







De-fuzzification: linguistic value(s) of output variable (sales) obtained in the previous stage are converted into a real output value. This can be accomplished by computing typical values and the crisp result is found out by balancing out the results. (Von Altrock, 1997)

Fuzzy logic model was applied to grouped data and sales values were calculated for each input output combination.

Total sales value for the whole period was calculated by summing up the sales values of all the grouped items.

Total Sales =  $\sum_0^n sales \rightarrow 1$  [Where  $n \rightarrow$  Number of input-output combinations]

A fuzzy logic algorithm was developed that automatically allocates electronic attack resources in real-time:

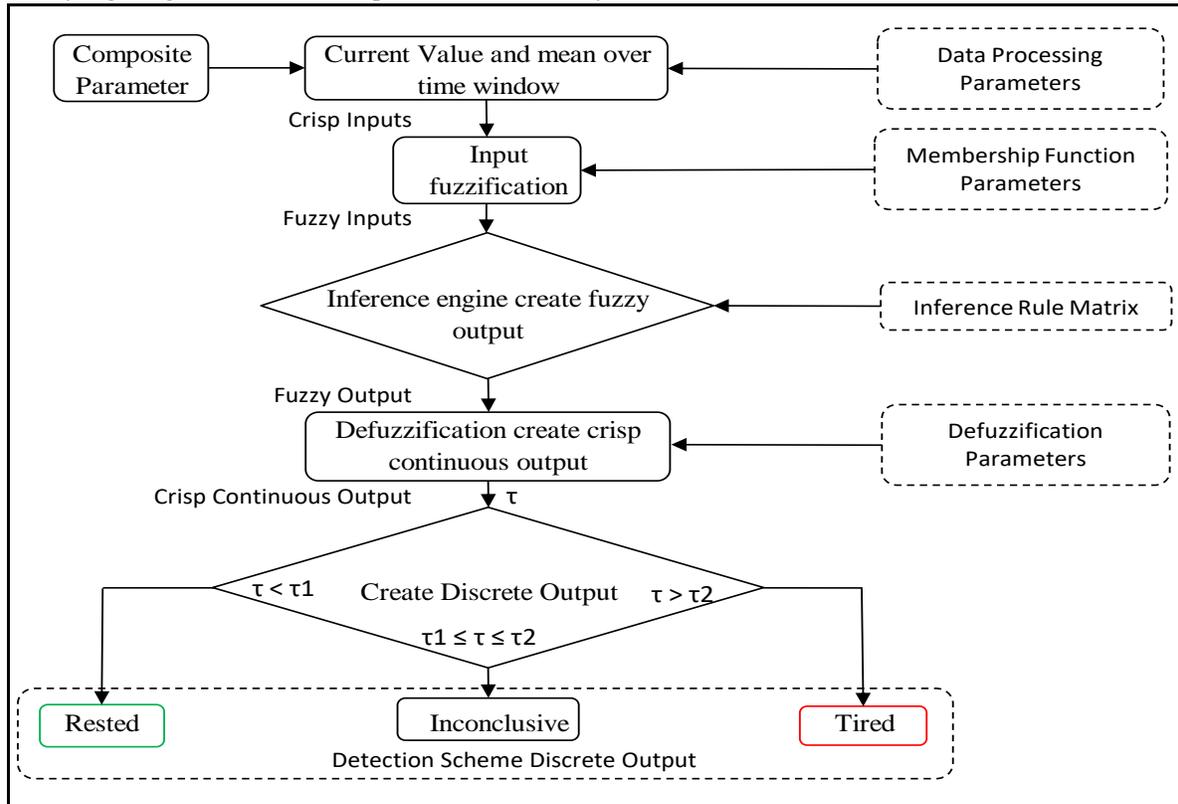


Figure 2. Algorithm of Fuzzy Logic

#### 4. Proposed Methodology:

The Success and accuracy of an FIS model depends on how appropriately the given data sets resemble to the actual occurrences. The membership function of variables should contain all the features of the real situations, so that, all uncertainties inherent in the system get included in the FIS model during formulation. To achieve appropriateness all of these membership functions should be chosen wisely to get a good FIS model. In order to forecast monthly RMG sold of a knit garments industry in Bangladesh, 16 important factors were considered as input parameters and number of RMG sold has considered as the Output parameters. The relationship between different input data and the output data and the uncertainties due to various real world reasons was decided by the FIS Artificial Intelligence. In this research work MATLAB Fuzzy Logic Toolbox was used to implement the design algorithm.

The problem solving method is described step by step below:

- Firstly, clear and straight-cut output parameters are selected. Here the selected parameter is- the Sales volume of RMG which is going to be forecasted by the developed Fuzzy model.

- Then the variables that impact the output parameter are identified and the major factors are selected as input parameters.

- Each Input is divided into different ranges & each range is represented by a specific Membership function (Triangular) by collecting of necessary real life data range to develop the model. Output is also split up into seven ranges by selecting appropriate membership functions.

- Then several logical rules were created using (and, or) connections by relating the input variables with output parameter and the graphical relationships (surface) between the inputs and output were observed.







