**What are Electronic Cheques?**  
Electronic cheques are another form of Electronic tokens. They are designed to accommodate the many individuals and entities that might prefer to pay on credit or through some mechanism other than cash. Once registered, a buyer can then contact sellers of goods and services. To complete a transaction, the buyer sends a check to the seller for a certain amount of money. These checks may be sent using Email or other Transport methods. When deposited, the cheque authorises the transfer of account balances from the account against which the cheque was drawn to the account to which the cheque was deposited.  
The electronic cheques are modeled on paper checks, except that they are initiated electronically. They use digital signatures for signing and endorsing and require the use of digital certificates to authenticate the payer, the payer’s bank and bank account. They are delivered either by direct transmission using telephone lines or by public networks such as the Internet.

**Benefits of electronic Cheques:**  
• Well suited for clearing micro payments. Conventional cryptography of e-cheques makes them easier to process than systems based on public key cryptography (like digital cash).  
• They can serve corporate markets. Firms can use them in more cost-effective manner.  
• They create float and the availability of float is an important requirement of Commerce.

**Advantages of Electronic cheques:**  
1. Similar to traditional cheques. This eliminates the need for customer education  
2. Since Electronic cheques use conventional encryption than Public and private keys as in e-Cash, Electronic cheques are much faster.

The risk is taken care of by the accounting server, which will guarantee that the cheque would be honoured.  
Disadvantages AND Legal Issues of E-Cash   
1. E-Cash cannot be broken into smaller denominations.  
2. The concept of maintaining a database of spent notes is very expensive.  
3. Accessing Database of spent notes is also very time consuming.  
4. Transaction based taxes account for a significant portion of state and local government revenue. If e-Cash becomes successful, then people will use it to buy things like cars and houses, which would not have been possible with actual cash. (One can’t physically carry so much of real cash)  
5. Currency fluctuation is another issue related to e-Cash.

**Important features of the Cheque are:**  
1.Transferability  
2.System of Crossing and its implications  
3.Creation of a Holder in Due Course

**1.Transferability:**  
A Cheque as any other Negotiable Instrument is transferable by Delivery in case it is drawn payable to a Bearer and by Endorsement and Delivery when made payable to order. The word Bearer has been used in the NI Act as a person who is in the physical possession of the written instrument. This aspect of Delivery cannot be constructive or implied in case of Negotiable instruments. Hence it can be fulfilled only in respect of Written Negotiable Instruments. If the Virtual instruments are to be acceptable, perhaps these concepts of Delivery and Bearer as applicable to them have to be redefined.

**2. System of crossing:**  
The idea of crossing of cheques has always been recognized through the method of physically writing on the paper cheques. But after the introduction of electronic cheques, the method of physically crossing the cheques has not been suitable amended so that if a particular cheque has to be crossed or is required to be sent to a particular account, there are no complications. Nowhere has it been mentioned after the amendment that the system of crossing shall also be electronically completed. Crossing by definition is an act of Writing. Unless this is redefined, it cannot be applied by extension.

**3. Holder in Due Course:**  
This aspect of negotiable instruments actually rests totally upon the fact that there has to be a physical existence of the cheque. Unless and until such existence is not there, it shall not be possible to have a Holder in Due Course for a cheque or any other negotiable instrument. There has not been an amendment which could give a full proof recognition to a holder in due course of an electronic cheque. The very essence of a Negotiable Instrument is its ability to create a Holder in Due Course. Whatever attempt has been made to redefine the law and introduce Virtual Negotiable Instruments it will have to accommodate this feature. Without this, the Virtual Cheques can only be another type of a Quasi Negotiable Instrument

**4: Rights and Liabilities of Bankers:**  
The extent of liability of the Collecting and the Paying Banker has been very clearly laid down under the Banking law. It cannot be extended to the electronic cheques, simply by introducing the concept of e-cheques without providing for a suitable amendment, which would clarify as to rights and liabilities of the banks. It should be made clear as to when will the liability of the paying banker arise in case of a fraud with respect to electronic cheques, and what remedy does it have against the customer. It should also be mentioned regarding the Collecting Banker  
Problems with the traditional payment systems:  
**1. Lack of Convenience:**  
Traditional payment systems require the consumer to either send paper cheques by snail-mail or require him/her to physically come over and sign papers before performing a transaction. This may lead to annoying circumstances sometimes.

