Basic Level:

Ans: A B C D 1. What is the starting point of a basic for loop in JavaScript? A) for (let i = 1; i < 10; i++) B) for (let i = 0; i < 10; i++) C) for (let i = 0; i <= 10; i++)</pre> D) for (let i = 1; i <= 10; i++) What part of the for loop controls how many times the loop executes? Ans: D A) Initialization B) Condition C) Increment/Decrement D) All of the above What will be the output of the loop? Ans: A for (let i = 0; i < 5; i++) { console.log(i); } A) 0, 1, 2, 3, 4 B) 1, 2, 3, 4, 5 C) 1, 2, 3, 4 D) 0, 1, 2, 3, 4, 5 Can a for loop be used without a condition? 4. Ans: A A) Yes B) No 5.

```
A) It checks the condition.
             B) It initializes the loop.
             C) It changes the loop variable each iteration.
             D) It ends the loop.
    What will be the output of the following code? Ans: A
6.
    for (let i = 5; i > 0; i--) {
      console.log(i);
    }
             A) 5, 4, 3, 2, 1
             B) 1, 2, 3, 4, 5
             C) 4, 3, 2, 1
             D) 5, 4, 3, 2, 1, 0
7.
    Can the loop variable be modified inside the for loop body?
                                                                 Ans: A
             A) Yes
             B) No
8.
    What happens if the condition in the for loop is always true? Ans: A
             A) Loop runs indefinitely.
             B) Loop will never run.
             C) Loop runs once.
             D) Loop exits immediately.
9.
    What does the loop do?
                                               Ans: A
    for (let i = 3; i < 10; i += 2) {
      console.log(i);
    }
```

```
A) 3, 5, 7, 9
               B) 4, 6, 8, 10
               C) 5, 7, 9
               D) 3, 4, 5, 6
  10. What will happen in this code?
                                            Ans: B
      for (let i = 0; i < 3; i++) {</pre>
         let i = 5;
         console.log(i);
      }
               A) 0, 1, 2
               B) 5, 5, 5
               C) Error
               D) Infinite loop
Intermediate Level:
  11. What is the scope of the variable i in a for loop?
                                                        Ans: B
               A) Global
               B) Local to the block
               C) Local to the function
               D) None
  12. Which of the following is a valid for loop?
                                                        Ans: B
               A) for (let i = 0; i++)
               B) for (let i = 0, i < 5, i++)
```

```
C) for (i = 0; i < 5; i++)
            D) for (i == 0; i < 5; i++)
13. How can you skip the current iteration in a for loop? Ans: A
            A) continue;
            B) break;
            C) return;
            D) exit;
14. How can you stop the execution of a for loop before it completes all iterations?
                                                             Ans: C
            A) continue;
            B) stop;
            C) break;
            D) exit;
15. What happens if the increment is missing in the for loop? Ans: A
            A) Infinite loop
            B) Syntax error
            C) Loop runs once
            D) No iteration occurs
16. What will be the output?
                                        Ans: B
    for (let i = 0; i < 5; i += 2) {
      console.log(i);
    }
            A) 0, 1, 2, 3, 4
```

```
B) 0, 2, 4
             C) 0, 2
             D) 2, 4
17. What will happen?
                                          Ans: A
    for (let i = 0; i < 3; i++)
      for (let j = 0; j < 2; j++)
         console.log(i + j);
             A) 0, 1, 1, 2, 2, 3
             B) 0, 1, 1, 2, 2, 3, 3
             C) 0, 1, 1, 2, 2, 3, 3, 4
             D) 0, 1, 2, 3, 4
18. What will the following loop output?
                                                   Ans: A
    for (let i = 0; i <= 10; i++) {</pre>
      if (i === 5) break;
      console.log(i);
    }
             A) 0, 1, 2, 3, 4
             B) 0, 1, 2, 3, 4, 5
             C) 0, 1, 2, 3, 4, 5, 6
             D) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
19. What will the following code do?
                                                   Ans: A
    for (let i = 1; i <= 10; i *= 2) {</pre>
      console.log(i);
    }
             A) 1, 2, 4, 8
             B) 1, 3, 5, 7, 9
```

```
C) 2, 4, 8
               D) 1, 2, 3, 4
  20. What will this for loop do?
                                                Ans: A
      for (let i = 10; i >= 0; i -= 3) {
        console.log(i);
      }
               A) 10, 7, 4, 1
               B) 10, 8, 6, 4
               C) 10, 9, 8, 7
               D) Error
Advanced Level:
  21. How many times will the following loop run?
                                                       Ans: D
      for (let i = 0; i !== 10; i += 3) {
        console.log(i);
      }
               A) 4
               B) 5
               C) 6
               D) Infinite
                                                Ans: C
  22. What will this loop print?
      for (let i = 0; i < 3; i++) {
        if (i % 2 === 0) continue;
        console.log(i);
      }
               A) 1, 2
               B) 0, 2
```

```
C) 1
             D) 0, 1, 2
23. Can the for loop header be empty?
                                       Ans: A
    for (;;) {
      // some code
    }
            A) Yes
             B) No
24. How can the following code be corrected? Ans: E
    for (let i = 0; i < 5 i++) {</pre>
      console.log(i);
    }
            A) Add a semicolon after i++.
             B) Remove let.
             C) Add a comma between statements.
            D) Add parentheses around i++.
            E) Add a semi colon before i++.
25. What is the output?
                                                        Ans: A
    for (let i = 0; i <= 3; i++, console.log(i));</pre>
            A) 1, 2, 3, 4
            B) 0, 1, 2, 3, 4
             C) 0, 1, 2, 3
             D) 1, 2
```

```
26. What will be the final value of i in this code?
                                                      Ans: B
    let i;
    for (i = 0; i < 5; i++) {}</pre>
    console.log(i);
            A) 4
             B) 5
             C) 6
             D) Undefined
                                                  Ans: A
27. What will happen in this loop?
    for (let i = 0; i < 10; i = i + 3) {
      console.log(i);
    }
            A) 0, 3, 6, 9
             B) 1, 4, 7, 10
             C) Infinite loop
             D) Syntax error
28. How many times will this loop run?
                                         Ans: A
    for (let i = 5; i <= 10; i += 2) {}</pre>
            A) 3
             B) 4
             C) 5
             D) Infinite
29. What will the following code print?
                                                 Ans: C
    for (let i = 0; i < 10; i++) {
      if (i % 3 === 0) {
        console.log(i);
```

```
}
             A) 1, 2, 3, 6, 9
             B) 3, 6, 9
             C) 0, 3, 6, 9
             D) 0, 2, 4, 6
30. What happens when the loop has no initialization?
                                                         Ans: D
    for (; i < 5; i++) {
      console.log(i);
    }
             A) Error
             B)
                 Infinite loop
             C) 0, 1, 2, 3, 4
             D) Depends on the scope of i
31. What will the following code do?
                                               Ans: A
    for (let i = 1; i < 20; i *= 3) {
      console.log(i);
             A) 1, 3, 9
             B) 1, 2, 4, 8
             C) 1, 3, 6, 9
             D) Infinite loop
32. How does the for loop differ from the while loop in terms of syntax? Ans:A
             A) Initialization happens outside the loop in while.
```

