CLASS 10 – COMPUTER APPLICATIONS

BOARD-STYLE QUESTION PAPER

Time: 2 hours | Marks: 80

SECTION – A (40 Marks)

Attempt all questions.

Q1.

a. Define wrapper class with an example.

b. What is autoboxing?

c. Output: Character.isDigit('5');

d. Difference between parseInt() and valueOf().

e. Primitive vs composite type.

f. Why arrays are composite types?

g. What is encapsulation?

h. Default value of boolean array element?

i. Length of int arr[][] = new int[3][4];

j. Convert "HELLO" to "hello".

Q2.

a. Name two wrapper classes.

b. Output: Character.toLowerCase('A')

c. Purpose of charAt()

d. What is linear search?

e. Max visibility access specifier.

f. Prototype of substring with one index.

g. Use of compareTo().

h. Expand OOP.

i. Output: "India".startsWith("In")

j. Define 2D array.

Q3.

a. Explain autoboxing and unboxing.

b. Distinguish private vs protected, primitive vs class.

c. Difference: selection vs bubble sort.

d. Output of s.substring(3,7) for "computer".

e. Purpose: isLetter(), isWhitespace()

f. What is binary search?

g. Example: instance and local variable.

h. Explain valueOf() with example.

i. Define encapsulation.

j. Use of array length.

SECTION – B (40 Marks)

Attempt any 4.

Q4. Wrapper class program: count digits, uppercase, lowercase.

Q5. Arrays: selection sort + binary search.

Q6. 3x3 matrix: row sum, column sum, diagonals.

Q7. Strings: trim, uppercase, frequency of first char.

Q8. Student class with encapsulation.

Q9. String array: bubble sort + linear search.