

AMIETE – CS/IT (NEW SCHEME)

Time: 3 Hours

DECEMBER 2011

Max. Marks: 100

NOTE: There are 9 Questions in all.

- Please write your Roll No. at the space provided on each page immediately after receiving the Question Paper.
- Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.
- The answer sheet for the Q.1 will be collected by the invigilator after 45 Minutes of the commencement of the examination.
- Out of the remaining EIGHT Questions, answer any FIVE Questions. Each question carries 16 marks.
- Any required data not explicitly given, may be suitably assumed and stated.

Q.1 Choose the correct or the best alternative in the following: (2×10)

a. C# supports _____ response files.

- (A) Single (B) Multiple
(C) Two (D) None of these

b. Which of the following is not a building block of the .Net platform?

- (A) CLR (B) CTS
(C) CLS (D) CMS

c. C# Param keyword allows you to send various number of arguments as a _____ parameter.

- (A) double (B) single
(C) multiple (D) none of these

d. A _____ block can be used to handle any Exception generated within a try box.

- (A) Try (B) Catch
(C) Finally (D) none of these

e. The method whose references are encapsulated into a delegate instance are known as _____.

- (A) Event handlers (B) System methods
(C) Delegate methods (D) none of these

f. Interfaces are used as _____ whose properties are inherited by classes.

- (A) Sub-classes (B) Private -classes
(C) Super- classes (D) none of these

Code: AC73/AT73 Subject: C# AND .NET

- g. In .NET, references types are_____.
- (A) Classes (B) Interfaces
(C) Pointers and Delegates (D) All of the above
- h. The .NET offers a complete suite for developing and deploying applications. The suite consists of_____.
- (A) .NET products (B) .NET Services
(C) .NET Framework (D) All of the above
- i. Constructors are_____.
- (A) member functions of a class
(B) same name as its class
(C) special methods that allow control over the initialization of objects
(D) All of the above
- j. When an object is created from a template, it is called_____.
- (A) message (B) instantiation
(C) property (D) collection
-

**Answer any FIVE Questions out of EIGHT Questions.
Each question carries 16 marks.**

- Q.2** a. What are component libraries? How do they differ from executable application programs? (8)
- b. “.NET Framework is a completely new model for building systems on the windows family of operating system and other OS now and in future” Comment. (8)
- Q.3** a. How a bug report can be generated by C# compiler. Explain with the help of an example. (8)
- b. What is the difference between “running” an application versus “debugging” an application? (8)
- Q.4** a. Write a program to display following output:
1
2 2
3 3 3
4 4 4 4 (8)
- b. Define arrays. Explain with the help of an example. (8)
-

- Q.5** a. What are nested Classes? Is it possible to define a type within the scope of another type? (8)
- b. Define a base class called car with following members:
(i) An integer data member to store the size of the car
(ii) A float data member to store the speed of the car
(iii) An integer data member to store the strength of the car
(iv) A method to MoveLeft() (8)
- Q.6** a. What do you understand by exception? Why exception handlers are required? Explain this with the help of an example. (8)
- b. What do you understand by object lifetime? Write a program to illustrate this. (8)
- Q.7** a. What is an interface? What are the major differences between a class and an interface? (8)
- b. Write a program in C# where an interface Area is implemented by two classes Circle and Square. (8)
- Q.8** a. What is Multicast Delegate in C#? Explain with the help of an example. (8)
- b. What are events? Differentiate between Delegates and Events. (8)
- Q.9** Write short notes on the following: (8×2)
- (i) Private assemblies
(ii) Strong names