What Is an Electronic Payment System?

 Electronic payment systems are also known as e-payment systems and online payment systems.

 An e-payment system is a way of making transactions or paying for goods and services through an electronic medium, without the use of checks or cash.

 Electronic payments allow customers to pay for products or services electronically.

 Electronic Payment is a financial exchange that takes place online between buyers and sellers.

Types of Payment System

1. Digital Cash.
2. Electric Cheque.
3. Smart Card.
4. Credit Card.
5. Debit Card.
6. E-Money.
7. Bit coins.
8. Crypto Currency.
9. Electronic Fund Transfer (EFT).
10. UPI.
11. IMPS.

1. Digital Cash

 It is a new concept of online payment system. Digital Cash is a digital money product that provides a way to pay for products and service without resorting to the use of paper.

 Digital Cash acts much like real cash, except that it's not on paper. Money in your bank account is converted to a digital code.
This digital code may
then be stored on a microchip, a pocket card (like a smart card), or on the hard drive of your computer.

 Digital Cash (also known as e-currency, e-money, electronic cash, \electronic currency, digital money, digital currency, cyber currency) refers to a system in which a person can securely pay for goods or services electronically without necessarily involving a bank to mediate the transaction.

2. Electronic Check
 Since the check is in an electronic format, it can be processed in fewer steps.

 It has more security features than standard paper checks includingauthentication, public key cryptography, digital signatures, and encryption, among others.

 An electronic check is a form of payment made via the internet that isdesigned to perform the same function as a conventional paper check.

 One of the more frequently used versions of the electronic check is the direct deposit system offered by many employers.

 Generally, the costs associated with issuing an electronic check are notably lower than those associated with paper checks.

 An electronic check has more security features than standard paper checks.

3. Smart Card

Smart card is again similar to a credit card or a debit card in appearance, but it has a small microprocessor chip embedded in it. It has the capacity to store a customer's work-related and/or personal information. Smart cards are also used to store money and the amount gets deducted after every transaction. Smart cards are secure, as they store information in encrypted format and are less expensive/provide faster processing.

Examples of Smart Cards

Smart cards are used as-

 Used as payment cards like credit/ debit cards. These are issued by commercial
companies or banks.

 Hospitals use these cards to store patient details.

 EBT (Electronic benefits transfer) cards are used for the distribution of government benefits.

 Smart cards are used by educational institutions, government authorities etc for access control.

4. Credit Card

Payment using credit card is one of most common mode of electronic payment. Credit card is small plastic card with a unique number attached with an account. It has also a magnetic strip embedded in it which is used to read credit card via
card readers.

When a customer purchases a product via credit card, credit card issuer bank pays on behalf of the customer and customer has a certain time period after which he/she can pay the credit card bill.

Following are the actors in the credit card system.

- The card holder – Customer
- The merchant – seller of product who can accept credit card payments.
- The card issuer bank – card holder's bank
- The acquirer bank – the merchant's bank
- The card brand – for example, visa or MasterCard.

5. Debit Card

Debit card, like credit card, is a small plastic card with a unique number mapped with the bank account number. It is required to have a bank account before getting a debit card from the bank.

The major difference between a debit card and a credit card is that in case ofpayment through debit card, the amount gets deducted from the card's bank account immediately and there should be sufficient balance in the bank account for the transaction to get completed; whereas in case of a credit card transaction, there is no such compulsion.
Debit cards free the customer to carry cash and cheques.

6. E-Money

- Electronic money is currency that is stored in banking computer systems.
- Various companies allow for transactions to be made with electronic money, such as Square or PayPal.
- Although electronic money is often considered safer and more transparent than physical currency, it is not without its risks.
- E-money transactions are faster, convenient, and save a lot of time.
- Online payments done via credit cards, debit cards, or smart cards are examples of e-money transactions. Another popular example is e-cash. In case of e-cash, both customer and merchant have to sign up with the bank or company issuing e-cash.

7. Bit coin

 Bit coin is a digital currency that was created in January 2009.

 The identity of the person or persons who created the technology is still a mystery. Bit coin offers the promise of lower transaction fees than traditional online payment mechanisms and, unlike government-issued currencies, it is operated by a decentralized authority.

 Bit coin is a type of crypto currency. There are no physical bit coins, only balances kept on a public ledger that everyone has transparent access to.

 All bit coin transactions are verified by a massive amount of computingpower. Bit coins are not issued by any banks or governments, nor are individual bit coins valuable as a commodity.

 Bit coin is very popular and has triggered the launch of hundreds of other crypto currencies. Bit coin is commonly abbreviated as "BTC."

8. Crypto Currency

 A crypto currency is a digital currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend.

 The word "crypto currency" is derived from the encryption techniques which are used to secure the network.

 It is monitored and organized by a peer-to-peer network called a blockchain, which also serves as a secure ledger of transactions, e.g., buying, selling, and transferring.

 Unlike physical money, crypto currencies are decentralized, which means they are not issued by governments or other financial institutions.

9. Electronic Fund Transfer

It is a very popular electronic payment method to transfer money from one bank account to another bank account without any paper money changing hands. Accounts can be in the same bank or different banks. Fund transfer can be done

using ATM (Automated Teller Machine) or using a computer. Types of EFTs The most common types of EFTs include:

 Wire transfers: Used for non-regular payments, such as the down payment on a
house.
 Automated Teller Machines (ATMs): Allows cash withdrawals and deposits,fund transfers and checking of account balances at multiple locations, such as branch locations, retail stores, shopping malls and airports.
 Debit cards: Allows users to pay for transactions and have those funds deducted from the account linked to the card.
 Pay-by-phone systems: Allows users to pay bills or transfer money over the phone.
 Online banking: Using online banking, users can access accounts to make payments, transfer funds and check balances.

10 .Unified Payment Interface (UPI)

A Unified Payment Interface (UPI) is a Smartphone application that allows users to transfer money between bank accounts.
It is a single-window mobile payment system developed by the National Payments Corporation of India (NPCI). It eliminates the need to enter bank details or other sensitive information each time a customer initiates a transaction.
It works by transferring money between two bank accounts along with a mobile platform.
The system is said to be a safe and secure method of transferring money betweentwo parties and eliminates the need to transact with physical cash or through a bank

The interface is regulated by the Reserve Bank of India (RBI), India's central bank, and funds sent between accounts. This app eliminates the need to enter bank details or other sensitive information each time a customer initiates a transaction making it a safe way to bank.

11. Immediate Payment Service (IMPS):

- Immediate Payment Service (IMPS) is an instant real-time interbank electronic funds transfer system in India.
- IMPS offer an inter-bank electronic fund transfer service through mobile phones available 24×7, throughout the year including Sundays and bank holidays.
- Customers can transfer and receive funds through IMPS using their registered mobile number and Mobile Money Identifier (MMID) or Account number and IFSC code.
- This facility is provided by National Payments Corporation of India (NPCI).

The participants for IMPS are Remitter, Beneficiary, Banks and NFS-NPCI.

- The IMPS was publicly launched on November 2010. Currently, there are 53
commercial banks, 101 Rural/District/Urban and cooperative banks, and 24 PPI signed up for the IMPS service.