

Objective Type Questions

1 Which of the following segment can be omitted in a for loop initialization?

- | | |
|-------------------|----------------------|
| a. test condition | b. update expression |
| c. All of these | |

2 Which of the following loop executes at least once?

- | | |
|-------------|------------------|
| a. while | b. for |
| c. do-while | d. None of these |

3 Which of the following is an exit-controlled loop?

- | | |
|----------|------------------|
| a. while | b. do-while |
| c. for | d. None of these |

4 Which of the following is an invalid loop?

- | | |
|-------------|----------|
| a. repeat | b. for |
| c. do-while | d. while |

5 Which of the following statement causes complete termination of the loop?

- | | |
|-------------|--------------|
| a. continue | b. jump |
| c. break | d. terminate |

6 Which of the following is an empty loop?

- | | |
|-----------------------------|-----------------------|
| a. for(i = 0; i < 5; i++); | b. while (i < 5) i++; |
| c. do {i++;} while (i < 5); | d. All of these |

7 Which of the following is not a jump statement in Java?

- | | |
|-----------|-------------|
| a. break | b. jump |
| c. return | d. continue |

8 How many times will the following code print "Java"?

```
for (int i = 1; i <= 5; i ++);  
{  
    System.out.println("Java");  
}
```

- | | |
|------|------|
| a. 0 | b. 1 |
| c. 5 | d. 4 |

9 What will be the output of the following code?

```
public static void main(String args[])  
{  
    int sum = 0;  
    for (int i = 1; i <= 5; i++)  
    {  
        sum = i;  
    }  
    System.out.println(sum);  
}
```

- | | |
|-------|-------|
| a. 15 | b. 21 |
| c. 5 | d. 0 |

10 How many times will the following loop execute?

```
public static void main(String args[])  
{  
    int sum = 0;  
    for (int i = 10; i > 5; i++)  
    {  
        sum += i;  
    }  
    System.out.println(sum);  
}
```

- | | |
|-------|------------------|
| a. 5 | b. 0 |
| c. 15 | d. Infinite loop |

11 Which of the following for loops will cause the body of the loop to be executed 10 times?

- a. for (int i = 0; i <= 10; i++)
- b. for (int i = 1; i < 10; i++)
- c. for (int i = 10; i > 1; i--)
- d. for (int i = 0; i < 10; i++)

12 How many times will the following loop execute?

```
public static void main(String args[])
{
    int i = 1;
    while (i < 10)
        if (i++ % 2 == 0)
            System.out.println(i);
}
```

- a. 4
- b. 5
- c. 0
- d. 10

13 Which of the following are conditional constructs?

- a. if-else
- b. if-else-if ladder
- c. switch statement
- d. All of these

14 Which operator cannot be used with if-else statement?

- a. <=
- b. ||
- c. &&
- d. ? :

15 What will be the output of the following code?

```
int size = 2;
if (size < 0)
    System.out.println("Small");
else if (size == 0)
    System.out.println("Medium");
else
    System.out.println("Large");
```

- a. Small
- b. Large
- c. Medium
- d. Runtime error

16 What will be the output of the following code?

```
int fruit = 3;
switch (fruit + 1)
{
    case 1:
        System.out.println("Banana");
        break ;
    case 2:
        System.out.println("Apple");
        break ;
    case 3:
        System.out.println("Orange");
        break ;
    default :
        System.out.println("Fruitless");
}
```

- a. Orange
- b. Banana
- c. Apple
- d. Fruitless

17 Predict the output of the following code snippet:

```
int a = 1;  
int b = 2;  
if (a == b)  
    System.out.println ("Both values are equal");  
else  
    System.out.println ("Values are not equal");
```

- a. Both values are equal
- b. Incorrect use of the == operator
- c. Values are not equal
- d. No output

18 Consider the following code snippet:

```
if ( c > d)  
    x = c;  
else  
    x = d;
```

Choose the correct option if the code mentioned above is rewritten using the ternary operator:

- a. $x = (c > d) ? c : d;$
- b. $x = (c > d) ? d : c;$
- c. $x = (c > d) ? c : c;$
- d. $x = (c > d) ? d : d;$

19 if ((a > b) && (a > c)), then which of the following statements is true?