**2. Lack of Security:**  
This is because the consumer has to send all confidential data on a paper, which is not encrypted, that too by post where it may be read by anyone.

**3. Lack of Coverage:**  
When we talk in terms of current businesses, they span many countries or states. These business houses need faster transactions everywhere. This is not possible without the bank having branch near all of the companies’ offices. This statement is self-explanatory.

**4. Lack of Eligibility:**  
Not all potential buyers may have a bank account.

**E-CHEQUE**

**INTRODUCTION:**

An e-Cheque is an electronic document which substitutes the paper document. E-Cheques pass directly from the payer to the payee, so that the timing and the purpose of the payment are clear to the payee. E-cheques are mode of electronic payments. Thistechnology was developed couple of years ago and has been promoted by many of thefinancial institutions. E-cheques work the same way as paper cheques and are a legally binding promise to pay. The payer/account holder writes an e-cheque using a computer or other type of electronic device and transmits the e-cheque to the payee electronically.The payer's bank verifies the payer's digital signature and debits the payer'saccount. Like paper cheques, e-Cheques can bounce or be returned, for stop payment instructions, insufficient funds or accounts being closed. Cryptographic signatures one very e-Cheque can be verified at all points, while in paper cheques, handwritten signatures can be verified at only one point. The e-Cheque system is designed withmessage integrity, authentication and non-repudiation features, strong enough to preventfraud against the banks and their customers. The purpose of going e cheques are well suited for clearing micro payments, Conventional cryptography of e-cheques makes them easier to process than systems based on public key cryptography (like digital cash).They can serve corporate markets. Firms can use them in more cost-effective manner. They create float and the availability of float is an important requirement of Commerce. Some of the advantages are similar to traditional cheques. This eliminates the need for customer education since, Electroniccheques use conventional encryption than Public and private keys as in e-Cash,Electronic cheques are much faster

**An introduction to Electronic Checks**

(By - Siddharth)

Electronic checks (or cheques) are also known as e-checks. This means that instead of  a paper check the customer fills out their banking information (bank account number, routing number) online. In a more simple language an e-check is an electronic version of a paper check. It can be used in any transactions where paper checks are used - yet it capitalizes on the speed and processing efficiencies of all-electronic payments.

**So how do e-checks work**

Electronic checks are designed to accommodate the many individuals and entities that might prefer to pay on credit or through some mechanism other than cash electronic checks are modeled on paper checks, except that they are initiated electronically, use digital signatures for signing and endorsing, and require the use of digital certificates to authenticate the payer, the payer’s bank and bank account. The payer writes the e-check through a computer, uses a digital signature and sends it either by direct transmission using telephone lines or by public networks such as the Internet. The payee receives it, verifies signatures, endorses it, writes a deposit slip, and signs it. The endorsed check is then sent over internet to the payee's bank for deposit. Bank personnel verify signatures, credit the deposit, and then clear and settle the endorsed e-check by sending it on to the payer's bank, where signatures are once again verified and the amount of the e-check is debited from the payer's account. The cryptographic certificates used with an e-check enable a check payee to determine the validity of the signatures. Initially, these certificates are actually transmitted with the e-check, but alternative models where the transmission, or possibly even issuance, of the certificate is not required are currently in the making. e-check technology also allows digital signatures to be applied to document blocks, rather than to the entire document. This allows parts of a document to be separated from the original, without compromising the integrity of the digital signature.

***Benefits of Electronic Checks***

* Electronic checks work in the same way as traditional checks, thus simplifying customer education.
* Electronic checks are well suited for clearing micro payments; the conventional cryptography of electronic checks makes them easier to process than systems based on public-key cryptography.
* Electronic checks can serve corporate markets. Firms can use electronic checks to complete payments over the networks in a more cost-effective manner than present alternatives.
* Electronic checks create float and the availability of float is an important requirement for commerce. The third-party accounting server can earn revenue by charging the buyer or seller a transaction fee or a flat rate fee or it can act as a bank and provide deposit accounts and make money from the deposit account pool.
* Electronic check technology links public networks to the financial payments and bank clearing networks, leveraging the access of public networks with the existing financial payments infrastructure.