

# LECTURE #26 MTH403

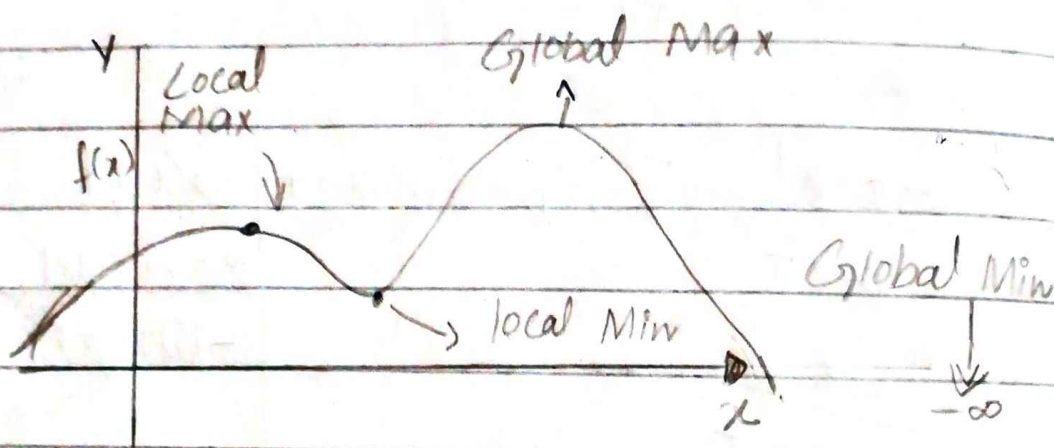
## Extreme Values (INTRODUCTION)

### • Absolute Maximum:-

\* A function  $f$  has an absolute maximum at  $c$  if  $f(c) \geq f(x)$  for all  $x$  in  $D$ .

\* Where  $D$  is the domain of  $f$ .

\* The number  $f(x)$  is called the maximum value of  $f$  on  $D$ .



### • Absolute Minimum, Relative Maximum and Relative Minimum.

### • Absolute Minimum:-

\* A function  $f$  has an absolute minimum at  $d$  if  $f(d) \leq f(x)$  for all  $x$  in  $D$ .

\* Where  $D$  is the Domain of  $f$ .