

**1.Which of the following declarations does not compile?**

- A. double num1, int num2 = 0;
- B. int num1, num2;
- C. int num1, num2 = 0;
- D. int num1 = 0, num2 = 0;

**2.What is the output of the following?**

```
public static void main(String... args)
{
String chair, table = "metal";
chair = chair + table;
System.out.println(chair);
}
```

- A. metal
- B. metalmetal
- C. nullmetal
- D. The code does not compile.

**3.Which is correct about an instance variable of type String?**

- A. It defaults to an empty string.
- B. It defaults to null.
- C. It does not have a default value.
- D. It will not compile without initializing on the declaration line.

**4.Which of the following is not a valid variable name?**

- A. \_blue
- B. 2blue
- C. blue\$
- D. Blue

**5.Which best describes what the new keyword does?**

- A. Creates a copy of an existing object and treats it as a new one
- B. Creates a new primitive
- C. Instantiates a new object
- D. Switches an object reference to a new one

**6.Which is the first line to trigger a compiler error?**

```
double d1 = 5f; // p1
double d2 = 5.0; // p2
float f1 = 5f; // p3
float f2 = 5.0; // p4
```

- A. p1
- B. p2
- C. p3
- D. p4

**7.Which of the following lists of primitive types are presented in order from smallest to largest data type?**

- A. byte, char, float, double
- B. byte, char, double, float
- C. char, byte, float, double
- D. char, double, float, bigint

**8.Which of the following is not a valid order for elements in a class?**

- A. Constructor, instance variables, method names
- B. Instance variables, constructor, method names
- C. Method names, instance variables, constructor
- D. None of the above: all orders are valid.

**9.Which of the following lines contains a compiler error?**

```
String title = "Weather"; // line x1
int hot, double cold; // line x2
System.out.println(hot + " " +title); // line x3
```

- A. x1
- B. x2
- C. x3
- D. None of the above

**10.Of the types double, int, and short, how many could fill in the blank to have this code output 0?**

```
public static void main(String[] args)
{
    defaultValue;
    System.out.println(defaultValue);
}
```

- A. None
- B. One
- C. Two
- D. Three

11. Which type can fill in the blank?

```
pi = 3.14;
```

- A. byte
- B. float
- C. double
- D. short

12. Which of the following is not a valid class declaration?

- A. class building {}
- B. class Cost\$ {}
- C. class 5MainSt {}
- D. class \_Outside {}

13. Which is correct about a local variable of type String?

- A. It defaults to an empty string.
- B. It defaults to null.
- C. It does not have a default value.
- D. It will not compile without initializing on the declaration line.

14. Given the following code, fill in the blank to have the code print bounce.

```
public class TennisBall
{
    public TennisBall()
    {
        System.out.println("bounce");
    }
    public static void main(String[] slam)
    {

    }
}
```

- A. TennisBall;
- B. TennisBall();

- C. new TennisBall;
- D. new TennisBall();

**15. Which of the following correctly assigns animal to both variables?**

- I. String cat = "animal", dog = "animal";
- II. String cat = "animal"; dog = "animal";
- III. String cat, dog = "animal";
- IV. String cat, String dog = "animal";

- A. I
- B. I, II
- C. I, III
- D. I, II, III, IV

**16. Which of the following does not compile?**

- A. double num = 2.718;
- B. double num = 2.\_718;
- C. double num = 2.7\_1\_8;
- D. None of the above; they all compile.

**17. Fill in the blank to make the code compile:**

```
package animal;
public class Cat
{
    public String name;
    public static void main(String[] meow)
    {
        Cat cat = new Cat();
        = "Sadie";
    }
}
```

- A. cat.name
- B. cat-name
- C. cat.setName
- D. cat[name]

**18. Which is a valid constructor for this class?**

```
public class TennisBall
{
}
```

- A. `public TennisBall static create() { return new TennisBall(); }`
- B. `public TennisBall static newInstance() { return new TennisBall():}`
- C. `public TennisBall() {}`
- D. `public void TennisBall() {}`

**19. What is the output of the following?**

```
package beach;
public class Sand
{
    public Sand()
    {
        System.out.print("a");
    }
    public void Sand()
    {
        System.out.print("b");
    }
    public void run()
    {
        new Sand();
        Sand();
    }
    public static void main(String... args)
    {
        new Sand().run();
    }
}
```

- A. a
- B. ab
- C. aab
- D. None of the above