MCQs on `if` and `if-else` in Java

1. What will happen if the condition in an `if` statement evaluates to `false` and there is no `else` part?
   a) The next statement is skipped
   b) Compilation error
   c) The `if` block is skipped
   d) The program stops

2. Which of the following is the correct syntax of an `if` statement in Java?
   a) if condition { }
   b) if (condition) { }
   c) if [condition] { }
   d) if {condition}

3. Which data type is required for the condition in an `if` statement?
   a) int
   b) float
   c) boolean
   d) char

4. What will be the output if the condition in an `if` block is `true` ?
   a) It executes the block
   b) It skips the block
   c) Error
   d) Jumps to else

5. In the following code, what will be executed?

```java
int x = 10;
if (x > 5)
    System.out.println("Greater than 5");
else
    System.out.println("Less than or equal to 5");
```

a) Greater than 5
b) Less than or equal to 5
c) Nothing
d) Error

6. Which of the following keywords is optional in `if-else` statement?
   a) if

b) else

c) condition

d) None

7. Can we use multiple `if` statements without using `else` ?

a) Yes

b) No

c) Only in loops

d) Only with switch

8. What will the following code print?

```java
int a = 3;
if (a < 5)
    System.out.println("Small");
System.out.println("Done");
```

a) Small

b) Done

c) Small Done

d) Error

9. In an `if-else` structure, how many `else` blocks can be associated with a single `if` ?

a) 0

b) 1

c) 2

d) Unlimited

10. What is the result of the following code?

```java
int num = 20;
if (num % 2 == 0)
    System.out.println("Even");
else
    System.out.println("Odd");
```

a) Even

b) Odd

c) Error

d) None

11. Choose the correct way to compare two integers `a` and `b` in an if condition.
    a) if (a = b)
    b) if (a == b)
    c) if (a === b)
    d) if (a equal b)

12. Which of the following can be a condition in an `if` statement?
    a) 5
    b) "text"
    c) true
    d) 3.14

13. What will the following code display?

```java
int age = 17;
if (age >= 18)
    System.out.println("Adult");
else
    System.out.println("Minor");
```

```
a) Adult
b) Minor
c) Error
d) Nothing
```

14. What happens if there is no semicolon after the `if` block?
    a) Compilation error
    b) Runs normally
    c) Executes infinitely
    d) Skips block

15. How many statements can be inside an `if` block?
    a) Only one
    b) Only two
    c) Unlimited
    d) Zero only

16. Which keyword is used to check an alternative condition when `if` fails?
    a) else
    b) for
    c) switch
    d) break

17. In Java, which of the following symbols are used for condition checking?
   a) ++
   b) ==
   c) :=
   d) **

18. If you write an `if` condition without braces `{}`, how many statements will be executed conditionally?
   a) None
   b) Only the next one
   c) All statements
   d) Two

19. Choose the valid `if` condition from the following:
   a) if (x + y = z)
   b) if (x + y > z)
   c) if (x + y)
   d) if (int x)

20. What does this code print?

```
int num = 0;
if (num)
    System.out.println("Zero");
```

```
a) Zero
b) Nothing
c) Compilation error
d) Runtime error
```

21. The following code will:

```
if (false)
    System.out.println("True");
else
    System.out.println("False");
```

```
a) Print True
b) Print False
c) Nothing
d) Error
```

22. What is the output?

```
int x = 10;
if (x != 10)
    System.out.println("Not 10");
else
    System.out.println("Ten");
```

a) Not 10
b) Ten
c) Error
d) None

23. Which of the following best describes an `if` block?
   a) Loop
   b) Function
   c) Condition checker
   d) Compiler directive

24. What is the role of `{}` in `if` statements?
   a) Mandatory for every if
   b) Groups multiple statements
   c) Acts as comment
   d) Adds delay

25. What will happen here?

```
int x = 5;
if (x > 0)
    System.out.println("Positive");
    System.out.println("Checked");
```

a) Only Positive
b) Only Checked
c) Positive Checked
d) Compilation error

26. Can `if` statements be nested?
   a) Yes
   b) No

c) Only with loops

d) Only in methods

27. What does the `else` block execute?

a) If `if` condition is true

b) If `if` condition is false

c) Always

d) Never

28. Choose the correct structure:

a) if condition do this else do that

b) if {condition} then {} else {}

c) if (condition) { } else { }

d) if condition: else:

29. Which operator is often used in `if` statements?

a) +

b) ==

c) new

d) . (dot)

30. Can you write an `if` statement inside another `if` ?

a) No

b) Yes

c) Only in switch

d) Only in constructors