

**Algorithm:** This is a problem solving technique. It can be defined as step by step procedure to solve a particular programme. It consists of English like statements.

**Definition of Algorithm:** The term Algorithm may be formally defined as a sequence of instructions designed in such a way that if the instructions are executed in the specific sequence the desired result will be obtained.

**Characteristics of Algorithm:**

- ⊗ In order to qualify as Algorithm a sequence of instructions must possess the following:-
- (i) **Input:** It may accept 0 or more inputs.

Date / /

- (ii) Output :- It should produce one output
- (iii) Definiteness :- Each instruction must be clear well defined and precise. There should be any ambiguity. ~~Each~~
- (iv) Finiteness :- It should be sequence of finite instructions. It should end after finite no. of steps.
- (v) Effectiveness :- This means that operation must be simple and carried out in a finite time at one or more level of complexity. It should be effective whatever traced manually for the results.

Qn Write the algorithm for finding greatest among ~~the~~ three numbers a, b, c.

Step-1  $\Rightarrow$  Read a, b, c

Step-2  $\Rightarrow$  [Compare ~~the~~ two numbers]  
if  $a > b$  go to step 4

Step-3  $\Rightarrow$  if  $b > c$   
~~else~~ print "b is greatest"  
else  
print "c is greatest"

Step-4  $\Rightarrow$  if  $a > c$   
~~then~~ print "a is greatest"  
else  
print "c is greatest"

Step-5  $\Rightarrow$  Stop.