22MCA3C9L

Sl. No.

M.C.A. III Semester Degree Examination, April/May - 2024

C# and ASP.Net.

(NEP)

Time : 3 Hours | Maximum Marks : 70

*Note : Answer **any five** of the following questions with question **No.1 Compulsory**.*

1. (a) Discuss the key components and functionalities of the .NET Architecture. **7**

(b) What are data types in C# programming language, and how do they play a crucial role in defining the type of data that variables can hold ? Also discuss about value data type in C#. **7**

2. (a) What is a class in C# programming, and how does it serve as a blueprint for creating objects with shared characteristics and behaviours ? **7**

(b) How can data be initialized and displayed through a method in C# ? Explain with an example. **7**

3. (a) Define structure. List out and explain the properties of structure with an example. **7**

(b) Write a note on garbage collection. Write a C# program that demonstrates the usage of the **System.GC.Collect()** method. **7**

4. (a) Explain the difference between checked and unchecked exceptions in C#. **7**

(b) How do the **try**, **catch**, and **finally** blocks help in handling exceptions in C# ? **7**

5. (a) Explain the benefits of using ASP.NET for web development. **7**

(b) Differentiate between server controls and HTML controls in ASP.NET. **7**

6. (a) What is a C# destructor, and how does it differ from other class members like constructors and methods ? **7**

(b) What is an abstract class in C# and how does it differ from a regular class ? **7**

7. (a) Explain the steps involved in declaring and raising an event in C#. **7**

(b) Differentiate between ViewState and SessionState. **7**

8. Write short notes on the following :

(a) Variables and Constants **5**

(b) Run-time Polymorphism **5**

(c) Class and Objects **4**

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