

SOME  $(\Lambda, b)$ -TYPE MAPPINGS IN TOPOLOGICAL SPACES

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**Abstract.** In this paper, the authors introduce and study  $(\Lambda, b)$ -continuous,  $(\Lambda, b)$ -irresolute and quasi- $(\Lambda, b)$ -irresolute mappings. Some characterizations and several properties concerning aforesaid mappings are obtained. The authors also introduce  $(\Lambda, b)$ -compactness and  $(\Lambda, b)$ -connectedness. It is proved that  $(\Lambda, b)$ -compactness (resp.  $(\Lambda, b)$ -connectedness) is preserved under  $(\Lambda, b)$ -irresolute mappings. The paper also touches the topics frontier points, Dirichlet's function, filter and algebraic structure of some functions.

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**Key words.**  $\Lambda_b$ -set,  $(\Lambda, b)$ -closed set,  $(\Lambda, b)$ -open set,  $b$ -continuous function,  $b$ -irresolute function.

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