What is cryptography?

The method of converting valuable/confidential data into a string of unreadable text is known as cryptography

There are 2 types of cryptography:

- 1) Symmetric
- 2) Asymmetric

In symmetric method the same one common key is used to encrypt and decrypt the text. While in the asymmetric method each user has his own public and private key used to encrypt/decrypt the text.

Cryptography policy:

- OpenSSL tool should be used to encrypt/decrypt data.
- AES128 algorithm should be used (In CBC mode only).
- The data should be base64 encrypted
- Data to be encrypted department wise:

Department	Data to be encrypted
Finance	Payment records , Dues and debt record
IT	User-id and password of all users
Sales	Client information life current cost of product and requirements

- Only IT specialists to encrypt all data for each department
- All cryptographic keys to be stored in external hard disks only
- This hard disk should be backed up daily and stored in a secure location.
- Key transfer should only happen in written form .