**Class 10 chap ter 3**

**Values and types**

**A. Tick (✓) the correct answers.**

1. To store character values, a corresponding numeric value is generated in:
   * **d. UNICODE** (✓)
2. How many escape sequence characters are there in Java?
   * **c. 8** (✓)
3. Consider the following code:

datatype variable = (datatype)

variable\_to\_be\_converted;

Which of the following is represented in the preceding code?

* + **a. Type conversion (✓)**

1. Which of the following is an example of a reference data type?
   * **b. array (✓)**
2. Which of the following can be used while creating an identifier?
   * **d. All of these (✓)**

**B. Fill in the blanks.**

1. Character set in Java consists of **letters, digits, and special characters**.
2. Implicit type conversion takes place when the two types are **compatible**.
3. Non-primitive data types are also called **reference** data types.
4. The size of the "short" data type is **smaller** than the "long" data type.
5. The **null** is a special Java literal which represents a null value.

**C. Short Answer Type Questions.**

1. **Define String literals and Boolean literals.**

**Ans:-**

* + **String Literals**: A sequence of characters enclosed in double quotes (" "). Example: "Hello, World!".
  + **Boolean Literals**: Used to represent true or false values in Java. Example: boolean flag = true;.

1. **Write the difference between declaration and initialization.**

**Ans:-**

| **Feature** | **Declaration** | **Initialization** |
| --- | --- | --- |
| Definition | Declaring a variable with its type | Assigning a value to the declared variable |
| Example | int num; | int num = 10; |

1. **Name the various types of tokens used in Java.**

**Ans:-**

* + **Keywords** (e.g., class, int)
  + **Identifiers** (e.g., variable names)
  + **Literals** (e.g., 10, "Java")
  + **Operators** (e.g., +, -, \*, /)
  + **Separators** (e.g., {}, (), ;)

1. **What is the use of \n in Java?**

**Ans:-**

* + \n is an **escape sequence** used to insert a new line in output.
  + Example:

System.out.println("Hello\nWorld!");

Output:

Hello

World!

1. **What is the difference between variables and identifiers?**

**Ans:-**

| **Feature** | **Variable** | **Identifier** |
| --- | --- | --- |
| Definition | A named storage location in memory | The name used for variables, methods, classes, etc. |
| Example | int age = 25; (age is a variable) | int myNumber; (myNumber is an identifier) |