Numerical Techniques

# First Year

## Lagrange Method of Undetermined Coefficients

### Method

Let given function be under the condition   
 Construct the Auxiliary function  
 Find Stationary points of F:

### Q) Find the maximum and minimum of

Ans

Critical point (1,0) lies in boundary so there are no extrema in the interior

Auxilary function

If y=0 then,

If then

Function values at Critical Points