#### Tribhuvan University

#### Institute of Science and Technology

2080

ΧX

Bachelor Level / Third Year /Six Semester/Science Computer Science and Information Technology (CSC 367) (NET Centric Computing)

Full Marks: 60 Pass Marks: 24 Time: 3 hours.

(NEW COURSE)

Candidates are required to give their answers in their own words as for as practicable. The figures in the margin indicate full marks.

### Group A

# Attempt any TWO questions

 $[2 \times 10 = 20]$ 

1. How do you cache the information of the client and what are its uses? Create a table named BAG(ID, Brand, Price, Date). Perform the following operations using Entity Framework Core.

[3 + 7]

- a. Update the Price of those Book to 2000 which are published on 2022.
- b. Delete the Book which are published in 1981
- c. Retrieve the Brand of Book having price greater than 500
- 2. How do you manage state on stateless HTTP? How do you validate form using JQuery? Describe with your own assumptions. [4 + 6]
- 3. What are the needs for partial class and sealed class? How do you relate delegate with events? State the steps to deploy .NET core applications. [3+2+5]

### Group B

## Attempt any **EIGHT** questions.

 $[8 \times 5 = 40]$ 

4. Describe the importance of MVC pattern in designing web applications.

[5]

5. How do you create controller? Mention some requirements for rendering HTML.

[3+2]

What is the role of adapter class in ADO.NET? List some features of URL routing.

[3+2]

Explain the chances of SQL injection attack with a scenario.

[5]

Define claim and policy in terms of authorization. How and when do you create hidden fields?

[2 + 3]

9. Mention the two types of services managed by IoC container and how they are registered?

- 10. Differentiate between generic and non-generic collections. Write a simple program to create generic class with generic constructor, generic member variable, genericproperty and generic method. [2+3]
- 11. What are tag helpers? What tag helper provides?

[2 + 3]

12. Write short notes on (Any TWO)

[2.5 + 2.5]

- a. Lambda Expression
- b. Cross Site Request Forgery
- c. Single Page Application