ABSTRACT

A group $G$ with topology $\tau$ on $G$ can be turned topological group $(G,\tau)$ if multiplication mapping $G \times G \rightarrow G$ continuous such that inverse mapping is continuous. A semigroup $S$ with topology $\tau$ on $S$ can be turned topological semigroup $(S,\tau)$ if the multiplication $S$, as a mapping of $S \times S \rightarrow S$ is continuous. A group(semigroup) $G$ can be turned into a topological group(semigroup) by providing it with the discrete topology.

Keywords : group, semigroup, topological semigroup, topological group, inverse mapping, discrete topology