**ABSTRACT**

Biometric system offers several advantages over traditional based methods. However, unimodal biometrics possesses disadvantages as well. If the biometrics feature is stolen, it cannot be replaced for further security. Also, the damaged biometrics leads to wrong predation. To overcome this difficulty, this work focuses on using the multimodal biometrics. The main focus is on the biometrics such as fingerprint and iris. In order to combine cryptography with multimodal biometric features, this work incorporates the implementation of double encryption. The templates is first encoded using the fuzzy vault concept. In order to enhance the security of the proposed system had used the symmetric key to encode the vault. This concept is referred as a double encryption in this work. The multiple feature representation offers more reliable characterization of features