**Question 1**:  
What is the primary advantage of using arrays in Java?

* A) Arrays allow dynamic resizing to accommodate changing data.
* B) Arrays can store values of different data types together.
* C) Arrays provide efficient memory management and quick access to elements. *(Correct Answer)*
* D) Arrays have built-in methods for adding, removing, or searching for elements.

**Question 2**:  
Which of the following is true about Java arrays?

* A) Java arrays can dynamically resize after instantiation.
* B) Java arrays are initialized with parentheses when created.
* C) An array initializer can only be used in a declaration statement. *(Correct Answer)*
* D) Java arrays can contain elements of different data types.

**Question 3**:  
What is the purpose of the Arrays.sort() method in the java.util.Arrays class?

* A) To copy an array to a specified length.
* B) To fill an array with a specified value.
* C) To sort the elements of an array in ascending order. *(Correct Answer)*
* D) To find the length of an array.

**Question 4**:  
What is the purpose of using a temporary variable (temp) in the sorting algorithm discussed in the lecture?

* A) To permanently store the value of the array element.
* B) To hold the value of an element temporarily during a swapping operation. *(Correct Answer)*
* C) To increase the array size during sorting.
* D) To print the elements of the array.

**Question 5**:  
What does a value type variable store in Java?

* A) A reference to an object.
* B) The actual value of the variable. *(Correct Answer)*
* C) The address of another variable.
* D) The length of an array.

**Question 6**:  
Which of the following indicates that a variable is a reference type?

* A) It holds primitive data types.
* B) It uses the new keyword when being assigned. *(Correct Answer)*
* C) It cannot be printed using System.out.println().
* D) It cannot be modified after initialization.

**Question 7**:  
What is the effect of using the varargs syntax (String...) in a Java method?

* A) It restricts the method to only one argument.
* B) It allows the method to accept a variable number of arguments. *(Correct Answer)*
* C) It requires the method to return an array.
* D) It changes the return type of the method to String.

**Question 8**:  
What is the key characteristic of a two-dimensional (2D) array in Java?

* A) It uses only a single index to access elements.
* B) It represents data in a table-like format with rows and columns. *(Correct Answer)*
* C) It can only store primitive data types.
* D) It can dynamically resize during runtime.

**Question 9**:  
How can you print all the elements of a 2D array in row-major order?

* A) By using a single for loop.
* B) By using two nested for loops. *(Correct Answer)*
* C) By calling System.out.println() on the array.
* D) By using a while loop with recursion.

**Question 10**:  
What happens when an array of objects, such as String, is modified through one reference?

* A) Only that specific reference shows the modification.
* B) The array becomes immutable.
* C) The change is reflected in all references pointing to that array. *(Correct Answer)*
* D) A new array is created for each reference.