

**Class 8**

**Subject- Computer Science**

**Topic-Algorithm and Flowchart (Page 38 to 42)**

**Synopsis:-**

- We need to follow certain rules while making an algorithm.
- The direction of flow of information in a flowchart is either from top to bottom or from left to right.
- Algorithms play a key role in developing computer programs.
- We should not make the algorithm too long.
- A flowchart is a diagrammatic representation of steps taken to perform a task.
- A flowchart can have only one start box and one stop box. These called terminal boxes.
- The flow of control shows only one path in a flowchart.

**Worksheet:-**

**A) Fill in the blanks:-**

- 1) A \_\_\_\_\_ is an elaborate algorithm.
- 2) A \_\_\_\_\_ involved writing steps to solve a problem.
- 3) Algorithms play a \_\_\_\_\_ in developing computer programs.
- 4) Algorithm can effectively be used to perform mathematical calculation to get desired \_\_\_\_\_, \_\_\_\_\_ to get meaningful information and \_\_\_\_\_ to implement intelligence in machines.
- 5) Algorithm writing is a \_\_\_\_\_ that involves precise flow of steps.
- 6) The start box and stop box are called as \_\_\_\_\_.

**B) Answer the following questions:-**

- 1) What is an algorithm?
- 2) Write the characteristics of an algorithm.
- 3) Write steps to develop an algorithm.
- 4) Write rules for writing an algorithm.
- 5) What is a flowchart?
- 6) What is the relation between algorithm and flowchart?
- 7) Name all the symbols of the flowchart and also draw the shapes.
- 8) Write the uses of the symbols of the flowchart.
- 9) What are the uses of flowchart?
- 10) Write steps to design a flowchart.
- 11) Write rules for designing a flowchart.

**C) Write algorithm for the following:-**

- 1) Write an algorithm to switch on the computer.
- 2) Write an algorithm to find the sum product and differences of two numbers.
- 3) Write an algorithm to make a sandwich.
- 4) Write an algorithm to find the average of three numbers. (A B and C)
- 5) Write an algorithm to find the Compound Interest by giving the values of Principal Rate and Time.

**Exercise from the textbook:-**

A, B, C,

-----The End-----