

**BACHELOR OF COMPUTER APPLICATIONS (CBCS-2019 COURSE)**  
**B.C.A. SEM - V : WINTER :- 2021**  
**SUBJECT: C# PROGRAMMING**

**Day : Thursday**  
**Date 24-02-2022**

**W-21889-2021**

**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 x 2 = 12 Marks**)
- a) Describe common language specification and Common language runtime?
  - b) Discuss the benefits of DOT NET approach.
- Q.2** Answer the following ( **6 x 2 = 12 Marks**)
- a) What is a nested class in C#? State its default type. When a nested class can be used?
  - b) What is Window forms? Explain its components?
- Q.3** Explain the following ( **6 x 2 = 12 Marks**)
- a) What is data adapter object in ADO.NET?
  - b) Explain exception handling mechanism.
- Q.4** Write short notes on **ANY THREE** of the following ( **4 x 3 = 12 Marks**)
- a) DOT NET framework
  - b) Inheritance and polymorphism
  - c) Data repeater
  - d) Types of errors in C#
  - e) Mathematical function in C#

**SECTION – II**

- Q.5** Answer the following ( **6 x 2 = 12 Marks**)
- a) Write a c# program to reverse the order of words in a given string?
  - b) Write a c# program to find if a number is prime or not?
- Q.6** Answer the following ( **6 x 2 = 12 Marks**)
- a) Write a c# program to swap two number.
  - b) Write a c# program to calculate simple interest.
- Q.7** Explain the following ( **6 x 2 = 12 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 use a parameterized constructor to create an object.

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