

# 18 Lecture - CS301

## Important Mcqs

1. **What is a reference variable in Java?**

- a. A variable that holds the actual value of a data type.
- b. A variable that holds the memory address of an object.
- c. A variable that holds both the value of a data type and the memory address of an object.

**Answer: b**

2. **What is the default value of a reference variable in Java?**

- a. 0
- b. false
- c. null

**Answer: c**

3. **Can a reference variable be reassigned to a different object in Java?**

- a. Yes
- b. No
- c. It depends on the data type of the reference variable.

**Answer: a**

4. **How does Java handle passing a reference variable as a parameter to a method?**

- a. It passes the actual value of the reference variable.
- b. It passes the memory address of the object held by the reference variable.
- c. It does not allow passing reference variables as parameters to methods.

**Answer: b**

5. **Can a reference variable be used to access static methods in Java?**

- a. Yes
- b. No
- c. It depends on the access modifier of the static method.

**Answer: a**

6. **How does Java handle garbage collection for objects referenced by reference variables?**

- a. It automatically frees up memory allocated to objects that are no longer being referenced.
- b. It requires manual intervention to free up memory allocated to objects.
- c. It does not perform garbage collection for objects referenced by reference variables.

**Answer: a**

7. **What is the difference between an instance variable and a reference variable in Java?**

- a. An instance variable holds the memory address of an object, while a reference variable is a variable declared in a class.
- b. An instance variable is a variable declared in a method, while a reference variable is a variable declared in a class.
- c. An instance variable is a variable declared in a class, while a reference variable is a variable declared in a method or block that holds a reference to an object.

**Answer: c**

8. **Can a reference variable be used to access private members of a class in Java?**

a. Yes

b. No

c. It depends on the access modifier of the private member.

**Answer: b**

9. **How can we check if a reference variable is null in Java?**

a. By using the null keyword.

b. By using the equals() method.

c. By using the == operator.

**Answer: c**

10. **Can a reference variable be assigned to a primitive value in Java?**

a. Yes

b. No

c. It depends on the data type of the reference variable.

**Answer: b**