1. Which of the following is not a primitive data type in Java?
   a) int
   b) float
   c) String
   d) char

2. What is the size of a `byte` in Java?
   a) 4 bits
   b) 8 bits
   c) 16 bits
   d) 32 bits

3. What is the default value of a `boolean` variable in Java?
   a) true
   b) false
   c) 0
   d) null

4. Which data type should be preferred for storing currency values precisely?
   a) float
   b) double
   c) int
   d) BigDecimal

5. Which of these can store the largest value?
   a) int
   b) float
   c) double
   d) long

6. Which of the following data types does **not** allow decimals?
   a) int
   b) float
   c) double
   d) all allow decimals

7. What is the result type of this expression: `5 + 2.0` ?
   a) int
   b) float
   c) double
   d) long

8. Which data type should be used to store a single character?
   a) String
   b) char
   c) byte
   d) character

9. Which of these values can a `char` store in Java?
   a) Only alphabetic letters
   b) Only numbers
   c) A single Unicode character
   d) A string of characters

10. Which of the following is a valid declaration of a `short` variable?
    a) short s = 100000;

b) short s = 'A';

c) short s = 3.14;

d) short s = "10";

11. Which keyword is used to define a constant value?

a) static

b) const

c) final

d) define

12. Which is the correct literal for a long value?

a) 100L

b) 100l

c) Both a and b

d) Just 100

13. What will be the type of the result of `5 / 2` in Java?

a) float

b) double

c) int

d) long

14. What happens when you assign a double value to an int variable directly?

a) It gets automatically converted

b) Compilation error

c) Rounded off

d) Value becomes null

15. How many bytes does a `double` take in memory?

a) 2

b) 4

c) 8

d) 16

16. Which is larger in range: `int` or `float`?

a) int

b) float

c) both are same

d) depends on the number

17. Which of the following data types can cause a **loss of precision** during conversion?

a) int to long

b) double to float

c) long to float

d) float to double

18. Which of these will cause a **compile-time error**?

a) byte b = 128;

b) int i = 1000;

c) char c = 'A';

d) float f = 12.3f;

19. What will be the result of this expression: `'A' + 1`?

a) B

b) A1

c) 66

d) Error

20. Which of these is **not** true for Java primitive data types?
    a) They are not objects
    b) They are stored by value
    c) They all start with uppercase letters
    d) They have fixed sizes

21. Which of the following data types is **signed**?
    a) byte
    b) char
    c) short
    d) All except char

22. Which value is valid for a `byte` variable?
    a) 200
    b) -130
    c) 0
    d) 300

23. What is the range of a Java `short`?
    a) -128 to 127
    b) -32,768 to 32,767
    c) -2^31 to 2^31 - 1
    d) 0 to 65535

24. Which is the **smallest** floating-point data type in Java?
    a) float
    b) double
    c) decimal
    d) real

25. Which of the following is **true** about a `String`?
    a) It is a primitive type
    b) It can be null
    c) It holds only one character
    d) It is stored by value

26. Which is a correct way to declare a float value?
    a) float f = 1.2;
    b) float f = "1.2f";
    c) float f = 1.2f;
    d) float f = (float)"1.2";

27. What will be the output of: `System.out.println(10/0);`
    a) Infinity
    b) 0
    c) ArithmeticException
    d) Compilation Error

28. Which of the following is **not allowed**?
    a) double d = 12.3;
    b) int i = 'A';
    c) char c = 65;
    d) boolean b = 0;

29. In which situation is **type casting** required?
    a) int to byte
    b) long to int
    c) double to int
    d) All of the above

30. What is the size of a `char` in Java?
    a) 8 bits
    b) 16 bits
    c) 32 bits
    d) Platform-dependent