

**CLASS VI  
COMPUTER  
UNIT 7**

**EXERCISES**

**1. MCQs.**

- a. The step by step procedure written to solve a given task is called \_\_\_\_.  
 Ⓐ algorithm      (ii) flowchart      (iii) both (i) and (ii)      (iv) none of these

**Ans.** (i) algorithm

- b. A diagrammatic representation of a program is called \_\_\_\_.  
 Ⓐ algorithm      (ii) flowchart      (iii) both (i) and (ii)      (iv) none of these

**Ans.** (ii) flowchart

- c. The shape used to represent processing in a flowchart.  
 Ⓐ Rectangle      (ii) Rhombus      (iii) Parallelogram      (iv) None of these

**Ans.** (i) Rectangle

- d. The shape used to represent Decision in a flowchart.  
 Ⓐ Rectangle      (ii) Rhombus      (iii) Parallelogram      (iv) None of these

**Ans.** (ii) Rhombus

**2. True (T) or False (F).**

- a. You can draw a flowchart and give it to the computer for processing.-F  
 b. Algorithm is a diagrammatic procedure for solving a problem.-F  
 c. Programming task consists of Problem Solving Phase and Flowchart Phase.-T  
 d. Using Flow Lines in a Flowchart is optional.-F  
 e. A Rhombus like shape is used to take decisions.-T

**3. Fill in the blanks.**

- a. The START/STOP symbols in a Flowchart is also called Terminator.  
 b. Parallelogram symbol is used to represent Input/Output.  
 c. A Flow Lines is used to represent the flow of movement of the processing in a flowchart.  
 d. The Connector symbol is used to show a jump from one point in the process flow to another.  
 e. A Decision symbol always has two flow lines outgoing from it to represent a True or False.

**4. Short answer type questions.**

- a. What is an Algorithm?

**Ans.** An Algorithm is a step by step procedure for solving a problem.

- b. What is a Flowchart?

**Ans.** A flowchart is a visual representation of the logical sequence of steps and decisions needed to perform a particular task.

- c. State one difference between Algorithm and a Flowchart.

**Ans.**

Algorithm	Flowchart
Algorithm is the step-by-step procedure for solving a given task.	Flowchart on the other hand is a pictorial representation of the procedure for solving the problem.

- d. State any two guidelines that you should follow while designing a Flowchart.

**Ans.** 1. A flowchart should always begin and end with the Terminators to indicate the START and STOP.  
 2. The symbols should be accurately used during designing.

- e. Name the two phases for a typical programming task.

**Ans.** i) Algorithm

ii) Flowcharts

**5. Long answer type questions.**

- a. State two advantages and disadvantages of using an Algorithm.

**Ans. Advantages:**

1. It allows you to plan the procedure for solving the task.
2. Easy to find bugs in an algorithm.

**Disadvantages:**

1. Solutions may be ambiguous.
2. As there is no rule for writing an algorithm structurally, it might lead to erroneous result.

- b. State two advantages and disadvantages of using a Flowchart.

**Ans. Advantages:**

1. Flowcharts are better way of communicating the logic of a system to all concerned or involved.

2. The flowcharts act as a guide or blueprint during the systems analysis and program development phase.

**Disadvantages:**

1. Sometimes, the program logic is quite complicated. In that case, flowchart becomes complex and clumsy.
2. If alterations are required the flowchart may require re-drawing completely.

c. Draw the symbol and state its uses:

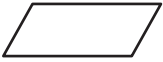
ⓐ Decision

Ans.



It is used to check for a criteria or a condition that can either be **True** (or **Yes**) or **False** (or **No**).

Ans ⓑ Input/Output





It is used to indicate any input/output process. Thus it may be used to accept values from the user (input) or display processed data (output) to the user.

Processing

Ans.



It is used to indicate any type of process or calculations that is being performed.

d. State at least 4 guidelines one must follow while designing a Flowchart.

**Ans.** While drawing a Flowchart the following guidelines should be kept in mind:

1. A flowchart should always begin and end with the Terminators to indicate the START and STOP.
2. The symbols should be accurately used during designing.
3. The flow of control is shown using flow lines..
4. Only one flow line should come out from a process symbol.

e. State the significance of Algorithm to solve a particular task.

**Ans.** An algorithm is any well-defined computational procedure that takes some value, or set of values, as input and produces some value, or set of values as output. So basically **algorithm tells exactly how to do something to reach our goal** or to achieve the required output or to accomplish our task.

