrent applications.

6. Describe the process of using ADO.NET for data access in a C# application.

SECTION - C

7. Explain the methods used for handling errors and exceptions in C#, including custom exceptions and exception chaining.

8. Provide an in-depth comparison of polymorphism, inheritance and interfaces in C#, including code examples to highlight their differences and usage.

9. Provide a detailed overview of networking for mobile devices using the .NET Compact Framework, including XAML for mobile UIs and compact data storage solutions:

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.