

**INSTRUCTIONS FOR OMR SHEET :-**

1. Attempt ALL the questions:
2. Use only black or blue (ball pen) for darkening/writing in appropriate oval/box.
3. While darkening the oval / box it is to be ensured that these are darkened completely.
4. OMR sheet shall not be folded or tampered in any way.
5. Over writing / erasing / dual data / use of correction fluid will render OMR sheet invalid.

**Subject : COMPUTER APPLICATION**

- Q.1- In object-oriented programming the stress is given on :
- a. data
  - b. methods
  - c. class
  - d. none of these
- Q.2- Which of the following principle does not allow to access directly from outside the class premises?
- a. data hiding
  - b. encapsulation
  - c. abstraction
  - d. all of these
- Q.3- The process of combining data and functions that enables them to be together as a single entity is called :
- a. inheritance
  - b. encapsulation
  - c. attributes
  - d. none of these
- Q.4- The process by which a class acquires the properties from another class is called :
- a. polymorphism
  - b. inheritance
  - c. object
  - d. none of these
- Q.5- In procedural programming, the stress is laid on :
- a. class
  - b. function
  - c. data
  - d. none of these
- Q.6- \_\_\_\_\_ is a set of objects that has common attributes and common behaviour.
- a. abstraction
  - b. encapsulation
  - c. class
  - d. none of these
- Q.7- Which of the following is not an object oriented programming language?
- a. C++
  - b. BASIC
  - c. Simula
  - d. None of these
- Q.8- The process of restricting the free flow of data from the outside world is known as :
- a. encapsulation
  - b. function
  - c. inheritance
  - d. none of these

- Q.9- A Java program developed and executed by the users without using web browser is known as :
- object
  - application
  - applet
  - none of these
- Q.10- Who developed Java?
- James Gosling
  - Robert James
  - Bjarne Stroustrup
  - None of these
- Q.11- Java Virtual Machine (JVM) is an :
- interpreter
  - compiler
  - machine code
  - none of these
- Q.12- Java is a case sensitive language. Which is the most appropriate statement with respect to this context?
- Upper and lower case letters are distinguished.
  - Upper and lower case letters are ignored.
  - Only lower case letters are distinguished.
  - none of these
- Q.13- Which of the following package is needed to find the square root of a number?
- java.text
  - java.math
  - java.lang
  - none of these
- Q.14- Which of the following is not a Java reserved word?
- public
  - private
  - total
  - none of these
- Q.15- The most suitable statement for BlueJ is :
- It is a window based platform.
  - It is a DOS based platform.
  - It is a window based and DOS based platform.
  - none of these
- Q.16- If m, a, p are the three integers, then which of the following holds true, if  $(m == n) \ \&\& \ (n != p)$  :
- m' and 'n' are equal
  - 'n' and 'p' are equal
  - 'm' and 'p' are equal
  - none of these
- Q.17- If  $((p > q) \ \&\& \ (q < r))$  then :
- q is the smallest number
  - p is the greatest number
  - q is the greatest number
  - none of these
- Q.18- if  $(a > b)$
- ```
c = a;
else
c = b;
```
- It can be written as:
- $c = (b < a) ? a : b;$
  - $c = (a != b) ? a : b;$
  - $c = (a < b) ? b : a;$
  - none of these
- Q.19- if  $(a < h \ \&\& \ a < c)$
- a is the greatest number
  - b is the greatest number
  - c is the smallest number
  - none of these
- Q.20- Objects can communicate with each other through \_\_\_\_\_ in object oriented programming language.
- Object
  - Class
  - Keyboard
  - None of these
- Q.21- \_\_\_\_\_ principle of object oriented programming promotes reusability feature.
- Encapsulation
  - Inheritance
  - Abstraction
  - None of these
- Q.22- The function is used to receive the next token from Scanner object which can be expressed as an integer and stores an integer type value.
- getInt()
  - setInt()
  - nextInt()
  - none of these
- Q.23- It is a type of error that occurs at runtime when the compiler does not respond properly while executing a statement.
- syntax error
  - runtime error
  - logical error
  - none of these
- Q.24- This function is used when you want to terminate execution at any instance of the program.
- System.exit(0)
  - System.in()
  - System.out()
  - None of these

