

Tribhuvan University
Institute of Science and Technology
2081



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

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

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

Section A

Attempt any **TWO** questions.

[2 × 10 = 20]

1. Distinguish between collections and generics. What are named and positional attribute parameters? Write a program to create your own exception when the user gives subject name other than "C#". [3 + 2 + 5]
2. How do you create controller? Illustrate with an example. Describe the procedure of rendering HTML with Razor with a scenario. [5 + 5]
3. List some advantages of Entity Framework over ADO.NET. Assume a database named "IOST" with a table FACULTY(Course_Name, Course_ID, No_of_Semester, fee). Insert some records using ADO.NET and retrieve the fee of records having name CSIT. [3 + 7]

Section B

Attempt any **FIVE** questions.

[5 × 5 = 25]

4. Describe the procedure of deploying .NET core application. [5]
5. How does ASP.NET core MVC provides patterns-based way to build dynamic website? Explain. [5]
6. Define state management. Explain the parts of state management on the client side. [1 + 4]
7. Write a program to validate the form that takes input user name, password and phone number using JQuery. All fields must be non-empty and phone number must contain exactly 10 digits. [5]
8. Distinguish between roles and policies. Explain about Kestrel web server in ASP.NET core. [2 + 3]
9. Describe the life cycle of Dependency Injection container. [5]
10. Create a class named EMPLOYEE as super class and ENGINEER and DOCTOR as sub class. Make your own assumptions as properties and methods. [5]
11. What is the task of ORM? Discuss about open redirect attacks. [2 + 3]
12. Write short notes on [2×2.5=5]
 - a) Polymorphism
 - b) Hidden Field.