}

```
B) while loop is more optimized.
             C) for loop doesn't require a condition.
             D) while loop can't be nested.
33. What will happen if there is no update statement in the for loop?
                                                                       Ans: B
             A) Loop will run once.
             B) Infinite loop.
             C) Loop won't run at all.
             D) Syntax error.
34. How many times does this loop run?
                                                      Ans: D
    for (let i = 0; i++ < 5;) {}
             A) 4
             B) 5
             C) 6
             D) Infinite
35. What is the result of this code?
                                                   Ans: B
    for (let i = 5; i; i--) {
      console.log(i);
             A) 4, 3, 2, 1
             B) 5, 4, 3, 2, 1
             C) 4, 3, 2, 1, 0
                  Infinite loop
             D)
```

```
for (let j = 1; j <= 2; j++) {
        console.log(i, j);
      }
    }
            A) 1, 1; 1, 2; 2, 1; 2, 2; 3, 1; 3, 2
             B) 1, 2; 2, 2; 3, 2
             C) 1, 2; 2, 1; 3, 2
             D) Syntax error
37. How many times will the inner loop run in this code?
                                                           Ans:
    for (let i = 0; i < 4; i++) {
      for (let j = 0; j < 3; j++) {
        console.log(i, j);
      }
    }
            A) 4
             B) 7
             C) 12
             D) 10
38. How many total iterations will both loops run?
                                                       Ans: C
    for (let i = 1; i <= 5; i++) {</pre>
      for (let j = 1; j <= i; j++) {
        console.log(i, j);
      }
    }
            A) 15
             B) 10
             C) 12
```

