LIST OF SYMBOLS

$A = B, A \neq B$ : Equality and Inequality for sets

$[a, b], [a, b)$ e.t.c. : Intervals on the real line

$\delta(A)$ : Diameter of a set $A$

$D(A, B)$ : Distance between the sets $A$ and $B$

$D(x, A)$ : Distance between the point $x$ and set $A$

$d(x, y)$ : Distance from one point to another

$I_X$ : Identity mapping on a set

$\inf$ : Infimum (or greatest lower bond)

$max$ : Maximum

$min$ : Minimum

$N$ : Set of natural numbers

$R$ : Set of real numbers

$R^+$ : Set of non-negative real numbers

$\sup$ : Supremum (or least upper bond)

$SoT$ : $S$ composition $T$

$| x |$ : Absolute value of $x$

$\| \cdot \|$ : Norm

$\Rightarrow$ : Implies

$\phi$ : Empty set

$\in$ : Belongs to, belonging to

$\notin$ : Does not belong to