

Tribhuvan University
Institute of Science and Technology
2078

Bachelor Level / Sixth Semester / Science

Computer Science and Information Technology(CSC367)

((TU CSIT) NET Centric Computing)

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Full marks: 60

Pass marks: 24

Time: 3 hours

Group A

Attempt any two questions [2*10=20]

1. Differentiate between struct and enum. Why do we need to handle the exception? Illustrate with an example with your own customized exception.[2+8]
2. Explain the procedure for building, running and deploying .NET core applications. Write a program to show the possibility of SQL injection attack.[5+5]
3. What are the advantages of stateless HTTP in ASP.NET core application? Create a method to insert a record (3, "John", 12000) onto the table Employee having fields EmployeeId(int), Name varchar(200), Salary(int) using Entity Framework.[4+6]

Group B

Attempt any EIGHT questions[8*5=40]

4. Define open redirect attacks. Discuss about docker and containerization.[2+3]
5. What is named and positional attribute parameters? Describe the .Net architecture design and principles.[2+3]
6. Explain about request and response message format with example.[5]
7. Why do we need to validate the form? How can you use react for this?[2+3]
8. Define data model and data context. What does URL routing mean?[2+3]
9. Give an example to manage the session state.[5]
10. How can you prevent SQL injection attack? Explain with an example.[5]
11. Explain the process to deploy the core application.[5]
12. Write short notes on (any two)[2*2.5=5]
 - a. LINQ
 - b. Open Redirect Attacks
 - c. Query string