
Started on	Monday, 9 February 2026, 4:11 PM
State	Finished
Completed on	Monday, 9 February 2026, 4:25 PM
Time taken	14 mins 3 secs
Marks	8.00/15.00
Grade	53.33 out of 100.00

Question 1

Complete

Mark 0.00 out of
1.00

```
public class Test {  
    public static void main(String[] args) {  
        int x = 5;  
        int y = x++;  
        int z = ++x;  
        System.out.println(x + " " + y + " " + z);  
    }  
}
```

What is the result?

ans: d

- a. 7 5 6
- b. 6 5 6
- c. 5 5 6
- d. 7 5 7

Question 2

Complete

Mark 1.00 out of
1.00

-- Table1: (1, Red), (2, Blue), (3, Green)

-- Table2: (4, Red), (5, Blue), (6, Yellow)

How many rows do these queries return?

Query A:

```
-----  
SELECT color FROM Table1  
UNION  
SELECT color FROM Table2;
```

Query B:

```
-----  
SELECT color FROM Table1  
UNION ALL  
SELECT color FROM Table2;
```

What are the results?

- a. Query A = 6 rows, Query B = 4 rows
- b. Query A = 4 rows, Query B = 6 rows
- c. Query A = 4 rows, Query B = 4 rows
- d. Query A = 6 rows, Query B = 6 rows

Question 3

Complete

Mark 1.00 out of
1.00

```
CREATE TABLE Students (
    student_id INT,
    name VARCHAR(50),
    score INT,
    class VARCHAR(10)
);

-- Data:
-- (1, John, 85, A), (2, Alice, 90, A)
-- (3, Bob, 75, B), (4, Carol, 80, B)
```

What does this query return?

```
SELECT name, score, class
FROM Students s1
WHERE score > (SELECT AVG(score) FROM Students s2 WHERE s2.class = s1.class);
```

- a. All students
- b. John and Carol
- c. No students
- d. Alice and Carol

Question 4

Complete

Mark 0.00 out of
1.00

CREATE TABLE Employees (

emp_id INT,

emp_name VARCHAR(50),

manager_id INT

);

-- Data:

-- (1, Alice, NULL) -- Alice is top manager

-- (2, Bob, 1) -- Bob reports to Alice

-- (3, Charlie, 1) -- Charlie reports to Alice

-- (4, David, 2) -- David reports to Bob

How many rows does this query return?

SELECT e1.emp_name as Employee, e2.emp_name as Manager

FROM Employees e1

ans:a

INNER JOIN Employees e2 ON e1.manager_id = e2.emp_id;

- a. 3 rows
- b. 2 rows
- c. 1 row
- d. 4 rows

Question 5

Complete

Mark 0.00 out of
1.00

-- Sales table has 5 rows:

-- (1, 100), (2, NULL), (3, 200), (4, NULL), (5, 300)

What do these queries return?

-- Query A

SELECT COUNT(*) FROM Sales;

-- Query B

SELECT COUNT(amount) FROM Sales;

ans: d

-- Query C

SELECT SUM(amount) FROM Sales;

What are the results?

- a. A=5, B=3, C=NULL
- b. A=5, B=5, C=600
- c. A=3, B=3, C=600
- d. A=5, B=3, C=600

Question 6

Complete

Mark 0.00 out of
1.00

```
public class Test {  
    public static void main(String[] args) {  
        String str1 = "Java";  
        String str2 = "Java";  
        String str3 = new String("Java");  
  
        System.out.println(str1 == str2);  
        System.out.println(str1 == str3);  
        System.out.println(str1.equals(str3));  
    }  
}
```

What is the result?

ans: d

- a. false false true
- b. true false false
- c. true true true
- d. true false true

Question 7

Complete

Mark 1.00 out of
1.00

```
CREATE TABLE Products (
    product_id INT,
    category VARCHAR(20),
    price DECIMAL(10,2)
);
```

```
-- Data:
-- (1, Electronics, 500), (2, Electronics, 800)
-- (3, Clothing, 50), (4, Clothing, 75)
-- (5, Books, 20)
```

Question: Which queries return one row per category (3 rows total)?

