

SILVER GROVE SCHOOL
CLASS – IX-K (SAMPLE PAPER SET – A)
SUB – COMPUTER APPLICATION

SECTION A – MULTIPLE CHOICE QUESTIONS

(1 X 20 = 20)

1. Which of the following is a primitive data type in Java?
 - a) String
 - b) Array
 - c) int
 - d) Class
2. Which keyword is used to declare a constant in Java?
 - a) static
 - b) final
 - c) const
 - d) constant
3. The size of int data type in Java is:
 - a) 2 bytes
 - b) 4 bytes
 - c) 8 bytes
 - d) Depends on system
4. Which operator is used for logical AND?
 - a) &
 - b) &&
 - c) |
 - d) ||
5. Which of the following is a valid Java identifier?
 - a) 9number
 - b) class
 - c) total_marks
 - d) total-marks
6. Which statement is used to take input in Java?
 - a) input()
 - b) read()
 - c) Scanner
 - d) System.in.read()
7. Which loop is guaranteed to execute at least once?
 - a) for
 - b) while
 - c) do-while
 - d) nested
8. The smallest unit of data in a computer is:
 - a) Byte
 - b) Bit
 - c) Nibble
 - d) Word
9. Which of the following is not a Java keyword?
 - a) class
 - b) public
 - c) integer
 - d) static
10. JVM stands for:
 - a) Java Variable Machine
 - b) Java Virtual Machine
 - c) Java Visual Machine
 - d) Joint Virtual Machine
11. Which symbol is used for single line comment in Java?
 - a) /* */
 - b) *
 - c) //
 - d) **
12. Which data type is used to store true or false values?
 - a) int
 - b) boolean
 - c) char
 - d) float
13. Which operator is used for logical AND?
 - a) &
 - b) &&
 - c) ||
 - d) !
14. Which loop executes at least once?
 - a) for
 - b) while
 - c) do-while
 - d) nested
15. Which statement is used to take input in Java?
 - a) System.out.print()
 - b) Scanner
 - c) println()
 - d) import
16. The default value of int variable is:
 - a) 1
 - b) null
 - c) 0
 - d) undefined

SECTION – B (SUBJECTIVE TYPE QUESTIONS)

$$(2 \times 10 = 20)$$

1. Define Java. Mention any two features of Java.
2. Differentiate between for loop and while loop.
3. What is conditional statement? Explain if-else with syntax.
4. Explain type conversion in Java with an example.
5. What is the difference between for loop and while loop?
6. What is the use of `Math.random()` and `Math.sqrt()` methods?
7. What is a compiler? How is it different from an interpreter?
8. Explain if-else-if ladder statement with proper syntax.
9. if $a = 4, b = 3$
Find the value of : $++a + ++b + a;$
10. Write the difference between & and && operator with example.

SECTION – C (ATTEMPT ANY FOUR)

$$(15 \times 4 = 60)$$

1. Write a Java program to display the sum of first 10 natural numbers using a loop.
2. Write a program in Java to input name and basic salary of an employee. Calculate and display the gross salary and net salary when:

Da	=	20% of basic
Hra	=	13.5% of basic
PF	=	11% of basic
Gross	=	basic + da + hra
Net pay	=	Gross - PF
3. A certain amount is invested at the rate 5% per annum for 2 years. Find the difference between compound interest (CI) and simple interest (SI). Write a program to take amount as an input.

Hint : $SI = \frac{P \times R \times T}{100}$ $CI = A = P (1 + r / n)^n$
: And $CI = A - P$
4. Write a program to input two numbers and display their sum, difference, product and quotient.
5. Write a program to display the first 10 natural numbers using a loop.
