

K21U 0869

Reg. No. :

IV Semester B.Sc. Degree (CBCSS – Sup./Imp.) Examination, April 2021 (2014 – '18 Admissions) Core Course in Computer Science 4B05CSC : C# and .NET Programming

Time : 3 Hours

Max. Marks: 40

 $(8 \times 0.5 = 4)$

SECTION – A

- 1. **One** word answer.
 - a) _____ is the simultaneous execution of multiple tasks or processes over a certain time interval.
 - b) MSIL stands for _____
 - c) _____ can contain methods, properties, indexers and events as its members.
 - d) The Virtual Machine component of the .NET Framework is termed as _____
 - e) An ______ is an incomplete class or special class we can't be instantiated.
 - f) A _____ is a delegate that holds the references of more than one function.
 - g) The keyword ______ is used to declare a list of named integer constants.
 - h) Web services are small units of code, designed to handle a limited set of tasks. using _____ based communication protocols.

SECTION – B

Write short notes on **any seven** of the following questions.

 $(7 \times 2 = 14)$

- 2. What are the uses of indexers ?
- 3. List the difference between abstract classes and interfaces.
- 4. What is the relationship between specialization and generalization ?

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- 5. Mention three important features of *properties* in C#.Net.
- 6. List out any 4 applications of C#.
- 7. What are structures ?
- 8. What is meant by CTS?
- 9. Justify that operators need to be overloaded. List the operators that cannot be overloaded.
- 10. What is the purpose of sealed classes in C# ?
- 11. What is .NET assembly ?

SECTION – C

Answer any four of the following questions.

- 12. Narrate the process of handling events through delegates.
- 13. Explain multitasking and multithreading in C# with suitable examples.
- 14. Write in brief about operator overloading.
- 15. Describe exception handling in C#.
- 16. Explain properties, arrays and indexers.
- 17. State about Web form events in detail.

SECTION – D

Answer an essay on **any two** of the following questions.

 $(2 \times 5 = 10)$

 $(4 \times 3 = 12)$

- 18. Develop a C# application that demonstrates dynamic polymorphism.
- 19. Write a program to find the area of various shapes like rectangle, circle and triangle using the concept of interfaces.
- 20. Illustrate with an example how the events are generated and handled in C#.
- 21. Explain Web Form Life cycle.