- **Select the correct answer**

1. What is the purpose of a variable declaration in a Java program?
   a. To define the type of data that will be stored in a variable
   b. To initialize a variable with a default value
   c. To change the value of a variable
   d. To declare a variable without assigning a value

2. Which symbol is used as the assignment operator in Java?
   a. +
   b. =
   c. *
   d. -

3. What is the result of the assignment statement 'temperature = 98.6;'?
   a. temperature is set to 98.6
   b. temperature is set to the value of another variable
   c. temperature is incremented by 98.6
   d. temperature is decremented by 98.6

4. When is it best to explicitly initialize variables?
    a. When the variable is declared
    b. When the variable is uninitialized
    c. When the variable is used in a block
    d. When the variable is assigned a value

5. Which variables are automatically initialized in Java?
    a. Local variables
    b. Instance variables
    c. None of the above
    d. Both instance and local variables

6. What are the arithmetic operators used in Java?
    a. +,-,*,/,%,=
    b. +,-,*,/,%,&
    c. +,-,*,/,%,^
    d. +,-,*,/,%,!

7. What is the resulting type when an arithmetic operator is combined with int operands?
    a. String
    b. int
    c. double
    d. float

8. What is the result of 15/2?

a. 7
b. 7.5
c. 8
d. 3

9. What does the % operator do?

a. Perform a modulo operation
b. Recover the information lost after performing integer division
c. Perform a type cast
d. Count by twos

10. What is the output

```
int c = 5;
System.out.println( c++ );
```

a. 6
b. 5
c. c
d. c++

10. What is the output

```
int c = 5;
System.out.println( ++c );
```

a. 6
b. 5
c. c
d. c++