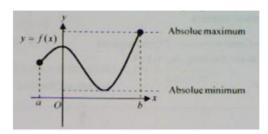
Extrema of a Function

A. Absolute Extrema: An absolute maximum is the highest y – value of a function on a given interval or across the entire domain. An absolute minimum is the lowest y – value of a function on a given interval or across the entire domain.



B. Relative Extrema

- **I. Relative Maximum:** The y-value of a function where the graph of the function changes from increasing to decreasing. Another way to define a relative maximum is the y-value where derivative of a function changes from positive to negative.
- **II. Relative Minimum:** The y-value of a function where the graph of the function changes from decreasing to increasing. Another way to define a relative maximum is the y-value where derivative of a function changes from negative to positive.

