

2019

Time : 3 hours

Full Marks : 80

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

The questions are of equal value.

*Answer any **five** questions in which*

Q. No. 1 is compulsory.

1. Choose the correct answer from the following :
 - (a) Which of the following access specifier in **c#** allows a ~~class~~ to hide its member variable and member function from other function and objects :
 - (i) Public
 - (ii) Private
 - (iii) Protected
 - (iv) Internal

(b) _____ are reserved and can not be used as Identifiers.

- (i) Keywords (ii) Literal
- (iii) Variable (iv) Identifiers

(c) _____ Parameters are used to pass results back to the calling method.

- (i) Input (ii) Reference
- (iii) Value (iv) Output

(d) Which of the following is the root of the .NET type hierarchy ?

- (i) System.Object (ii) System.Base
- (iii) System.Root (iv) System.Parent

(e) Defining two methods with the same name but with different parameters is called :

- (i) Loading (ii) Overloading
- (iii) Multiplexing (iv) Duplexing

(f) Which of the following .NET components can be used to remove unused references from the managed heap ?

- (i) Class Loader (ii) Garbage collector
- (iii) CTS (iv) CLR

(g) The theory of _____ implies that user can control the access to a class, method, or variable.

- (i) Data hiding

(ii) Encapsulation

(iii) Information hiding

(iv) Polymorphism

(h) Arrays in c# are _____ objects.

- (i) Reference (ii) Logical
- (iii) Value (iv) Arithmetic

2. Describe access modifiers in c# ? What is a virtual method in c# ?

3. Write difference between the following :

- (a) Is and as operator in c#
- (b) Interface and Abstract class
- (c) Late binding and early binding
- (d) Boxing and unboxing

4. (a) Write a program in c# to display the height value in an array.

(b) Write a program in c# to display the following :

12345

1234

123

12

1

5. What is method overloading and method overriding. Explain it with example.
6. What is the constructor chaining in c# 2. How it is implemented in inheritance ? Explain it with example. What is virtual method in c# ?
7. What do you understand by value types and Reference types in c# ? What is the use of the "using" statement in c# ?
8. What is Array in c# ? Explain its different types and write difference between Regular array and Tagged array.
9. Write short notes on the following :
- (a) File System Controls
 - (b) Multithreading
 - (c) Indexer
 - (d) Sealed class

