

1. Given the following class, which of the following lines of code can replace INSERT CODE HERE to make the code compile? (Choose all that apply)

```
public class Price {  
    public void admission() {  
        INSERT CODE HERE  
        System.out.println(amount);  
    }  
}
```

- A. int amount = 9L;
- B. int amount = 0b101;
- C. int amount = 0xE;
- D. double amount = 0xE;
- E. double amount = 1_2_.0_0;
- F. int amount = 1_2_;
- G. None of the above.

Answer: B,C,D

2. Which of the following are true? (Choose all that apply)

```
public class Bunny {  
    public static void main(String[] args) {  
        Bunny bun = new Bunny();  
    }  
}
```

- A. Bunny is a class.
- B. bun is a class.
- C. main is a class.
- D. Bunny is a reference to an object.
- E. bun is a reference to an object.
- F. main is a reference to an object.

G. None of the above.

Answer:A,E

3. Which represent the order in which the following statements can be assembled into a program that will compile successfully? (Choose all that apply)

A: class Rabbit {}

B: import java.util.*;

C: package animals;

A. A, B, C

B. B, C, A

C. C, B, A

D. B, A

E. C, A

F. A, C

G. A, B

Answer: C,D,E

4. Suppose we have a class named Rabbit. Which of the following statements are true?(Choose all that apply)

1: public class Rabbit {

2: public static void main(String[] args) {

3: Rabbit one = new Rabbit();

4: Rabbit two = new Rabbit();

5: Rabbit three = one;

6: one = null;

7: Rabbit four = one;

8: three = null;

9: two = null;

10: two = new Rabbit();

11: System.gc();

12: } }

- A. The Rabbit object from line 3 is first eligible for garbage collection immediately following line 6.
- B. The Rabbit object from line 3 is first eligible for garbage collection immediately following line 8.
- C. The Rabbit object from line 3 is first eligible for garbage collection immediately following line 12.
- D. The Rabbit object from line 4 is first eligible for garbage collection immediately following line 9.
- E. The Rabbit object from line 4 is first eligible for garbage collection immediately following line 11.
- F. The Rabbit object from line 4 is first eligible for garbage collection immediately following line 12.

Answer: B,D

5. What is true about the following code? (Choose all that apply)

```
public class Bear {  
    protected void finalize() {  
        System.out.println("Roar!");  
    }  
  
    public static void main(String[] args) {  
        Bear bear = new Bear();  
        bear = null;  
        System.gc();  
    }  
}
```

- A. finalize() is guaranteed to be called.
- B. finalize() might or might not be called
- C. finalize() is guaranteed not to be called.
- D. Garbage collection is guaranteed to run.
- E. Garbage collection might or might not run.
- F. Garbage collection is guaranteed not to run.
- G. The code does not compile.

Answer: B,E

6. What does the following code output?

```
1: public class Salmon {  
2:     int count;  
3:     public void Salmon() {  
4:         count = 4;  
5:     }  
6:     public static void main(String[] args) {  
7:         Salmon s = new Salmon();  
8:         System.out.println(s.count);  
9:     }  
10:}
```

- A. 0
- B. 4
- C. Compilation fails on line 3.
- D. Compilation fails on line 4.
- E. Compilation fails on line 7.
- F. Compilation fails on line 8.

Answer: A

7. Which of the following are true statements? (Choose all that apply)

- A. Java allows operator overloading.
- B. Java code compiled on Windows can run on Linux.
- C. Java has pointers to specific locations in memory.
- D. Java is a procedural language.
- E. Java is an object-oriented language.
- F. Java is a functional programming language.

Answer: B,E

8. Which of the following are true? (Choose all that apply)

- A. javac compiles a .class file into a .java file.
- B. javac compiles a .java file into a .bytecode file.
- C. javac compiles a .java file into a .class file.
- D. Java takes the name of the class as a parameter.
- E. Java takes the name of the .bytecode file as a parameter.
- F. Java takes the name of the .class file as a parameter.

Answer: C,D

9. Which of the following are true? (Choose all that apply)

- A. A local variable of type boolean defaults to null.
- B. A local variable of type float defaults to 0.
- C. A local variable of type Object defaults to null.
- D. A local variable of type boolean defaults to false.
- E. A local variable of type boolean defaults to true.
- F. A local variable of type float defaults to 0.0.
- G. None of the above.

Answer: G

10. Which of the following legally fill in the blank so you can run the main() method from the command line? (Choose all that apply)

`public static void main()`

- A. `String[] _names`
- B. `String[] 123`
- C. `String abc[]`
- D. `String _Names[]`
- E. `String... $n`
- F. `String names`
- G. None of the above.

Answer: A,C,D,E