BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)

B.C.A. Sem-V:: SUMMER - 2022 SUBJECT: C# PROGRAMMING

Day : Friday
Date : 27-05-2022

S-18789-2022

Time: 02:00 PM-05:00 PM

Max. Marks: 60

N.B.

- 1) Q.4 from Section I is **COMPULSORY**.
- 2) Answer any **TWO** questions from Q.1, Q.2, Q.3 in Section I.
- 3) Answer any **TWO** questions from Q.5, Q.6, Q.7 in Section II.
- 4) All questions carry **EQUAL** marks.
- 5) Answers to both the sections should be written in the **SAME** answer books.
- 6) Draw neat and labelled diagrams **WHEREVER** necessary.

SECTION - I

- Q.1 Answer the following ($6 \times 2 = 12 \text{ Marks}$)
 - **a)** What is the important components of DOT NET? Explain what is common type system (CTS)?
 - **b)** Differentiate between C++ and C#.
- Q.2 Answer the following ($6 \times 2 = 12 \text{ Marks}$)
 - a) Explain the use of private constructor and static constructor in C#
 - b) Explain the textbox and label control in visual studio with example.
- Q.3 Explain the following ($6 \times 2 = 12 \text{ Marks}$)
 - a) What are the data providers in ADO.NET framework?
 - **b)** What is custom exception and how to raise it in C#?
- Q.4 Write short notes on ANY THREE of the following ($4 \times 3 = 12 \text{ Marks}$)
 - a) Just in time compilation
 - **b)** Type conversion in C#
 - c) Nesting of classes in C#
 - d) Data adapter
 - e) Using exception for debugging

SECTION - II

- Q.5 Answer the following ($6 \times 2 = 12 \text{ Marks}$)
 - a) Write a c# program to find if a given string is palindrome or not?
 - b) Write a c# program to find the sum of digits of a given positive integer.
- Q.6 Answer the following ($6 \times 2 = 12 \text{ Marks}$)
 - a) Write a c# program to find the factorial of a given number.
 - **b)** Write a c# program to print transpose of matrix.
- Q.7 Explain the following ($6 \times 2 = 12 \text{ Marks}$)
 - a) Write a c# program to find the roots of quadratic equation $ax^2 + bx = c = 0$, read coefficient a,b,c from users.
 - **b)** Write a c# program to demonstrate use of copy constructors?

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