- Q.25- The statement terminates the entire loop (i.e.) all the forthcoming iterations of the loop.
- switch statement
  - break statement
  - continue statement
  - none of these
- Q.26- This operator works on the principle 'CHANGE AFTER ACTION'.
- prefix increment
  - postfix increment
  - both (a) and (b)
  - none of these
- Q.27- The high level language is referred to as the source code.
- source code
  - byte code
  - long code
  - none of these
- Q.28- It specifies the size and type of values that can be stored.
- object type
  - class type
  - data type
  - none of these
- Q.29- Programs written in Java are compiled for conversion to an intermediate code.
- object code
  - byte code
  - machine code
  - none of these
- Q.30- This function is used to input a character :
- charAt(0)
  - next().Character(0)
  - next().charAt(0)
  - none of these
- Q.31- It is a type of error that occurs at runtime when the compiler does not respond properly while executing a statement.
- syntax error
  - logical error
  - runtime error
  - none of these
- Q.32- What encapsulates data and functions?
- Constructor
  - Class
  - Object
  - None of these
- Q.33- What does JVM stand for ?
- Java Virtual Machine
  - Java Visual Machine
  - Java Visual mechanics
  - None of these
- Q.34- Which of the below sequence/order is correct for the data type in increasing order of their size
- float, byte, int, boolean
  - boolean, byte, int, double
  - float, double, boolean, int
  - none of these
- Q.35- The default value of integer data type is :
- 1
  - 0
  - false
  - none of these
- Q.36- Which of the following is not a branching statement?
- for
  - switch
  - if-else
  - none of these
- Q.37- Which of the below loop always executes at least once?
- while
  - do while
  - for
  - none of these
- Q.38- What is the output of the below?
- ```
for(i = 'a' ; i <= 'c'; i++)
System.out.print(i);
```
- a b c
  - abc
  - 97 98 99
  - none of these
- Q.39- What is the output of the below?
- ```
for(i = 1; i <=5; i++)
continue;
System.out.print(i);
```
- 1
  - 1 2 3 4 5
  - 5
  - none of these
- Q.40- In nested loop, outer loop gets terminated first. This Statement is :
- true
  - false
  - may be
  - none of these

- Q.41- How many times will the below nested loop run?  
`for(int i = 1; i <= 2; i++)  
for(int j = 1; j <= i; j++)  
System.out.print(j);`  
a. 2  
b. 0  
c. 4  
d. none of these
- Q.42- Which of the below methods is used for reading a sentence?  
a. `nextline()`  
b. `nextLine()`  
c. `next()`  
d. none of these
- Q.43- What is the output of below statements?  
`System.out.print(Math.sqrt(Math.pow(3,2)));`  
a. 3  
b. 9  
c. 3.0  
d. none of these
- Q.44- Result of `Math.floor(-5.6)` is :  
a. 5.0  
b. -5.0  
c. 6.0  
d. none of these
- Q.45- Which of the below condition for a loop is syntactically incorrect?  
a. `while(i > 5)`  
b. `while(i !> 5)`  
c. `while(i < 5)`  
d. none of these
- Q.46- Find the output if `a = b + c + ++b`, where `b = 30` `c = 40`  
a. 101  
b. 100  
c. 102  
d. none of these
- Q.47- What will be the final value of `j` and `k`, if `j = 9`, `k = 5`?  
`k += k++ - ++j + k`  
a. 10 6  
b. 11 5  
c. 12 7  
d. none of these
- Q.48- If `int y = 10` then find `int z = (++y * (y ++ + 5))`  
a. 150  
b. 165  
c. 187  
d. none of these
- Q.49- Give the output of the following expression  
`a+ = a++ + ++a + --a + a--`, `a = 7`  
a. 39  
b. 42  
c. 36  
d. none of these
- Q.50- What is the value of `y` after the execution?  
`y- = ++y + y-- + --y` when `y = 8`  
a. 33  
b. 38  
c. 36  
d. none of these
- Q.51- `System.out.println(Math rint(-9.4) - Math.sqrt(9.0))`  
a. -5.0  
b. -6.0  
c. -7.0  
d. none of these
- Q.52- `System.out.println(Math.max(Math.ceil(14.55), 15.5))`:  
a. 15.5  
b. 14.5  
c. 16.5  
d. none of these
- Q.53- `System.out.println(Math.sqrt(Math.min(42.5, 42.25)))`:  
a. 3.5  
b. 4.5  
c. 6.5  
d. none of these
- Q.54- `System.out.println(Math.ceil(3, 4) + Math.pow(2, 3))`:  
a. 9.0  
b. 10.0  
c. 12.0  
d. none of these
- Q.55- `int m = 3, n = 5, p = 4;`  
`if(m == n) && (n != p)`  
`{`  
`System.out.print(m*n);`  
`System.out.print(n%p);`  
`}`  
`if((m != n) || (n == p))`  
`{`  
`System.out.print(m+n);`  
`System.out.print(m-n);`  
`}`  
a. 7 -1  
b. 8 -1  
c. 3 -1  
d. none of these

