1.   Set of instructions to be provided to an electronic machine to perform a task is called
        a) Programming
        b) Processing
        c) Computing
        d) Compiling

Solution: (a) Programming is the process of creating a set of instructions that tell a computer how to perform a task.

2.   Compiler helps in the translation from
        a) Integer to binary
        b) High-level program to binary digits
        c) High-level language to machine level language
        d) Pseudo code to computer program

Solution: (c) Compiler helps in translating from high-level language to machine level language

3.   The ALU unit of computer
        a) Can perform logical operation only
        b) Can perform arithmetic operation only
        c) Can perform both arithmetic and logical operations
        d) None of the above.

Solutions: (c) Can perform both arithmetic and logical operations

4.   What type of device is computer printer?
        a) Memory
        b) Output
        c) Storage
        d) Input

Solution: (b) Output

5.   Algorithm is-
        a) A process or set of rules to be followed in calculations or other problem-solving operations, especially by a human.
        b) A process or set of rules to be followed to solve numerical problems only.
        c) A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.

d) A process or set of rules to be followed to solve logical problems only.

Solution: (c) A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer

6.　When we write X=10 and Y=X, which of the following memory assignment is correct

    a) X and Y will have same location and 10 will be stored.
    b) X and Y will have two distinct locations and 10 will be stored in both.
    c) X and Y will have same location and only X will contain value 10
    d) X and Y will have two distinct locations and only X will contain value 10

Solution: (b) X=10 will create a memory location for X and 10 will be stored. After declaring Y=X, a new memory location for Y will be created and the value of X will be copied in Y. This both of them will contain 10.
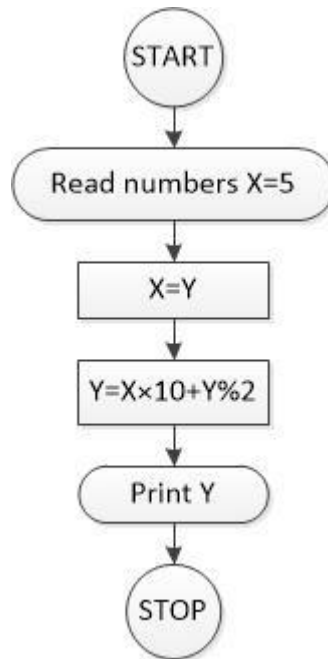
7.　The input N from the user is 6. The output of the following algorithm is
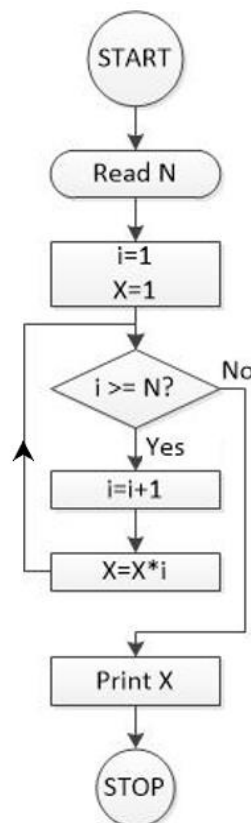
    a) 21
    b) 720
    c) 1
    d) 2

Solution: (c) The condition "i>=N" fails in the first iteration because i=1 and N=6. Thus, the execution jumps directly to the print command. The initial assigned value of X will be printed which is 1.

8.   What will be the output of the algorithm given below?

```
( START )
   |
   v
( Read numbers X=5 )
   |
   v
[ X=Y ]
   |
   v
[ Y=X×10+Y%2 ]
   |
   v
( Print Y )
   |
   v
( STOP )
```

    a) 51
    b) 52
    c) 50
    d) Compilation error

Solution: (d) The assignment X=Y is incorrect. "Equals to" is a right to left assignment. The variable Y is not declared before assignment. Thus the compiler will throw an error at this step.

9.   The following algorithm is used to find a number X is even or odd. What will be the content of the empty box?
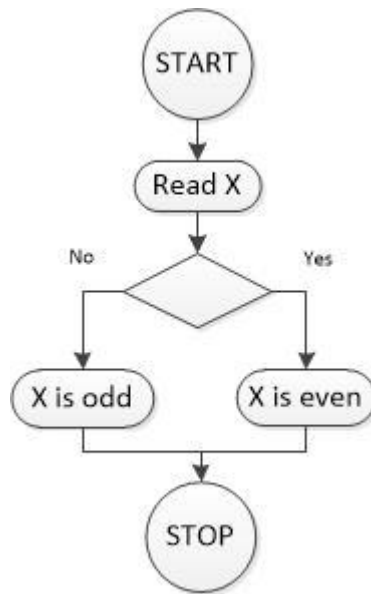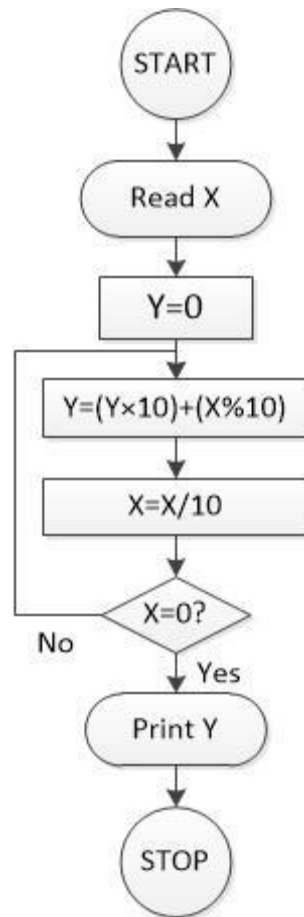
a) X%10=0?
b) X/10=0?
c) X/2=0?
d) X%2=0?

Solution: (d) To find whether a number is odd or even, the number has to be divided by 2. If it is equals to zero, then the number is even. Thus, X%2=0? Condition is appropriate.

10. X is an integer (X=2648). The print value of Y of the flowchart below is

a) 20
b) 22664488
c) 8462
d) 0

Solution: (c) The algorithm finds the reverse of the number X. Hence, the output is 8462