**ABSTRACT**

Secure Transmission of data needs ensured cryptographic technique with most effective solution. Network Security has become a great threat to the Network Accessible Resources that consists of the policies to prevent and monitor unauthorized access, modification, misuse of a computer network and network-accessible resources. Several numbers of algorithms and techniques were proposed for the secure transmission of data and to protect user’s privacy. Secret-key cryptography and public-key cryptography are the two major cryptographic architectures that are defined for the protection of security issues. Secrecy of the cryptographic key holds the security of the system. Thus, key management is the main issue in the cryptography. Hence several key generation methods were developed and ensured for privacy over communication. This work brings a study of various techniques used for network security and how biometrics was used for the authentication, key generation purposes and security purposes in the network. The proposed techniques are compared on the basis of the parameters to prove its efficiency.