

**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) ISCII
  - (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. →
- 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?
  - $++i <= 10$
  - $i++ <= 10$

- (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

- (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).

[10]

#### Section B

(Answer any 5 questions from this section)

#### Question 5

- (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. [30]
- (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]