for (let i = 1; i <= 3; i++) {

```
D) 20
39. What is printed by the following loop?
                                                  Ans: A
    for (let i = 2; i <= 4; i++) {
      for (let j = 1; j < i; j++) {
        console.log(i, j);
      }
    }
            A) 2, 1; 3, 1; 3, 2; 4, 1; 4, 2; 4, 3
            B) 2, 1; 3, 2; 4, 3
            C) 2, 2; 3, 3; 4, 4
            D) 1, 2; 2, 3
40. How many iterations will this loop combination execute? Ans: B
    for (let i = 0; i < 3; i++) {
      for (let j = i; j < 3; j++) {
        console.log(i, j);
    }
            A) 9
            B) 6
            C) 5
            D) 3
41. What is the final output of this nested loop?
                                                   Ans:
    let result = '';
    for (let i = 0; i < 3; i++) {
      for (let j = 0; j < 3; j++) {
        result += i + '' + j + '';
    }
    console.log(result);
            A) "000 011 022"
```

```
B) "00 01 02 10 11 12 20 21 22"
                 "012 012 012"
             C)
             D) Infinite loop
42. What does this code output?
                                              Ans: A
    for (let i = 1; i <= 2; i++) {
      for (let j = 1; j <= 3; j++) {
        if (i + j === 4) {
           console.log(i, j);
        }
      }
    }
             A) 1, 3; 2, 2
             B) 1, 1; 2, 3
             C) 2, 1; 1, 2
             D) 1, 2; 2, 1
43. What will happen when the following nested loop is executed?
                                                                 Ans: A
    for (let i = 0; i < 3; i++) {
      for (let j = 0; j < 2; j++) {
        if (j === 1) break;
        console.log(i, j);
      }
    }
             A) 0, 0; 1, 0; 2, 0
             B) 0, 1; 1, 1; 2, 1
             C) 0, 1; 1, 0
             D) Infinite loop
44. What does this loop combination output?
                                                   Ans: B
    for (let i = 1; i <= 3; i++) {
      for (let j = 1; j <= 2; j++) {
        if (i === 2) continue;
```

```
}
    }
             A) 1, 1; 1, 2; 2, 1; 2, 2; 3, 1; 3, 2
             B) 1, 1; 1, 2; 3, 1; 3, 2
             C) 1, 2; 2, 1; 3, 2
             D) Infinite loop
45. What will the output be for this nested loop setup?
                                                          Ans: A
    let output = '';
    for (let i = 1; i <= 3; i++) {</pre>
      for (let j = i; j <= 3; j++) {</pre>
        output += i + '' + j + ' ';
      }
    }
    console.log(output);
             A) 11 12 13 22 23 33
             B) "12 23 34"
             C) "12 13 23"
             D) Infinite loop
46. How many times will the inner loop execute in total?
                                                         Ans: A
    for (let i = 0; i < 4; i++) {
      for (let j = i; j >= 0; j--) {
        console.log(i, j);
      }
    }
             A) 10
             B) 5
             C) 4
```

console.log(i, j);

```
D) 8
                                                Ans: C
47. What does this code print?
    let counter = 0;
    for (let i = 0; i < 4; i++) {
      for (let j = 0; j < 2; j++) {
        counter++;
      }
    }
    console.log(counter);
            A) 2
            B) 4
            C) 8
            D) 6
48. What is printed by this code?
                                            Ans: C
    for (let i = 1; i <= 2; i++) {
      for (let j = 1; j <= 2; j++) {
        if (i === j) break;
        console.log(i, j);
      }
    }
            A) 1, 2; 2, 1
            B) 1, 1; 2, 2
            C) 2, 1
            D) Infinite loop
49. What happens in the following nested loop?
                                                    Ans: E
    for (let i = 3; i > 0; i--) {
      for (let j = 3; j > i; j--) {
        console.log(i, j);
      }
    }
```

A) 3, 2; 2, 1; 1, 0

```
B) 2, 3; 1, 2; 1, 3
            C) 1, 2; 1, 3
            D) 3, 2; 3, 1
            E) 231312
50. How many total times does the loop run in this code?
                                                    Ans: B
   for (let i = 0; i < 3; i++) {
      for (let j = 0; j < 3; j++) {
        if (i === 2) break;
        console.log(i, j);
      }
    }
            A) 9
            B) 6
            C) 4
            D) 5
```