

Class 10

Chapter – 13

Library Classes

A. TICK (✓) THE CORRECT ANSWER

A. Tick (✓) the correct answer

1. What will be the output of the `Character.isLetterOrDigit('s')` method?

- a. True
- b. true
- c. false
- d. False

Answer: b. true

Explanation:

- 's' is a letter.
- `isLetterOrDigit()` returns **true** for letters or digits.
- Java boolean output is always **lowercase (true/false)**.

2. What will be the return type of the `Integer.parseInt("120")` method?

- a. boolean
- b. String
- c. int
- d. double

Answer: c. int

Explanation:

- `parseInt()` converts a **String** → **int**
- So return type = **int**

3. The statement:

`System.out.print(Integer.parseInt("2") + Double.parseDouble("3.5"));`
will return _____

- a. 23.5
- b. 5.5
- c. 5
- d. 5.0

Answer: b. 5.5

Explanation:

- "2" → 2 (int)
- "3.5" → 3.5 (double)
- 2 + 3.5 = 5.5

4. Which of the following methods checks that the parameter is space or not?

- a. isUpperCase()
- b. toUpperCase()
- c. isWhitespace()
- d. None of these

Answer: c. isWhitespace()

Explanation:

- isWhitespace() checks space, tab, newline
- Others do NOT check space

5. Which method is used to convert String into double?

- a. Double.valueOf(String)
- b. Double.parseDouble(String)
- c. Double.toString(String)
- d. None of these

Answer: b. Double.parseDouble(String)

Explanation:

- Converts String → double primitive

6. Which method is used to determine whether a character is a digit in Java?

- a. isDigit(char ch)
- b. isLetter(char ch)
- c. isLowerCase(char ch)
- d. isUpperCase(char ch)

Answer: a. isDigit(char ch)

Explanation:

- Checks if character is 0–9

7. What does the Character.isLetter(char ch) method return?

- a. true if lowercase letter
- b. true if uppercase letter
- c. true if letter (both cases)
- d. false if not a letter

Answer: c. true if letter (both cases)

Explanation:

- Works for A–Z and a–z

8. Which method converts a character to lowercase?

- a. toLowerCase(char ch)
- b. toUpperCase(char ch)
- c. toLower(char ch)
- d. toLowercase(char ch)

Answer: a. toLowerCase(char ch)

Explanation:

- Converts 'A' → 'a'

9. What is autoboxing in Java?

- Primitive → Wrapper
- Wrapper → Primitive
- Between primitives
- Between wrappers

Answer: a. Primitive → Wrapper

Explanation:

- Example:

```
int x = 5;
```

```
Integer obj = x;
```

10. Which statement is true about autoboxing and unboxing?

- Autoboxing = Wrapper → Primitive
- Unboxing = Wrapper → Primitive
- Same process
- Not related

Answer: b. Unboxing = Wrapper → Primitive

Explanation:

- Autoboxing → primitive → object
- Unboxing → object → primitive

B. Fill in the blanks

1. Output of Character.isLetter('5') is _____

Answer: false

Explanation:

- '5' is digit, not letter

2. Character.isLowerCase() checks if character is in _____

Answer: lowercase

3. Double.parseDouble() method is same as _____

Answer: valueOf()

Explanation:

- Both convert string → double (but one returns primitive, one object)

4. To convert String into Integer, we use _____ method

Answer: parseInt()

5. toLowerCase() method returns _____ data type

Answer: char

C. Answer the following questions

1(a). Write the output

```
char ch = 'E';  
boolean t = Character.isUpperCase(ch);  
System.out.println(ch + " : " + t);
```

Output:

E : true

Explanation:

- 'E' is uppercase → true

1(b). Write the output

```
String str = "39.6";  
double d = Double.parseDouble(str);  
System.out.println(str + (d + 100));
```

Output:

39.6139.6

Explanation:

- d = 39.6
- d + 100 = 139.6
- String + number → concatenation

2. Difference between parseInt() and toString()

Answer:

parseInt()	toString()
String → int	Data → String
Returns int	Returns String

3. Use of methods

(a) Float.parseFloat()

☞ Converts String → float

(b) Character.isDigit()

☞ Checks if character is digit

4. What is Wrapper Class?

☞ Converts primitive → object

Example:

int → Integer

5. What is Autoboxing and Unboxing?

- **Autoboxing:** int → Integer
- **Unboxing:** Integer → int

D. Assertion & Reason

1.

Assertion: Character.isLetter() is wrapper method

Reason: Checks digit

Answer: d. A is false, R is true

2.

Assertion: toUpperCase converts to uppercase

Reason: Uppercase remains same

Answer: a. Both true and correct

3.

Assertion: parseInt converts int → string

Reason: Integer is wrapper

Answer: d. A false, R true



E. Case-based questions

i. Which statement is correct?

Statement 1: String.valueOf() converts primitive to string

Statement 2: Wrapper toString() also converts

- a. Only 1 true
- b. Only 2 true
- c. Both true
- d. Both false

Answer: c. Both true

ii. What does String.valueOf() do?

- a. String → primitive
- b. Primitive → String
- c. Wrapper → primitive
- d. Primitive → wrapper

Answer: b. Primitive → String



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iii. Which method converts different types into String?

- a. toString()
- b. valueOf()
- c. getString()
- d. parseString()

Answer: b. valueOf()

2. Program-based

```
int value = 123456789L;  
String str = String.valueOf(value);  
double parsedValue = Double.parseDouble(str);
```

i. Purpose of *String.valueOf()*?

Answer: Converts long → String

ii. Purpose of *Double.parseDouble()*?

Answer: Converts String → double

iii. Error in program?

Answer:

```
int value = 123456789L;
```

✗ long assigned to int

✓ Correct:

```
long value = 123456789L;
```
