Question 1 of 10
Assume that there are 2 members, field1 and foo, declared in class A and there are also 2 members, field2 and foo, declared in class B, and A is the superclass of B, how many members in class A and class B?
- A. A has 4 members while B has 2 members
- B. A and B have 2 members
- C. A and B have 4 members
- D. A has 2 members while B has 4 members

Question 2 of 10
Assume that A is the super class of B and C, and variables x, y, z are declared as follows,
A. x;
B. y;
C. z;
Select valid assignment statement(s)
- A. x = new B;
- B. y = new A;
- C. z = new B;
- D. z = new A;
- E. x = new C;

Question 3 of 10
Assume that class A is the super class of class B and class B is the super class of class C. There is method foo declared in class A and it is overridden in class B and also in class C (i.e. foo is declared in B and C). Variables x, y, z are declared as follows,
A. x;
B. y;
C. z;
Match the call to the set of its targets.
A. (foo in C)
B. (foo in A, foo in B, foo in C)
C. (foo in A, foo in B)
D. (foo in B, foo in C)
- B. 1. x.foo();
- D. 2. y.foo();
- A. 3. z.foo();
- C. 4. Not match

Question 4 of 10
Assume that class A is the super class of class B, and class B is the super class of class C. There are declarations of static method foo in class A, B and C.
- A. B.foo() may call just foo defined in B
- B. A.foo() may call foo defined in A, in B or in C
- C. B.foo() may call foo defined in B or in C
- D. A.foo() may call just foo defined in A
- E. B.foo() may call foo defined in A or in B
Question 5 of 10
To declare a static field `sfield` for class ABC in Scala, how must programmers write?

- A. Add the following line in object ABC,
  ```scala
  static var sfield:Int
  ```
- B. Add the following line in class ABC,
  ```scala
  var sfield:Int
  ```
- C. Add the following line in object ABC,
  ```scala
  var sfield:Int
  ```
- D. Add the following line in class ABC,
  ```scala
  static var sfield:Int
  ```

Question 6 of 10
In Scala, to declare class ABC as a subclass of class DEF, how must programmers write?

- A. class ABC: DEF
- B. class DEF extends ABC
- C. class ABC extends DEF
- D. class DEF super ABC

Question 7 of 10
Given the following code in Scala,
```scala
abstract class A { def cal(x:Int):Int }
trait B extends A { abstract override def cal(x:Int):Int = super.cal(x * 2)}
trait C extends A {abstract override def cal(x:Int):Int = super.cal(x + 1)}
class D extends A {def cal(x:Int):Int = x}
val t = new D with B with C
println(t.cal(5))
```
What is the printed value?

- A. 5
- B. 11
- C. 12
- D. Other value
Question 8 of 10
How to define a member which can only be accessed inside the object? For example, class X {
    var f: Int // <= how to declare this field to be accessed just inside an object of X
    var m = new X
    // this.f is ok but m.f is wrong in the code of class X
}

- A. var f: Int
- B. protected[this] var f: Int
- C. protected var f: Int
- D. private var f: Int
- E. private[this] var f: Int

Reset Selection

Question 9 of 10
How to create an object of a case class in Scala? For example, for the following case class, case class Rational(n: Int, d: Int)
Please select the shortest correct answer.

- A. Rational(2,3)
- B. object Rational(2,3)
- C. new Rational(2,3)
- D. create Rational(2,3)

Question 10 of 10
which is/are the declaration(s) of A such that the new A is INVALID?

- A. trait A
- B. case class A
- C. abstract class A
- D. class A