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**On Invariant Submanifolds of Riemannian Warped Product Manifold**

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Abstract: In this paper, we generalize the geometry of the invariant submanifolds of Riemannian product manifold to the geometry of the invariant submanifolds of Riemannian warped product manifold. We investigate some properties of an invariant submanifolds of a Riemannian warped product manifold. We show that every invariant submanifold of the Riemannian warped product manifold is a Riemannian warped product manifold. Also, we give a theorem on the pseudo-umbilical invariant submanifold. Further, we obtain that integral manifolds on an invariant submanifold are curvature-invariant submanifolds. Finally, we give a necessary condititon on a totally umbilical invariant submanifold to be totally geodesic.

Key Words: Riemannian Warped Product Manifold, Vertical and Horizontal Distributions, Pseudo-Umbilical Submanifold, Curvature-Invariant Submanifold