

Tribhuvan University

Faculty of Humanities & Social Sciences OFFICE OF THE DEAN 2024

Bachelor in Computer Applications Course Title: Dot Net Technology

Code No: CACS 302

Semester: V

Full Marks: 60

Pass Marks: 24

Time: 3 hours

Candidates are required to answer the questions in their own words as far as possible.

Group B

Attempt any SIX questions.

 $[6 \times 5 = 30]$

- 2. What is managed code? Give reason to justify the statement "DOT NET framework is platform independent and Language interoperability". [1+4]
- What is optional parameter? Write a C# program which stores values in two enumerations,
 Department and College. It uses two functions to display the data contained in Department and College enumerations.
- 4. What is difference between value type and reference type in C#? Explain the concept of boxing and unboxing with suitable program. [2+3]
- 5. What is interface? Explain with suitable program, how interface can be used to perform multiple inheritance?
 [1+4]
- 6. What are use of finalizer in C#? Explain with suitable program, how base keyword is used to call member function and constructor of parent class? [1+4]
- 7. What are keyword used in exception handling? Write a C# program to handle IndexOutOfRangeException and InvalidCastException. [1+2+2]
- 8. What is query syntax in LINQ? Explain the standard query operators "select", "contains", "orderBy" and "where" in LINQ with suitable example [1+4]

Group C

Attempt any TWO questions.

 $[2 \times 10 = 20]$

- 9. a) What is an event? Explain with suitable program, how event is handled in C#. [1+4]
 - b) What is Lambda expression? Explain the concept of generic delegates with suitable program. [1+4]
 - 10. How this keyword is used to declare indexer? Write C# program to overload unary (++) and relational (= =) operator. [2+4+4]
 - What are component of ASP.NET? Explain various validation server control in ASP.NET with suitable program.