**Abstract**

The availability of large quantity of text documents from the World Wide Web and business document management systems has made the dynamic separation of texts into new categories as a very important task for every business intelligence systems. Text document clustering is one of the emerging and most needed clustering techniques used to cluster documents with regard to similarity among documents. It is used widely in digital library management system in the modern context. Document clustering is widely applicable in areas such as search engines, web mining, information retrieval, and topological analysis. There are several clustering approaches available in the literature to cluster the document. But most of the existing clustering techniques suffer from a wide range of limitations. The existing clustering approaches face the issues like practical applicability, very less accuracy, more classification time etc. Thus a novel approach is needed for providing significant accuracy with less classification time. In recent times, inclusion of fuzzy logic in clustering provides better clustering results. One of the widely used fuzzy logic based clustering is Fuzzy C-Means (FCM) Clustering. In order to further improve the performance of clustering, this thesis uses Modified Fuzzy C-Means (MFCM) Clustering. The documents are ranked using Term Frequency–Inverse Document Frequency (TF–IDF) technique. From the experimental results, it can be observed that the proposed technique results in better clustering when compared to the FCM clustering technique.