1. Which of these is long data type literal?

a) 0x99fffL
b) ABCDEFG
c) 0x99fffa
d) 99671246

Answer: a) 0x99fffL

2. Which of the following is a valid integer literal in Java?

a) 075
b) 0x75
c) 75L
d) All of the above

Answer: d) All of the above

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

```
int a = 012;
System.out.println(a);
```

a) 12
b) 10
c) 8
d) Compilation error

Answer: b) 10

4. Which of the following is an invalid literal in Java?

a) 0b1010
b) 0x1F
c) 078
d) 123_456

Answer: c) 078

5. Which literal represents a Unicode character?

a) 'A'
b) '\u0041'
c) 65
d) All of the above

Answer: d) All of the above

6. What is the type of the literal 3.14 in Java by default?

a) float
b) double
c) Decimal
d) long double

Answer: b) double

7. Which of the following boolean literals are valid in Java?

a) 0 and 1
b) true and false
c) TRUE and FALSE
d) Yes and No

Answer: b) true and false

8. Which of the following is a valid binary literal in Java (Java 7+)?

a) 0b1010
b) 0B1010
c) Both a and b
d) None

Answer: c) Both a and b

9. Which of the following literals is invalid?

a) 0x1A
b) 0_52
c) 1_00_000
d) 1_2_3_

Answer: b) 0_52

10. What will be the output of this Java code?

```
int x = 0b1010;
System.out.println(x);
```

a) 2
b) 5
c) 10
d) 1010

Answer: c) 10

11. Which of the following is a valid float literal?

a) 3.14
b) 3.14F
c) 2.0d
d) 1.23L

Answer: b) 3.14F

12. Which of the following assignments is valid?

```
a) char c = 'AB';
b) char c = 'A';
c) char c = 65;
d) Both b and c
```

Answer: d) Both b and c

13. Which of the following is not a valid character literal?

a) 'A'
b) '\n'
c) '\u0041'
d) ''

Answer: d) ''

14. Which of the following is not a valid String literal?

a) "Hello"
b) "Java\nWorld"
c) "A" + "B"
d) 'Hello'

Answer: d) 'Hello'

15. Which of the following is a valid long literal?

a) 10
b) 10.9
c) 9999999999
d) 9999999999L

Answer: d) 9999999999L

16. Which of the following is not a literal in Java?

a) true
b) "Hello"
c) 123.45
d) variable

Answer: d) variable

17. Which of the following is valid?

```
a) int x = 0x1A;
b) int x = 1_000_000;
c) int x = 07;
d) All of the above
```

Answer: d) All of the above

18. What is the output of this code?

```
System.out.println(10 + 020 + 0x10);
```

a) 10
b) 20
c) 26
d) 42

Answer: d) 42

19. Which literal is used to denote the absence of a value?

a) 0
b) false
c) null
d) NaN

Answer: c) null

20. Which of the following will cause a compilation error?

```
a) double d = 1.2e3;
b) float f = 3.14;
c) long l = 1234567890L;
d) int i = 0xFF;
```

Answer: b) float f = 3.14;

21. What is the output of this code?

```
int dec = 25;
int oct = 031;
int hex = 0x19;
int bin = 0b11001;
System.out.println("Decimal: " + dec);
System.out.println("Octal: " + oct);
System.out.println("Hexadecimal: " + hex);
System.out.println("Binary: " + bin);
```

Answer:
Decimal: 25
Octal: 25
Hexadecimal: 25
Binary: 25

22. What is the output of this code?

```
double d1 = 3.14159;
double d2 = 1.2e3;
float f1 = 2.5f;
System.out.println("Double: " + d1);
System.out.println("Scientific: " + d2);
System.out.println("Float: " + f1);
```

Answer:
Double: 3.14159
Scientific: 1200.0
Float: 2.5

23. What is the output of this code?

```
char c1 = 'A';
char c2 = 65;
char c3 = '\u0041';
char c4 = '\n';
System.out.println("c1 = " + c1);
```

```
    System.out.println("c2 = " + c2);
    System.out.println("c3 = " + c3);
    System.out.println("c4 shows newline above");
```

Answer:

c1 = A

c2 = A

c3 = A

c4 shows newline above

24. What is the output of this code?

```
    boolean b1 = true;
    boolean b2 = false;
    System.out.println("b1 = " + b1);
    System.out.println("b2 = " + b2);
    if (b1) {
    System.out.println("This runs because b1 is true");
    }
```

Answer:

b1 = true

b2 = false

This runs because b1 is true

25. What is the output of this code?

```
    String s1 = "Hello Java";
    String s2 = "";
    String s3 = null;
    System.out.println("s1 = " + s1);
    System.out.println("s2 = \"" + s2 + "\" (empty string)");
    System.out.println("s3 = " + s3);
```

Answer:

s1 = Hello Java

s2 = "" (empty string)

s3 = null