A STUDY ON THE SE-CONNECTION
AND ITS CURVATURE TENSOR IN $*g\text{-}SEX_n$

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An n–dimensional $*g\text{-}SE$–manifold $*g\text{-}SEX_n$ is a generalized Riemannian space connected by the SE–connection which is both semi–symmetric and Einstein. The purpose of the present paper is to study the SE–connection and its curvature tensor in $*g\text{-}SEX_n$. In this paper, we show that the SE–connection uniquely exists in $*g\text{-}SEX_n$ and represent it in terms of the basic real tensor $*g_{\lambda\mu}$ *employing newly obtained recurrence relations.* Furthermore, we investigate the properties of the curvature tensor and its contracted curvature tensors defined by the SE–connection in $*g\text{-}SEX_n$, and derive several useful generalized identities involving them.

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