ON SOME CLASSES OF SETS VIA $\theta$-GENERALIZED OPEN SETS

M. CALDAS, S. JAFARI and T. NOIRI

Abstract. In this paper, we introduce and study the notions of $\theta$-g-derived, $\theta$-g-border, $\theta$-g-frontier and $\theta$-g-exterior of a set via the notion of $\theta$-g-open sets. Nakaoka and Oda ([9] and [10]) introduced the notion of maximal open sets and minimal closed sets. By the same token, we introduce new classes of sets called maximal $\theta$-g-open sets, minimal $\theta$-g-closed sets, $\theta$-g-semi maximal open sets and $\theta$-g-semi minimal closed sets and investigate some of their fundamental properties.

MSC 2000. Primary: 54B05, 54C08; Secondary: 54D05.

Key words. Topological space, $\theta$-g-border, $\theta$-g-frontier, maximal open sets, minimal closed sets, $\theta$-open sets, maximal $\theta$-g-open sets.

REFERENCES


Received January 31, 2007
Departamento de Matemática Aplicada
Universidade Federal Fluminense
Rua Mário Santos Braga, s/n
24020-140 Niterói, RJ, Brasil
E-mail: gmamccs@vm.uff.br

College of Vestsjaelland South
Herrestraede 11
4200 Slagelse, Denmark
E-mail: jafari@stofanet.dk

Department of Mathematics
Yatsushiro College of Technology
866 Yatsushiro, Kumamoto, Japan
E-mail: noiri@as.yatsushiro-nct.ac.jp