

# SAPTHAGIRI COLLEGE OF ENGINEERING

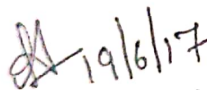
14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore-560037

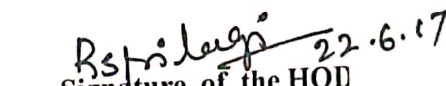
*Department of Computer Science and Engineering*


## Certificate



Certified that the project work entitled "A Secure Anti-Collusion Data Sharing Scheme for Dynamic Groups in the Cloud" carried out by ROHIT KUMAR(1SG13CS087), SANT RAJ (1SG13CS094), SHAMMEM AHAMAD(1SG13CS097), VIDYA SAGAR(1SG13CS123), bonafide students of this institute, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2016-17. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project progress report has been approved as it satisfies the academic requirements in respect of Project work (10CS85) prescribed for the said degree.

  
Signature of the Guide  
Prof. Latha A  
Assistant Professor

  
Signature of the HOD  
for Dr. Prashanth C.M  
Professor & Head

  
Signature of the Principal  
Dr. Aswatha Kumar M  
Principal

Name of the Examiners

1.....

2.....

Signature with date

.....

.....

## ABSTRACT

Benefited from cloud computing, users can achieve an effective and economical approach for data sharing among group members in the cloud with the characters of low maintenance and little management cost. Meanwhile, this system must provide security guarantees for the sharing data files since they are outsourced. Unfortunately, because of the frequent change of the membership, sharing data while providing privacy-preserving is still a challenging issue, especially for an untrusted cloud due to the collusion attack. This system proposes a secure data sharing scheme for dynamic members. Firstly, this system proposes a secure way for key distribution without any secure communication channels, and the users can securely obtain their private keys from group manager. Secondly, this scheme can achieve fine-grained access control, any user in the group can use the source in the cloud and revoked users cannot access the cloud again after they are revoked. Thirdly, this system can protect the scheme from collusion attack, which means that revoked users cannot get the original data file even if they conspire with the untrusted cloud.