- a. a is the largest number.
- b. b is the largest number.
- c. c is the largest number.
- d. b is the smallest number.

20 Consider the following code snippet:

```
int val = 2;  
switch (val)  
{  
    case 1: System.out.println("Case 1");  
    break;  
    case 2: System.out.println("Case 2");  
    break;  
    default: System.out.println("No match found");  
    break;  
}
```

Which of the following statements is correct?

- a. case 1 will be executed.
- b. case 2 will be executed.
- c. default will be executed.
- d. both case 1 and 2 will be executed.

21 A sequence of statements enclosed between a pair of curly brackets is called

- a. a compound statement
- b. an empty statement
- c. a null statement
- d. a void statement

22 Which clause is optional in the switch statement?

- a. default
- b. case
- c. switch
- d. None of these

23 Which of the following statements involves a fall-through?

- a. if-else
- b. for loop
- c. if-else-if ladder
- d. switch

24 Which of the following causes a fall-through in the switch statement?

- a. the omission of fall
- b. the omission of continue
- c. the omission of break
- d. the omission of loop

25 Which of the following is mandatory in the switch statement?

- a. break
- b. continue
- c. case
- d. default

- 26 Which of the following statement is a valid combination?
- a. if inside switch
 - b. switch inside if
 - c. else inside switch
 - d. default inside if
- 27 What will be the output of `Math.cbrt(-125)`?
- a. 5.0
 - b. 0.0
 - c. -5.0
 - d. error — can't use `Math.cbrt()` on a negative number
- 28 Which Java package includes the `Math` class?
- a. `java.io`
 - b. `java.lang`
 - c. `java.util`
 - d. `java.sys`
- 29 Give the output of `Math.sqrt(x)`; when `x = 9.0`
- a. 3
 - b. 3.0
 - c. 3.00
 - d. All of these
- 30 Give the output of `Math.ceil(-0.6)`.
- a. -1.6
 - b. -1.5
 - c. -1.0
 - d. -0.0
- 31 Give the output of `Math.ceil(-46.6)`.
- a. -46.6
 - b. -46.5
 - c. -47.0
 - d. -46.0
- 32 Give the output of `Math.abs(x)`; when `x = -9.99`
- a. -9.99
 - b. 9.99
 - c. 0.99
 - d. None of these
- 33 Which of the following is a method to find the square root of a number?
- a. `FindSquareroot(x)`
 - b. `Sqrt(x)`
 - c. `Math.Square(x)`
 - d. `Math.sqrt(x)`
- 34 What will be the output of `Math.pow(3, 0)`?
- a. 0.0
 - b. 1.0
 - c. 3.0
 - d. -1.0
- 35 `Math.random()` returns a double value `r` such that
- a. $0.0 \leq r < 1.0$
 - b. $0.0 \leq r \leq 1.0$
 - c. $0.0 < r \leq 1.0$
 - d. $0.0 < r < 1.0$
- 36 What will be the output of `Math.floor(-20.10)`?
- a. -20.0
 - b. -21.0
 - c. 20
 - d. 21
- 37 What will be the output of `Math.round(0.5)`?
- a. 0.0
 - b. 0
 - c. 1
 - d. 1.0
- 38 What will be the output of `Math.abs(-0)`?
- a. 0.0
 - b. 0
 - c. -0
 - d. +0
- 39 Given the following statements:
- ```
int min = 1, max = 10;
int range = max - min + 1;
int num = (int) (range * Math.random() + min);
```
- The value of `num` will be in integer such that .....
- a.  $1 \leq \text{num} \leq 10$
  - b.  $1 \leq \text{num} < 10$
  - c.  $1 < \text{num} \leq 10$
  - d.  $1 < \text{num} < 10$
- 40 A programmer wrote the following statement:
- ```
netPay = grossPay + providentFund;
```
- instead of:
- ```
netPay = grossPay - providentFund;
```
- Assuming all the unseen code is correct, what kind of error is it?
- a. Syntax error
  - b. Runtime error
  - c. Logical error
  - d. None of these