Paper Id: | 206701 | **Roll No:** | | | | | | | | | | | |

MCA (INT)
(SEM-VII) THEORY EXAMINATION 2019-20
.NET FRAMEWORK AND C#

Time: 3 Hours   *Total Marks: 100*

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1.   **Attempt *all* questions in brief.**   **2 x 10 = 20**

a.	Give reasons why c# is a safe language.
b.	Difference between string and string builder class. Give an example for any five string operations.
c.	What makes .NET Platform on which programs written in different languages can cooperate seamlessly?
d.	What is the role of .NET class library in .NET application development?
e.	Explain Identifiers, variables, constant, static, read-only and Literals with example.
f.	What is MSIL? Briefly discuss the working of JIT compiler.
g.	How an event is defined and handled in c# application.
h.	Discuss the role of assessors in defining properties of a class (set and get).
i.	What is jagged array?
j.	Differentiate between Managed & Unmanaged Code.

SECTION B

2.   **Attempt any *three* of the following:**   **10x3=30**

a.	Explain attributes and types of attributes.
b.	What is the GDI (Graphical Device Interface) class in c# language? Explain different features supported by GDI classes in c# language.
c.	How the system collection is used in c# language? Explain its indexer property with an Example.
d.	Discuss the importance of ADO.Net. How ADO.Net implement disconnected approach using Dataset Class?
e.	What do you mean by web enabled application? How you make an application web enabled using C#? Explain various steps.

SECTION C

3.   **Attempt any *one* part of the following:**   **10x1=10**

a.	Why delegates are used in C#? Show the implementation of multicast delegates with the help of an example.
b.	What is the use of web services? Explain he steps to develop a web method and use it in web application.

4.   **Attempt any *one* part of the following:**   **10x1=10**

a.	Explain main features of generic. Differentiate C# generic with C++ templates.
b.	Discuss the main features of assemblies. Write a program to build a private assembly in C#.

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5.   **Attempt any *one* part of the following:**   **10x1=10**

a.	Discuss the role of window service and normally where you found it in your computer. Write down the steps of creating and deploying a window service.
b.	What is the difference in between File class and FileInfo class? Write a program to illustrate reading and writing operations on a text file.

6.   **Attempt any *one* part of the following:**   **10x1=10**

a.	Explain the different types of inheritance available with c# language and ambiguity problem with the help of examples.
b.	Discuss the support available in C# for developing distributed applications? What are the steps required to create a distributed application?

7.   **Attempt any *one* part of the following:**   **10x1=10**

a.	What is a thread? How can we create and start a thread in C#? How can we set the priorities of threads; illustrate through an example.
b.	How many types of access modifiers of class available in .Net? Illustrate through Example.