

ASSESSMENT - I
COMPUTER APPLICATION (GRADE 9)

Maximum Marks: 100

Time allowed: Two hours

This paper is divided into two sections

Attempt all questions from Section A and any five question from Section B.
The intended marks for questions or parts of questions are given in brackets[].

Section A

(Answer all questions from this section)

Question 1

Choose the correct answer

[20]

- (i) The parameters appearing in method call statement are called ____.
- (a) formal parameters
 - (b) actual parameters
 - (c) call parameters
 - (d) all of the above
- (ii) User defined type conversion is known as
- (a) coercion
 - (b) type promotion
 - (c) type casting
 - (d) implicit conversion
- (iii) Method not returning any value has return type as
- (a) int
 - (b) char
 - (c) void
 - (d) float
- (iv) $ch = ch+2$ is equivalent to
- (a) $ch+2$
 - (b) $Ch = + 2$
 - (c) $ch +=2$
 - (d) None of these
- (v) Choose the odd one
- (a) class
 - (b) void
 - (c) true
 - (d) public
- (vi) Which keyword turns a variable declaration into constant declaration
- (a) const
 - (b) constant
 - (c) fixed
 - (d) final
- (vii) Wrapping up of characteristics and behaviour in one single unit
- (a) Inheritance
 - (b) Encapsulation
 - (c) Abstraction
 - (d) Polymorphism

- (viii) $N = k++ + 5$ results into (value of k is 15)
- (a) 20
 - (b) 02
 - (c) 19
 - (d) 21
- (ix) $(0 > 1) \parallel (1 > 0)$ is
- (a) 1
 - (b) 0
 - (c) false
 - (d) true
- (x) $a + 5 > 2 + b$ is equivalent to
- (a) $a + (5 > 2) + b$
 - (b) $((a + 5) > b) + 2$
 - (c) $(a + 5) < (2 + b)$
 - (d) None of the above
- (xi) Java uses __ character set.
- (a) ASCII
 - (b) ISCI
 - (c) Unicode
 - (d) All of the above
- (xii) The expression which uses $> =$ operators is known as:
- (a) relational
 - (b) logical
 - (c) arithmetic
 - (d) assignment
- (xiii) Ternary operator is a:
- ~~(a) logical operator~~
 - (b) arithmetic operator
 - (c) relational operator
 - (d) conditional operator
- (xiv) The number of bytes occupied by int data type:
- ~~(a) 2 bytes~~
 - ~~(b) 1 byte~~
 - (c) 4 byte
 - (d) 8 byte
- (xv) Which of the following does not represent a character literal?
- (a) 'a'
 - (b) '1'
 - (c) '\a'
 - (d) "a"
- (xvi) The process by which a class acquires the properties from another class is called:
- (a) polymorphism
 - (b) inheritance
 - (c) abstraction
 - (d) object
- (xvii) Who developed java?
- (a) James Gosling
 - (b) Robert James
 - (c) Bjarne Stroustrup
 - (d) None of these

- (xviii) A class is also considered as an ___ factory.
- array
 - string
 - class
 - object
- (xix) Reserved words are also called ___.
- identifier
 - method
 - keywords
 - packages
- (xx) Which of the is not an integral data type in java?
- short
 - long
 - byte
 - double

Question 2

[10]

- Java applications are platform ____.
- $(6 == 3) \&\& (4 == 4)$ is
- The parameters appearing in method definition are called ____.
- In Java ,methods reside in ____.
- Write the syntax to create an object in java program. \rightarrow
- An object is identified by its ____.
- Write any two Separators(punctuators) used in java.
- Write the two types of methods used in java.
- Write the names of any two Tokens used in java
- What do you understand by variables?

Question 3

[10]

- Write the following as java expressions
 - $\sqrt{a^2 + b^2}$
 - $a = \frac{\sqrt{b^2 - 4ac}}{2a}$
1. evaluate the following
 - $x = ++y + 2y$ if $y = 6$ (find the value of x)
 - $s = ++j + 5$ results into (value of j is 10, find the value of s)
- Write the syntax to create a new object with example.
- What will be the result of following two expressions if $i = 10$ initially?
 - $++j <= 10$
 - $i++ <= 10$

- (v) Write the Variables used and their data type in the following program

```
class Calc
{
    public static void main(String[]args)
    {
        int a,b,c;
        a=10;
        b=12;
        c=a+b;
        System.out.println("Sum=");
        System.out.println(c);
    }
}
```

Question 4

[10]

- (i) What will be the output of the following?
(a) `System.out.println(2+3+"Hello");`
(b) `System.out.println("Hello"+(2+3));`
- (ii) What do you understand by JVM?
- (iii) What is the difference between an object and a class?
- (iv) Write the number of bytes occupied by the following primitive datatypes:
(a) long (b) double
(c) char (d) float
- (v) Construct an expression that is equal to the absolute value of a variable. That is, if a variable x is positive, the value of the expression is just x , but if x is negative, the value of the expression is $-x$, which would be positive. Do it: using a conditional operator. (do not use the mathematical function here).

Section B

(Answer any 5 questions from this section)

Question 5

[30]

- (i) Write a program that computes tax for income of Rs 12,23,423. The income upto 3,00,000 is not taxable and the tax is computed as 15% of the taxable income.
- (ii) Write a program to calculate average of numbers 155.5, 80.0, 90.5.
- (iii) Write a program to calculate and print side of a room whose area is 625.0 sqm and is square in shape (using Math class)
- (iv) An athlete takes 18 rounds of a triangle park with sides as 25m, 35m and 45m. Write a program to determine the total distance covered by him.
- (v) Write a program to calculate the scholarship earned by Satvik who gets 750 per month for 5 years.
- (vi) Write a program to the cost of tilling a rectangular plot of land 500m long and 200m wide at the rate of Rs 80 per hundred sq m.
- (vii) Write a program to calculate area of sphere with radius 7cm. (Hint: $\text{area} = 4\pi r^2$)

Question 6 Practical

[20]