GREENLAWNS SCHOOL, WORLI
TERMINAL EXAMINATION
COMPUTER APPLICATION

STD : X   **MARKS : 100**
Date :-8/10/24   **TIME :** 2 Hrs

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) Which of the following ASCII code range is applicable for capital letters?

   a) 65 - 90
   b) 90 - 115
   c) 97 - 122
   d) 95 - 110

   1) Which of the following is the right way to use a comment in Java program?

   a) /* comment */
   b) /* comment
   c) // comment //
   d) */ comment */

   2) Which of the following ASCII code range is applicable for digits?

   a) 33 - 47
   b) 48 - 57
   c) 48 - 56
   d) 47 - 56

3) Which among the following keyword is used to allocate memory space for an object?
    a) new
    b) for
    c) while
    d) int

4) if and else if are use for
    a) multiple choice
    b) two choice

c) single

d) None

5) The keyword used to call package in the program.
   a) Extends
   b) Export
   c) import
   d) package

6) what value will Math.sqrt(Math.ceil(15.3)) return
   a) 16.0
   b) 16
   c) 4.0
   d) 5

7) The output of the function "composition".substring(3.6);
   a) posi
   b) pos
   c) mpo
   d) mpos

8) int res='A';
   what will be the value of res?
   a) 64
   b) 65
   c) 97
   d) 98

9) System.out.print("BEST");
   System.out.println("OF LUCK");

   Choose the correct option for the output.
   a) BEST OF LUCK
   b) BEST
      OF LUCK
   c) BEST
      OF
      LUCK
   d) None of above.
   e)

10) Which of the following escape sequence

   a) /n
   b) \t
   c) /t
   d) //n

11) The trim( ) method of the string class remove
   a) Leading space only
   b) Trailing space only
   c) Space between words
   d) Leading and trailing space

12) IndexOf ( ) method return the position of the….

    a) First occurrence of the specified character
    b) last occurrence of the specified character
    c) null character
    d) '\n' character

13) Substring take first character as ….

    a) 1
    b) 0
    c) Both 0 and 1
    d) None of above

14) Math.round(5.5) will return

    a) 5
    b) 6
    c) 5.5
    d) None of above

15) Output of the following statement is …..

System.out.println("SUNDAY".substring(3));

    a) NDA
    b) DAY
    c) SUN
    d) N

16) Output of the following statement is …..

System.out.println("WONDERFUL".substring(3,4));

    a) DERF
    b) NDER
    c) D
    d) N

17) Output of the following statement is …..

double num=2.3;

System.out.println(Math.floor(num));

    a) 2.0
    b) 2
    c) 3.0
    d) 3

18) Output of the following statement is …..

System.out.println(Math.cbrt(-125));

a) 5.0
b) -5.0
c) -5
d) Nan

2) Which of the following ASCII code range is applicable for capital letters?

a) 65 - 90
b) 90 - 115
c) 97 - 122
d) 95 - 110

19) Which of the following ASCII code range is applicable for special character

a) 33 to 46 or 58 to 64
b) 33 to 47 or 58 to 64
c) 33 to 46 or 57 to 64
d) None of these.

20) Output of the following statement is …..

System.out.println(Math.max(12,67,3));

a) 67
b) 12
c) 3
d) Error found in class

Question 2 State the difference of the following: [10]

a) equals( ) and equalsIgnoreCase ( )
b) Implicit and explicit.
c) floor and ceil function.
d) = and = =.
e) sc.next( ) and sc.nextLine( )

Question 3   [10]

a) Explain escape sequence with example.
b) Explain infinite loop.
c) Explain local variable with eg.
d) Explain block variable with eg.
e) Define object.

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

Define a class named BookFair with the following description: [15]

Instance variables/Data members:

String Bname — stores the name of the book

double price — stores the price of the book

Member methods:

(i) void Input() — To input and store the name and the price of the book.

(ii) void calculate() — To calculate the price after discount. Discount is calculated based on the following criteria.

Price	Discount
Less than or equal to ₹1000	2% of price
More than ₹1000 and less than or equal to ₹3000	10% of price
More than ₹3000	15% of price

(iii) void display() — To display the name and price of the book after discount.

Question 5

Write a program to enter a sentence from the keyboard and count the number of time vowel occurs in it. [15]

Sample Input:
Enter a sentence: Greenlawns school worli.
Sample Output:
number of vowels :- 7 times

Question 6

Write a program in Java to accept a string and display the number of uppercase, number of lowercase, number of special characters and number of digits present in the string. [15]

Question 7

Write a program to enter a sentence from the keyboard and drag and display each character along with it ascci code. [15]

Question 8

Input three values in a , b , c variable find out whether it is Pythagoras triplets or not [15]

Example : $a^2=b^2+c^2$

note have to using math function

Question 9

Input a word and generate the following pattern [15]

Input : SCHOOL

Output :   S

        SC

        SCH

        SCHO

        SCHOO

        SCHOOL

……………