Choice 1:

```
SELECT category FROM Products;
```

Choice 2:

```
SELECT DISTINCT category FROM Products ORDER BY category;
```

Choice 3:

```
SELECT category FROM Products GROUP BY category;
```

Choice 4:

```
SELECT category, COUNT(*) FROM Products GROUP BY category;
```

- a. Choice 2 and 3
- b. Choice 2, 3, and 4
- c. Choice 1 and 2
- d. All choices

Question 8

Complete

Mark 1.00 out of
1.00

```
javapublic class Test { public static void main(String[] args) { for(int i = 0; i < 3; i++) { for(int j = 0; j < 2; j++) { System.out.print(i + j + " "); } } } } What is the result?
```

- a. 1 2 2 3 3 4
- b. 0 1 1 2 2 3
- c. Compilation fails
- d. 0 1 0 1 0 1

Question 9

Complete

Mark 1.00 out of
1.00

```
import java.util.*;

public class Test {

    public static void main(String[] args) {

        LinkedList<String> list = new LinkedList<>();

        list.add("A");
        list.add("B");
        list.add("C");
        list.add("D");

        list.removeFirst();
        list.removeLast();
        list.addFirst("X");

        System.out.println(list);
    }
}
```

What is the result?

- a. [B, C, X]
- b. [X, B, C]
- c. [A, B, C, X]
- d. [X, A, B, C]

Question 10

Complete

Mark 0.00 out of
1.00

```
public class Test {

    private int value = 10;

    public void setValue(int value) {
        value = value;
    }

    public static void main(String[] args) {
        Test obj = new Test();
        obj.setValue(20);
        System.out.println(obj.value);
    }
}
```

What is the result?

- a. 10
- b. Compilation fails
- c. 20
- d. 0

ans: a

this.value doesn't modify the instance variable,
concept used = shadowing

Question 11

Complete

Mark 0.00 out of
1.00

```
import java.util.*;  
  
public class Test {  
    public static void main(String[] args) {  
        HashMap<String, Integer> map = new HashMap<>();  
        map.put("X", 10);  
        map.put("Y", 20);  
        map.put("Z", 30);  
        map.put("X", map.get("X") + 5);  
        map.remove("Y");  
        System.out.println(map.get("X") + " " + map.size());  
    }  
}
```

What is the result?

- a. 10 and 3
- b. 10 and 2
- c. 15 and 2
- d. 15 and 3

ans: c

Question 12

Complete

Mark 1.00 out of
1.00

```
class Animal {  
    public void makeSound() {  
        System.out.println("Animal sound");  
    }  
}
```

```
class Dog extends Animal {  
    public void makeSound() {  
        System.out.println("Bark");  
    }  
}
```

```
public class Test {  
    public static void main(String[] args) {  
        Animal a = new Dog();  
        a.makeSound();  
    }  
}
```

What is the result?

- a. Compilation fails
- b. An exception is thrown at runtime
- c. Animal sound
- d. Bark

Question 13

Complete

Mark 1.00 out of
1.00

```
import java.util.*;

public class Test {

    public static void main(String[] args) {
        ArrayList<Integer> list = new ArrayList<>();
        list.add(10);
        list.add(20);
        list.add(30);
        list.add(1, 15);
        list.remove(Integer.valueOf(20));
        System.out.println(list);
    }
}
```

What is the result?

- a. [15, 30]
- b. [10, 30]
- c. [10, 15, 30]
- d. [10, 15, 20, 30]

Question 14

Complete

Mark 0.00 out of
1.00

```
import java.util.*;

public class Test {

    public static void main(String[] args) {
        Queue<Integer> queue = new LinkedList<>();
        queue.offer(10);
        queue.offer(20);
        queue.offer(30);
        queue.poll();
        queue.offer(40);
        queue.poll();
        System.out.println(queue);
    }
}
```

ans: c

What is the result?

- a. [20, 30, 40]
- b. [10, 20]
- c. [30, 40]
- d. [40]

Question 15

Complete

Mark 1.00 out of
1.00

```
import java.util.*;

public class Test {

    public static void main(String[] args) {
        Stack<Integer> stack = new Stack<>();
        stack.push(5);
        stack.push(10);
        stack.push(15);
        stack.pop();
        stack.push(20);
        stack.push(25);
        stack.pop();
        System.out.println(stack.peek() + " " + stack.size());
    }
}
```

What is the result?

- a. 15 and 3
- b. 25 and 4
- c. 20 and 3
- d. 10 and 2