

Fifth Semester B.E. Degree Examination, June/July 2024

Dot Net Framework for Application Development

Time: 3 hrs. Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. What is a console application? Explain the steps to create a console application in visual studio 2015. (07 Marks)
 - b. Explain the purpose of namespaces and assemblies.

(04 Marks)

c. Explain the steps to create a graphical application and create a user interface to print the greeting message. (05 Marks)

OR

2 a. Define local scope and class scope.

(02 Marks)

- b. Create a method that calculates all arithmetic operations (+, -, *, /, %(mod)) and explain the procedure to generate a method stub wizard that help you to write methods. Explain the use of visual studio 2015 debugger to step in and step out of method call as they run. (10 Marks)
- Explain the exception handling using try and catch statements.

(04 Marks)

Module-2

3 a. Demonstrate Boxing and unboxing with code snippets.

(06 Marks)

b. Discuss two different operators to cast data safely in C#. Give examples.

(06 Marks) (04 Marks)

c. Differentiate between class and structure.

OR

- 4 a. What is a gagged array? Write a C# program to create a gagged array, populate this array with values and to display contents of the same. (06 Marks)
 - b. Demonstrate ref and out parameters with suitable examples for each.

(10 Marks)

Module-3

5 a. Discuss params array and params objects.

(04 Marks)

b. Illustrate the concept of method overriding with an example.

(06 Marks)

c. What is an interface? Describe explicitly implementing an interface with an example.

(06 Marks)

OR

6 a. Differentiate between abstract class and sealed class.

(05 Marks)

b. Explain how garbage collector works.

(05 Marks)

c. Implement the using statement and the IDisposable interface, with an example.

(06 Marks)

Module-4

7 a. Explain the use of get and set assessors.

(06 Marks)

b. Describe an interface containing properties by using structure and classes.

(04 Marks)

c. What is an indexer? Differentiate between indexers and arrays.

(06 Marks)

OR

Explain in detail about generics. 8

(02 Marks)

b. Explain the functionality provided in the different collection classes available within the (14 Marks) NET frame work.

Module-5

Implement an enumerator by using a simple iterator. 9

(08 Marks)

What is a delegate? Create an instance of a delegate initialized with a single specific method. (08 Marks)

OR

BANGALORE - 560 037

Explain Ordering, Grouping and aggregating data using LINQ expression. (08 Marks) 10 What is operator overloading? Write a program to overload binary operator '+' to add two

(08 Marks) complex numbers.