St. Thomas' School, Sunari, Agra
Half-yearly Examination (2024-2025)
Class: IX
Subject: Computer Applications
<u>Specimen Paper</u>

M. Time: 2 hours   **MM: 80**

Name: _____   **Roll no.: _____**

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*Maximum marks: **80***
*Time allowed: **Two hours***
Answers 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 reading the question paper.
The time given at the head of this paper is the time allowed for writing the answers.

*This paper is divided into **two** sections.*
*Attempt **all** questions from **section A** and **any four** questions from **section B**.*
The intended marks for questions or parts of questions are given in brackets [ ].

<u>SECTION-A</u>
(Attempt all questions from this Section.)

Question 1:   **[20]**
Choose the correct answer and write the correct option.

(i) An/A _____ has unique identity through which it may differ with some characteristics and behaviour:

    (a) Class   (c) Object

    (b) Data   (d) Function

(ii) Procedure Oriented Programming mainly uses ....

    (a) Top-down approach   (c) Top-down and bottom-up approach

    (b) Bottom-up approach   (d) None

(iii) Which of the following is not a high-level language?

    (a) JAVA   (c) C++

    (b) Python   (d) Binary

(iv) The words which are preserved with the system are called _____ words that cannot be used as variable names in Java programming.

    (a) Keywords/reserved   (c) Identifier

    (b) Object   (d) Statement

(v) Which of the following is primitive data?

    (a) char   (c) short

    (b) long   (d) All of these

(vi) A constant which gives the exact representation of data is called:

    (a) Variable   (c) Identifier

    (b) Literal   (d) Character

(vii) Find the output of following snippet:

```
double c;
int a, b, d;
a = 10; b = 15; d = 12;
c = a*b%d/2;
System.out.print(c);
```

    (a) 65.0   (b) 65.5

(c) 65   (d) None of these

(viii) What will be the output of a & b in the following, if int a, b; a=100; b=a++; ?
    (a) 100,100   (c) 101,100
    (b) 100,101   (d) 101,101

(ix) JRE stands for ....
    (a) Java Runtime Environment   (c) Java Document Kit
    (b) Java Data Kit   (d) Java Disc Ki

(x) Which of the following is not a java built-in package?
    (a) lang   (c) io
    (b) util   (d) tab

(xi) Which of the following is a member operator?
    (a) *   (c) &
    (b) .   (d) ?

(xii) The statement x += 15; is equal to _____.
    (a) x = 15*;   (c) x =1 5;
    (b) x = x*15;   (d) x = x+15;

(xiii) The operator && is called _____ operator.
    (a) binary   (c) logical AND
    (b) relational   (d) logical OR

(xiv) Which of the following are Multi line comments?
    (a) /*comment*/   (c) both a and b
    (b) //comment   (d) /*comment

(xv) A program that translates code written in a high-level language into machine code is called ....
    (a) Compiler   (c) Linker
    (b) Secure   (d) All of these

(xvi) Name the method to accept data in sentence form:
    (a) next( )   (c) nextShort( )
    (b) nextLine( )   (d) nextByte( )

(xvii) Which of the following having the highest order of data type.
    (a) int   (c) double
    (b) long   (d) float

(xviii) What will be the output of the following syntax?
    Int n = 20;
    Int m = n++%5;

    (a) m=0, n=21   (c) m=0, n=22
    (b) m=1, n=20   (d) m=4, n=20

(xix) Which keyword used to call a package in java.
    (a) Input   (c) counter
    (b) Println   (d) import

(xx) Which one of the following is a *logical not* operator in Java?
    (a) <=   (c) &
    (b) !   (d) ==

Question 2:

(i) Differentiate between the implicit and explicit conversion with an example.   **[2]**

(ii) What is a compound statement? Give an example.   **[2]**

(iii) Explain the member operator. Give an example.   **[2]**

(iv) What is the result of evaluating the following expression?

(1 + 2 * 2) / 2 + 2 **[2]**

(v) Class and object are inter-related. Explain. **[2]**

(vi) Evaluate the following expression if the value of x = 5, y = 4, z = 2: **[2]**

S = x + --z + y++ +y

(vii) What is the use and syntax of a ternary operator? **[2]**

(viii) Write one difference between / and % operators with an example. **[2]**

(ix) Observe the following code segments carefully and predict the data type of 's' and 't': **[2]**

    a. int p; double q;   b. float m;

        _____ s = p - q;   _____ t = m*3/4.5;

        System.out.println(s);   System.out.println(t);

(x) Give the output of the following code: **[2]**

```
int i = 1, j = 3;
 j = - - i;
System.out.println("i ="+ i);
System.out.println("j ="+ j);
```

SECTION-B
(Answer any four questions from this Section)
The answers in this section should consist of the programs in either BlueJ environment or any program environment with Java as the base.
Each program should be written using variable description/mnemonic codes so that the logic of the program is clearly depicted.
Flowcharts and algorithms are not required.
Buffered Reader/Data Input Reader should not be used in the programs.

Question 3: **[10]**
Write a program in java to find the cost of 100 kg of mangoes if the cost of 1 kg of mango is ₹50.

Question 4: **[10]**
Write a program in java to find area of circle take values from user with the help of Scanner class.

Question 5: **[10]**
Write a program in java to find the rectangle of rectangle using member operator.

Question 6: **[10]**
Write a program in java to input (using scanner class) the rainfall on three consecutive days and find the average rainfall.

Question 7: **[10]**
Write a program in java to find leap year by using Scanner class.

Question 8: **[10]**
A person is paid ₹350 for each day he works and fined ₹30 for each day he remains absent. Write a java program to calculate and display his monthly income, if he is present for 25 days and remains absent for 5 days.

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Note: This specimen paper is provided as an example of the format and type of questions that may appear on the half yearly exam (2024-25). It is intended to help students familiarize themselves with the structure and expectations of the exam.