GREENLAWNS SCHOOL, WORLI
TERMINAL EXAMINATION
COMPUTER APPLICATION

STD : IX   MARKS : 100
Date :- 6/3/26   TIME : 2 Hours

Answer to this paper must be written on the paper provided separately. You will not be allowed to write during the first 15 minutes. This time is to be spent in reading the question paper. The time given at the head of the paper is the time allowed for writing the answers.

This paper is divided in to two Sections. Attempt all questions in Section A and any four questions from Section B. The intended marks for the questions or parts thereof are given in brackets([ ]).

Section A (40 marks)
(Attempt all questions)

Question 1

Choose the correct answer and write the correct option.   [20]

1) The output of Math.sqrt (Math.ceil(8.1)) return :

    a. 3.0

    b. 1.0

    c. 3

    d. .0

2) Decimal number are :

    a. long

    b. int

    c. short

    d. double

3) JVM converts bytecode directly into :

    a. Machine

    b. High level code

    c. Another byte code

    d. None of above

4) Which clause is optional in the switch statement?

    a. default

b. case
c. switch
d. None of these

5) Which of the following statements involves a fall through?

    a. if-else
    b. for loop
    c. if-else-if
    d. switch

6) Give the output of Math.abs(x); where x= -99.9;

    a. -9.99
    b. 9.99
    c. 0.99
    d. one of these

7) A class is a blue print used to create objects that share common properties and behavior :

    a. abstraction
    b. encapsulation
    c. polymorphism
    d. class

8) Which of the following is / are principles of object oriented programming?

    a. Encapsulation

    b. Abstraction

    c. Inheritance

    d. All of these

9) If a=8 and b=4 the value of a = a%b is :

    a. 2
    b. 0
    c. 4
    d. 8

10) Ternary operator is a :

    a. logical operator
    b. arithmetic operator
    c. relational operator

d. conditional operator

11) ceil function round the value to :

    a. highest value

    b. lowest value

    c. same value

    d. none of them

12) Among the following which is a keyword :

    a. every

    b. same value

    c. case

    d. all the above

13) A mechanism where one class acquire the properties of another class :

    a. Polymorphism

    b. Inheritance

    c. Encapsulation

    d. Abstraction

14) Identify the type of operator && :

    a. ternary

    b. unary

    c. logical

    d. relational

15) Number of relational operator are :

    a. 4

    b. 6

    c. 5

    d. None

16) What is the output of **Math.ceil(5.4)+Math.ceil(4.5)?**

a. 10.0

b. 11.0

c. 12.00

d. 9.00

17) Other name of identifier is :

   a) Keyword

   b) Constants

   c) Operator

   d) None

18) do while loop is called:

   a. Entry

   b. Exit

   c. Return

   d. None of above

19) No of token in java

   a. 7

   b. 4

   c. 3

   d. 5

20) Number of logical operator:

   a. 4

   b. 5

   c. 3

   d. none

Question 2 [10]

   a) Difference between Compiler and interpreter.
   b) Difference between double and int.
   c) Difference between floor and ceil.
   d) Explain inheritance.

e) Define object.

Question 3 [10]
a) What is the importance of break command in switch case?
b) Give the syntax of switch.
c) Give the syntax of while loop.
d) int number=3;
   if (number % 2 == 0)
   {
           System.out.println("Even number");
   }
   else
   {
           System.out.println("Odd number");
   }
    Rewrite the statement using ternary operator

Section– B (60 marks)
(Attempt any four questions from this section. The answers in this section should consist of the program in Blue J environment with java.)

Question 4
Input number of days and check whether is it a Armstrong number or not. [15]

Some of qube of each digit is same as number
Input : 153
      3*3*3   = 27
      5*5*5   =125
      1*1   = 1

Output : Armstrong number
Question 5 [15]

Write two separate programs to generate the following patterns using iteration (loop) statements:

(a)

```
*
* #
* # *
* # * #
* # * # *
```

(b)

```
5 4 3 2 1
5 4 3 2
5 4 3
5 4
5
```

Question 6
Write a program to input and store roll numbers, names and marks in 3 subjects of n number of students in five single dimensional arrays and display the remark based on average marks as given below:

Average mark   Grade   [15]

85 to 100   Excellent

75 to 84   Distinction

60 to 74   First class

40 to 59   Pass

Less than 40   Fail

Question 7
Input week days in number and display the week day. Using switch case.   [15]

Question 8
     Write a program in Java to input employee salary and calculate :   [15]

     da=40% of salary

     hra=20% of salary

     pf=10% of salary

      grossalary = (Salary +DA+HRA)

     netsalary = grossalary -PF

     Display grosssalary and netsalary

Question 9
     A security man is paid at the hourly rate (R) of the first 40 hours of work in a week.
     Thereafter, he is paid at 1.25 times the hourly rate (R) for the next 16 hours and at 1.5

     times the hourly rate (R) for further hours of work in the week. Taking the number of hours (h)

     and the rate per hour (R) as inputs, the weekly wage (W) is to be calculated :   [15]

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