- Q.56- A constant which gives the exact representation of data is called :
- variable
  - literal
  - identifier
  - character
- Q.57- ASCII codes of upper case alphabets ranges from :
- 65 - 90
  - 60 - 85
  - 96 - 91
  - none of these
- Q.58- What type of a value is returned by Sqrt function?
- int
  - float
  - double
  - none of these
- Q.59- The words which are preserved with the system are called \_\_\_\_\_ words, which are not used as variable names in Java programming.
- reserved key
  - normal key
  - identifier
  - none of these
- Q.60- A set of character is assigned to :
- string variable
  - static variable
  - boolean variable
  - none of these
- Q.61- The statement  $n++ = 4$  is equivalent to :
- $++n$
  - $n = n + 4$
  - $n + 1$
  - none of these
- Q.62- The character type of constant is placed within \_\_\_\_\_ .
- double quotes
  - single quotes
  - paranthesis
  - none of these
- Q.63- Which of the following is used for newline character ?
- $\backslash n$
  - $\backslash a$
  - $\backslash r$
  - $\backslash s$
- Q.64- The size of double data type is \_\_\_\_\_
- 8 bytes
  - 4 bytes
  - 6 bytes
  - none of these
- Q.65- A floating point number contains \_\_\_\_\_ .
- integer part only
  - fractional part only
  - both integer and fractional both
  - none of these
- Q.66- How many types of primitive data types exist in Java ?
- 7
  - 5
  - 8
  - none of these
- Q.67- The size of variable of type char is \_\_\_\_\_ .
- 1 byte
  - 1 bit
  - 1 nibble
  - none of these
- Q.68- Which of the following are legal identifier?
- 3count
  - $a + b$
  - \$sum
  - none of these
- Q.69- Which of the following variable declarations would not compile in Java program?
- `int VAR;`
  - `int var_1;`
  - `int 1_var;`
  - none of these
- Q.70- Data abstraction is a process of :
- binding data in a single unit
  - binding data and functions in a single unit
  - extracting data from an object
  - none of these
- Q.71- Encapsulation is a process of :
- binding data in a single unit
  - binding data and functions in a single unit
  - extracting data from an object
  - none of these
- Q.72- What is bytecode in the context of Java?
- The type of code generated by a java compiler.
  - The type of code generated by a java virtual machine.
  - It is another name for a java source file.
  - none of these

- Q.73- Java is a/an \_\_\_\_\_ .
- Procedural programming language
  - Structured programming language
  - Object oriented programming language
  - none of these

Q.74- What is the meaning of JDK?

- Java Development Kit
- Java Data Kit
- Java Document Kit
- None of these

Q.75- The Java compiler :

- creates executable file
- does the packaging
- translates Java source code to bytecode
- none of these

Q.76- Which of the following is correct usage in Java ?

- static public void main(String args[ ])
- public static void main(String args[ ])
- public void main(String args[ ])
- none of these

Fill in the blanks with appropriate code for proper working of the function arm( ). The function will receive a number and check whether the number is an Armstrong number or not and display message accordingly. (Armstrong Number is a number whose sum of cubes of the digits is equal to the number

Ex :  $153 = 1^3 + 5^3 + 3^3$ )

```
class Armstrong
{
public static void main(int n)
{
int t = n, c = 0, d, i, a;
while(t != 0)
{
_____ ?77? _____ ;
t = t/10;
}
a = n;
while(_____ ?78? _____)
{
d = a%10;
x = (int)Math._____?79?_____(d,c);
s = s + _____ ?80? _____ ;
a = a/10;
}
if(s == _____?81?_____)
System.out.println("Armstrong no");
else
System.out.println("Not Armstrong no");
}
}
```

- |       |           |                  |
|-------|-----------|------------------|
| Q.77- | a. c++    | b. c--           |
|       | c. c%10   | d. none of these |
| Q.78- | a. a == 0 | b. a != 0        |
|       | c. a < 0  | d. none of these |
| Q.79- | a. pow    | b. sqrt          |
|       | c. cbrt   | d. none of these |
| Q.80- | a. d      | b. x             |
|       | c. a      | d. none of these |

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