**Question 1**

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| Which of the given code fragments will compile without errors? |
| **Select all correct answers :** | |

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|  | **a.** | float f=3.5; |
|  | **b.** | double d=3.5; |
|  | **c.** | int i=10; |
|  | **d.** | int e,f=10; |
|  | **e.** | char c = "C"; |

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| **Question 2** |
| What will be the result of compiling and running the following code? |
| abstract class Employee {  String name;  public abstract float calcIncome();  }  class Manager extends Employee {  public void hire(String who) {  System.out.println( who + " hired by " + name );  }    public void fire(String who) {  System.out.println( who + " fired by " + name );  }  }    public class ManagerCheck {  public static void main(String args[]) {  Manager me = new Manager();  me.hire("newbie");  me.fire("nobody");  }  } |
| **Select the correct answer :** | |

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|  | **a.** | who hired by name and who fired by name |
|  | **b.** | newbie hired by name and nobody fired by name |
|  | **c.** | newbie hired by null and nobody fired by null |
|  | **d.** | Compilations fails |

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| **Question 3** |
| According to the UML diagram - what is the correct Java representation of Animal and Cat ? |
| http://www.scja.de/images/q-3-3.gif |
| **Select the correct answer :** | |

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|  | **a.** | class Cat implements Animal { } |
|  | **b.** | class Animal extends Cat { } |
|  | **c.** | class Animal implements Cat { } |
|  | **d.** | class Cat extends Animal { } |
|  | **e.** | UML diagram is invalid |

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| [Answer](http://www.scja.de/scja-mock-exam-section3.html) |
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| **Question 4** |
| Methods defined in a java interface are public and abstract by default. |
| **Select the correct answer :** | |

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|  | **a.** | The statement is true. |
|  | **b.** | The statement is false. |

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| **Question 5** |
| Which of the following statements about abstract classes in java are true ? |
| **Select all correct answers :** | |

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|  | **a.** | A class must be declared abstract if one or more methods are abstract. | | |
|  | **b.** | A class can be declared abstract if one or more methods are abstract. | | |
|  | **c.** | A class can be declared abstract without abstract methods. | | |
|  | **d.** | An abstract class cannot be instanciated. | | |
| **Question 6** | | |
| Which of the following options will successfully compile the following code ? | | |
| public class CompileCheck {  public static void main(String args[]) {  System.out.println("SCJA Exam");  }  } | | |
| **Select the correct answer :** | | | |

|  |  |  |
| --- | --- | --- |
|  | **a.** | javac CompileCheck |
|  | **b.** | javac CompileCheck.class |
|  | **c.** | java CompileCheck.java |
|  | **d.** | javac CompileCheck.java |
|  | **e.** | java CompileCheck.class |

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| **Question 7** |
| Which of the following statements are true ? |
| **Select all correct answers :** | |

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|  | **a.** | A class can extend more than one class |
|  | **b.** | A class can implement more than one interface |
|  | **c.** | An interface can extend more than one interface |
|  | **d.** | An interface can implement more than one interface |

**Question 8**

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| Which of the following primitives are known as the floating point datatypes ? |
| **Select all correct answers :** | |

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|  | **a.** | int |
|  | **b.** | short |
|  | **c.** | double |
|  | **d.** | float |
|  | **e.** | char |

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| **Question 9**  What will be the output of the program?  class A  {  final public int GetResult(int a, int b) { return 0; }  }  class B extends A  {  public int GetResult(int a, int b) {return 1; }  }  public class Test  {  public static void main(String args[])  {  B b = new B();  System.out.println("x = " + b.GetResult(0, 1));  }  } |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | x = 0 | | |  | B. | |  | | --- | | x = 1 | | |  | C. | |  | | --- | | Compilation fails. | | |  | D. | |  | | --- | | An exception is thrown at runtime. | | |

**Question 10**

Which of the following lines will compile without warning or error.

1) float f=1.3;   
2) char c="a";   
3) byte b=257;   
4) boolean b=null;   
5) int i=10;

4 and 5

**Question 11**

Which of the following will compile without error

1)

import java.awt.\*;  
package Mypackage;  
class Myclass {}

2)

package MyPackage;  
import java.awt.\*;  
class MyClass{}

3)

/\*This is a comment \*/  
  
package MyPackage;  
import java.awt.\*;  
class MyClass{}

Option 2 and 3

**Question 12**

What will happen when you compile and run the following code? 

public class MyClass{  
 static int i;  
 public static void main(String argv[]){  
 System.out.println(i);  
 }  
}

1) Error Variable i may not have been initialized   
2) null   
3) 1   
4) 0

Answer: 4

**Question 13**

What will happen if you try to compile and run the following code?

public class Q {  
 public static void main(String argv[]){  
 int anar[]=new int[]{1,2,3};  
 System.out.println(anar[1]);  
 }  
}

1) 1   
2) Error anar is referenced before it is initialized   
3) 2   
4) Error: size of array must be defined

Choice 3

**Question 14**

What will happen if you try to compile and run the following code?

public class Q {  
 public static void main(String argv[]){  
 int anar[]=new int[5];  
 System.out.println(anar[0]);  
 }  
}

1) Error: anar is referenced before it is initialized   
2) null   
3) 0   
4) 5

choice: 3.

**Question 15**

What will be the result of attempting to compile and run the following code?

abstract class MineBase {  
 abstract void amethod();  
 static int i;  
}  
public class Mine extends MineBase {  
 public static void main(String argv[]){  
 int[] ar=new int[5];  
 for(i=0;i < ar.length;i++)  
 System.out.println(ar[i]);  
 }  
}

1) a sequence of 5 0's will be printed   
2) Error: ar is used before it is initialized   
3) Error Mine must be declared abstract   
4) IndexOutOfBoundes Error

I think it will not compile as it subclass mine has not implemented the abstract method of the super class.