1. What will be the output of the following code?

```
Integer a = 100;
int b = a + 10;
System.out.println(b);
```

A) 110

- B) Compilation error
- C) Runtime error
- D) NullPointerException
- 2. What will be the output of the following code?

```
Integer x = 127;
Integer y = 127;
System.out.println(x == y);
```

A) true

- B) false
- C) Compilation error
- D) Runtime error
- 3. What will be the output of this code?

```
Integer x = 128;
Integer y = 128;
System.out.println(x == y);
```

- A) true
- B) false
- C) Compilation error
- D) Runtime error
- 4. What is the default value of an Integer instance variable in a class?
 - A) 0
 - B) null
 - C) Garbage value
 - D) Compilation error
- 5. What happens if you execute the following code?

```
Integer x = null;
int y = x;
System.out.println(y);
```

- A) 0
- B) Compilation error
- C) Runtime error
- D) null
- 6. What will be the output of the following code?

```
String str = "200";
Integer num = Integer.valueOf(str);
System.out.println(num);
```

A) 200

- B) "200"
- C) Compilation error

- D) Runtime error
- 7. What will be the output of the following code?

```
Integer a = new Integer(50);
Integer b = new Integer(50);
System.out.println(a == b);
```

A) true

B) false

- C) Compilation error
- D) Runtime error
- 8. What will be the output of this code?

```
Double d = 10.5;
double val = d;
System.out.println(val);
```

A) 10.5

- B) Compilation error
- C) 0.0
- D) Runtime error
- 9. What will be the output of the following code?

```
Float f = 12.5f;
Integer i = f.intValue();
System.out.println(i);
```

A) 12

- B) 12.5
- C) Compilation error
- D) Runtime error
- 10. What will be the output of the following code?

```
Character ch = 'A';
System.out.println(Character.isLowerCase(ch));
```

A) true

B) false

- C) Compilation error
- D) Runtime error
- 11. What will be the output of the following code?

```
Boolean b1 = new Boolean("True");
Boolean b2 = new Boolean("true");
System.out.println(b1 == b2);
```

A) true

B) false

- C) Compilation error
- D) Runtime error
- 12. What will be the output of the following code?

```
Boolean b1 = Boolean.valueOf("true");
Boolean b2 = Boolean.TRUE;
System.out.println(b1 == b2);
```

A) true

- B) false
- C) Compilation error
- D) Runtime error
- 13. What will be the output of the following code?

```
Short s1 = 100;
Short s2 = 100;
System.out.println(s1 == s2);
```

A) true

- B) false
- C) Compilation error
- D) Runtime error
- 14. What will be the output of the following code?

```
String str = "45.6";
Double d = Double.parseDouble(str);
System.out.println(d);
```

A) 45.6

- B) "45.6"
- C) Compilation error
- D) Runtime error
- 15. What happens if you execute the following code?

```
Byte b = 128;
System.out.println(b);
```

A) 128

B) Compilation error

- C) -128
- D) Runtime error
- 16. What will be the output of the following code?

```
Float f = 10.5f;
Double d = 10.5;
System.out.println(f.equals(d));
```

A) true

B) false

- C) Compilation error
- D) Runtime error
- 17. What will be the output of the following code?

```
Character ch = '5';
System.out.println(Character.isDigit(ch));
```

A) true

B) false

- C) Compilation error
- D) Runtime error
- 18. Which of the following assignments is valid?

```
Long 1 = 100;
```

- A) Valid
- B) Compilation error
- C) Runtime error
- D) Invalid due to type mismatch
- 19. What will be the output of the following code?

```
Boolean b = new Boolean("TrUe");
System.out.println(b);
```

- A) true
- B) false
- C) Compilation error
- D) Runtime error
- 20. What will be the output of the following code?

```
Integer i = 100;
Double d = i * 2.0;
System.out.println(d);
```

- A) 200.0
- B) Compilation error
- C) 200
- D) Runtime error
- 21. What will be the output of the following code?

```
Character ch = 'b';
System.out.println(Character.toUpperCase(ch));
```

- A) b
- B) B
- C) Compilation error
- D) Runtime error
- 22. What will be the output of the following code?

```
Float f1 = 10.5f;
Float f2 = 10.5f;
System.out.println(f1 == f2);
```

- A) true
- B) false
- C) Compilation error
- D) Runtime error
- 23. What happens if you execute the following code?

```
Integer x = null;
int y = x;
System.out.println(y);
```

- A) 0
- B) Compilation error
- C) Runtime error
- D) null
- 24. What will be the output of the following code?

```
Double d = 20.5;
Integer i = d.intValue();
System.out.println(i);
```

A) 20

- B) 20.5
- C) Compilation error
- D) Runtime error
- 25. What will be the output of the following code?

```
Character c = 'Z';
System.out.println(Character.isUpperCase(c));
```

- A) true
- B) false
- C) Compilation error
- D) Runtime error
- 26. What will be the output of the following code?

```
Integer i = 300;
Integer j = 300;
System.out.println(i.equals(j));
```

A) true

- B) false
- C) Compilation error
- D) Runtime error
- 27. What will be the output of the following code?

```
Byte b = new Byte("50");
System.out.println(b);
```

A) 50

- B) Compilation error
- C) Runtime error
- D) -50
- 28. What is the size of Double in Java?
 - A) 4 bytes
 - B) 8 bytes
 - C) 16 bytes
 - D) Platform-dependent
- 29. What will be the output of Boolean.valueOf("False")? A) true

B) false

- C) Compilation error
- D) Runtime error

30. What is the maximum value a Short can store?

A) 32,767

- B) 65,535
- C) 16,383
- D) 131,071