Course: JAVA (2) **Semester**: 1st term 2026/2027.	**Lecturer**: Dr. Mohammed AbdelFattah **Assistants**: Engs. / Osama El-Samadony, Mostafa El-Mansy, Mohammed Osama, Mohammed Saeed, Hazem Hamdy, Mena-Allah, Mariem Fathy, Youssef Mohammed, Mohammed Adel, AbdelRahman Ibrahim
Tutorial: *Sheet 3*	

Part A – True or False:

1. `Object` class is the parent class of all classes in Java. (___)
2. Wrapper classes are used to convert primitive data types into objects. (___)
3. The `equals()` method in the `Object` class compares object references by default. (___)
4. Every class in Java directly or indirectly inherits from the `Object` class. (___)
5. `ArrayList` can store primitive data types directly without using wrapper classes. (___)
6. The `List` interface allows duplicate elements in Java. (___)
7. The size of an `ArrayList` is fixed after initialization. (___)
8. The `toString()` method is inherited from the `Object` class. (___)
9. `LocalDateTime` belongs to the `java.util` package. (___)
10. You cannot use a `for-each` loop to iterate through an `ArrayList`. (___)

Part B – Multiple Choice Questions

1. Which of the following is the superclass of all Java classes?

   a) `String` b) `Object` c) `Class` d) `Main`

2. Which method of the `Object` class is used for comparing two objects?

   a) `compareTo()` b) `equals()` c) `compare()` d) `same()`

3. What is the wrapper class for the primitive type `int`?

   a) `Integer` b) `Int` c) `Number` d) `Float`

4. Which process automatically converts a primitive type into its wrapper object?

   a) Casting b) Autoboxing c) Unboxing d) Wrapping

5. The `ArrayList` class implements which interface?

   a) `Set` b) `Queue` c) `List` d) `Collection`

6. Which package contains Java's modern date and time classes?

   a) `java.date` b) `java.util` c) `java.time` d) `java.datetime`

7. Which method returns the number of elements in an `ArrayList`?

   a) `size()` b) `length()` c) `count()` d) `getSize()`

8. Enums in Java are:

   a) Classes that can have only constants b) Variables c) Packages d) Interfaces

9. Which of the following correctly declares an enum?

   a) `enum Days {MON, TUE, WED}` b) `enum = Days {MON, TUE, WED}`

   c) `Days enum {MON, TUE, WED}` d) `enum Days = {MON, TUE, WED}`

10. The `List` interface allows:

    a) Only unique elements b) Ordered elements with duplicates

    c) Unordered elements d) Only primitive data types

Part C: Programming Tasks

1. **Program – ArrayList and List Interface:**

   Create a `List<String>` of student names using `ArrayList`, add several names, remove one, and display all names using a `for-each` loop.