

**SARDAR PATEL UNIVERSITY**  
**Programme & Subject: M.Sc (Mathematics)**  
**Semester: IV**  
**Syllabus with Effect from: November-2013**

<b>Paper Code: PS04EMTH08</b>	<b>Total Credit: 4</b>
<b>Title Of Paper: Topological Groups</b>	

<b>Unit</b>	<b>Description in detail</b>	<b>Weighting (%)</b>
I	Basic properties of topological groups- left and right translations- neighbourhood system of identity.	25%
II	Separation axioms-subgroups and quotient groups -products and inverse limits of groups.	25%
III	Structure theorem for locally compact groups.	25%
IV	Construction of Haar measure and its properties. The Banach algebra $L^1(G)$ .	25%

**Basic Text & Reference Books:-**

- T. Husain - Introduction to topological groups, W. B. Saunders Co., Japan, 1966.
- E. Heb Witt and K.A. Ross - Abstract Harmonic Analysis – I, Springer Verlag, Berlin, 1993.

