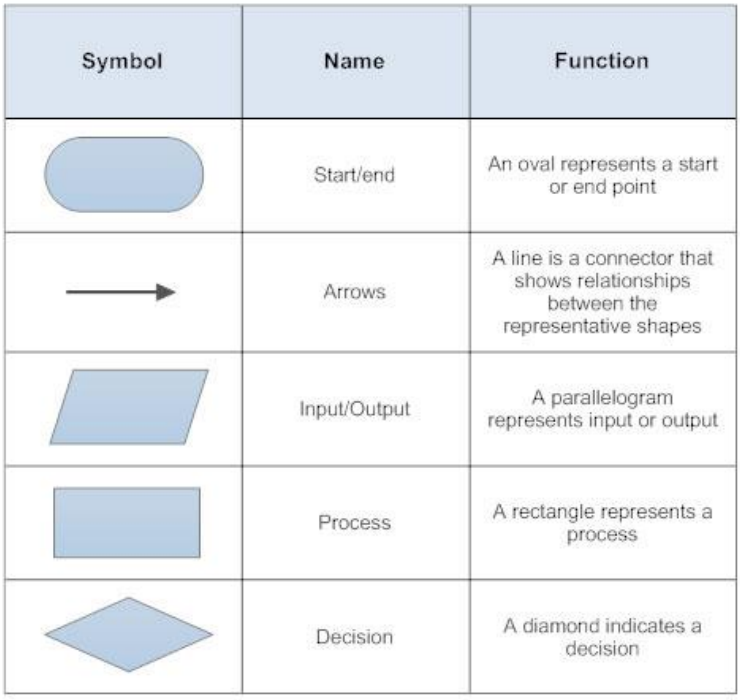
Flow chart (Questions)

Algorithms	Algorithm can be defined as: "A sequence of activities to be processed for getting desired output from a given input."
Problem Solving	Problem solving is the act of defining a problem; determining the cause of the problem; identifying, prioritizing, and selecting alternatives for a solution; and implementing a solution. The problem-solving process. Problem solving resources.
Flowcharts	A flowchart is a type of diagram that represents an algorithm, workflow or process. The flowchart shows the steps as boxes of various kinds, and their order by connecting the boxes with arrows. This diagrammatic representation illustrates a solution model to a given problem. Flowcharts are used in analyzing, designing, documenting or managing a process or program in various fields.
Symbols Used	
CPU	CPU itself has following three components. -Memory or Storage Unit.

	-Control Unit. -ALU(Arithmetic Logic Unit)

1. Make a flowchart to check whether a triangle is possible or not.

2. Make a flowchart that accepts the length of two different line segments and check whether they are equal or unequal. Display the message accordingly.

3. Write an algorithm to go for a class picnic.

4. Write an algorithm that inputs the age of a person and check whether he/she is eligible to vote or not. A person is eligible to vote only when he/she is 18 years or more.
5. Make a flowchart for the problem given in Q4.

6. Draw the flowchart to find 'Pythagorean Triplets' or not. Display the message accordingly. [Hint: Use Pythagoras Formula for a Right-angled Triangle: $h = p2+b^2$]

7. Draw a flowchart to display the grades as per the table given below:

Marks obtained	**Grade**
80% or more	A
60% or more but less than 80%	B
40% or more but less than 60%	C
Less than 40%	No Grade

8. Draw a flowchart to input three angles of a triangle and check whether a triangle is possible or not. If possible, then check whether it is an 'Acute-angled Triangle, 'Obtuse-angled Triangle' or a 'Right-angled Triangle'.

9. A librarian charges a fine for books, if returned late. The tariff for the fine is given below:

No. of days Fine

For the first ten days	40 paise per day
Eleven to twenty days	60 paise per day
More than twenty days	80 paise per day

Draw a flowchart to calculate the fine assuming that a book is returned 'N' days late.

Home work

10. Write an Algorithm to input three angles of a triangle and check whether a triangle is possible or not. If possible, then check whether it is an 'Acute-angled Triangle, 'Obtuse-angled Triangle' or a 'Right-angled Triangle'.
11. Draw flowchart to find the largest among three different numbers entered by user.
12. Write an algorithm Accept a number and check:
    (a) whether the number is divisible by 2 and 5.
    (b) whether the number is divisible by 2 but not by 5.
    (c) whether the number is divisible by 5 but not by 2.
    Display the message accordingly