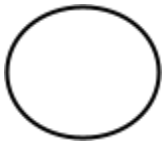
Program Design with Algorithms

A. Choose the correct option:

1. Which of the following is a part of flow chart?
   (a) 
   (b) 
   (c) Both a and b
2. To execute the statement more than once repeatedly is called-
   (a) Looping
   (b) Following
   (c) Polling
3. Purpose of the  symbol in a flow chart is-
   (a) Process
   (b) Input/Output
   (c) Start
4. Pictorial representation of an algorithm is called-
   (a) Variable
   (b) Condition
   (c) Flow chart
5. A _____ is a symbol or name that identifies the data in an algorithm and flowchart.
   (a) Variables
   (b) Loops
   (c) Block

B. Fill in the blanks:

1. Flowchart for _____ problems are difficult to draw and manage.
2. _____ is a set of steps arranged in a logical sequence to get desired output.
3. _____ is a block that contains the statements to execute repeatedly.
4. _____ and _____ are tools to design the logic for computer programs.
5. Symbol  the flow chart is called _____.

C. State true or false:

1. The direction of the flow chart is either from top to down or left to right.
2. Algorithms are independent of any programming language.
3. We cannot understand the flow of the program looking at the flowchart.
4. A flowchart has only two symbols or boxes that signify different types of actions.
5. An expression to compare values in an algorithm is called condition.

D. Answer the following questions:

1. Write any two limitations of flowchart.
2. What are the different symbols a flowchart is composed of?
3. Define the term variable.
4. Explain looping giving examples of While-End While block.
5. Create an algorithm to accept the length and width of the rectangle and calculate its area.