

# 1. Introduction.

The word 'Continuous' means without any break or gap. If the graph of a function has no break, or gap or jump, then it is said to be continuous.

A function which is not continuous is called a discontinuous function.

While studying graphs of functions, we see that graphs of functions  $\sin x$ ,  $x$ ,  $\cos x$ ,  $e^x$  etc. are continuous but greatest integer function  $[x]$  has break at every integral point, so it is not continuous. Similarly  $\tan x$ ,  $\cot x$ ,  $\sec x$ ,  $\frac{1}{x}$  etc. are also discontinuous function.

