GREENLAWNS SCHOOL, WORLI
TERMINAL EXAMINATION
COMPUTER APPLICATION

STD : IX

Date :-24/9/24

MARKS : 100

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) .... is the technique of binding both data and functions together to keep them safe from unauthorised access and misuse.

a) Abstraction
b) Inheritance
c) Encapsulation
d) Polymorphism

2) The ability of a function or object to take on multiple forms is called ....

a) Abstraction
b) Inheritance
c) Encapsulation
d) Polymorphism

3) A program that translates code written in a high-level language into machine code is called ....

a) Assembler
b) Linker
c) Compiler
d) None of these

4) Which of the following is not a token?

a) Keyword
b) Identifiers
c) Operators
d) Procedure

5) Who developed Java?

a) James Gosling
b) Robert James
c) Bjarne Stroustrup
d) None

6) The process of combining data and functions that enables them to be together as a single entity is called

a) inheritance
b) encapsulation
c) classification
d) attributes

7) Which of the following type is an exact representation of fractional values?
a) char
b) double
c) byte
d) String

8) An object is represented by two attributes, out of which one is characteristics and the other one is _____.
a) Behaviour
b) Situation
c) Abstraction
d) Encapsulation

9) The || operator requires which among the following conditions to be satisfied to represent a success for two relations?

a) Both should be satisfied

b) Any one should be satisfied.

c) Ether Any one should be satisfied or both.

d) None of these

10) Which among the following is not a logical operator?

a) &&
b) ||
c) =
d) !=

11) byte type data type in size is _____ byte

a) 1 byte

b) 2 byte

c) 4 bype

d) None of these

12) long type data type in size is _____ byte

a) 1 byte

b) 2 byte

c) 4 bype

d) 8 byte

13) Which of the following is an invalid integer?

a) 1999

b) 1999999

c) 199 99

d) 199

14) Which one of the following is not a valid operator in Java?

a) <=

b) !==

c) !=

d) ==

15) An object has ....

a) Attributes

b) State

c) Behaviour

d) All of these

16) .... represents an entity in the real-world with its identity and behaviour.

a) A class

b) An object

c) A procedure

d) A method

17) Which non decimal value is big in size
   a) byte
   b) short
   c) int
   d) long

18) The values of an object's .... represent the state of the object.

a) Methods

b) Procedures

c) Attributes

d) Classes

19) Objects that share the same attributes and behaviour are grouped together into a/an ....

a) Interface

b) Instance

c) Alias

d) Class

20) = meaning in java

a) Assignment operator

b) Binary operator

c) Unary operator

d) None of these

Question 2

State the difference of the following: [10]

a) = and ==.

b) double and float

c) switch case and if else

d) / and %

e) Compiler and interpreter

Question 3

a) Explain abstraction. [2]

b) Explain encapsulation [2]

c) Give the syntax of if else if statement [2]

d) Explain the following math function [4]
Math.max( ) and Math.sqrt( )

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

To foster a sense of water conservation, the water department has an annual water conservation tax policy. The rates are based on the water consumption of the consumer.

The tax rules are as follows :

Water Consumed (in Gallons)	Tax Rate in Rs.
More than 45 but 75 or less	475.00
More than 75 but 125 or less	750.00
More than 125 but 200 or less	1225.00
More than 200 but 350 or less	1650.00
More than 350	2000.00

Question 5

Define a class with a member function to accept monthly salary from the user.Find and display Income Tax with the help of following rules :-

Monthly Salary	Income tax
Rs. 9000 or More	40% of Monthly salary
Rs. 7500 to Rs. 8999	30% of Monthly salary
Rs. 7499 or less	20% of Monthly salary

Question 6

Write a program in Java to accept marks obtained in 5 different subjects and hence find

the total and the percentage. If the percentage is 40% or more then display "Promotion granted"

other wise "Promotion not granted".

Question 7

A shopkeeper offers 10% discount on the printed price of a Digital Camera. However, a customer has to pay 6% GST on the remaining amount. Write a program in Java to calculate the amount to be paid by the customer taking printed price as an input.

Question 8

Write a program in Java to calculate the Simple Interest and the Amount, when

p = Rs.4000; r = 10%; t = 3 years. Si=(p*r*t)/100

Question 9

Input time in second and convert them into hour , minute and remaining second .