

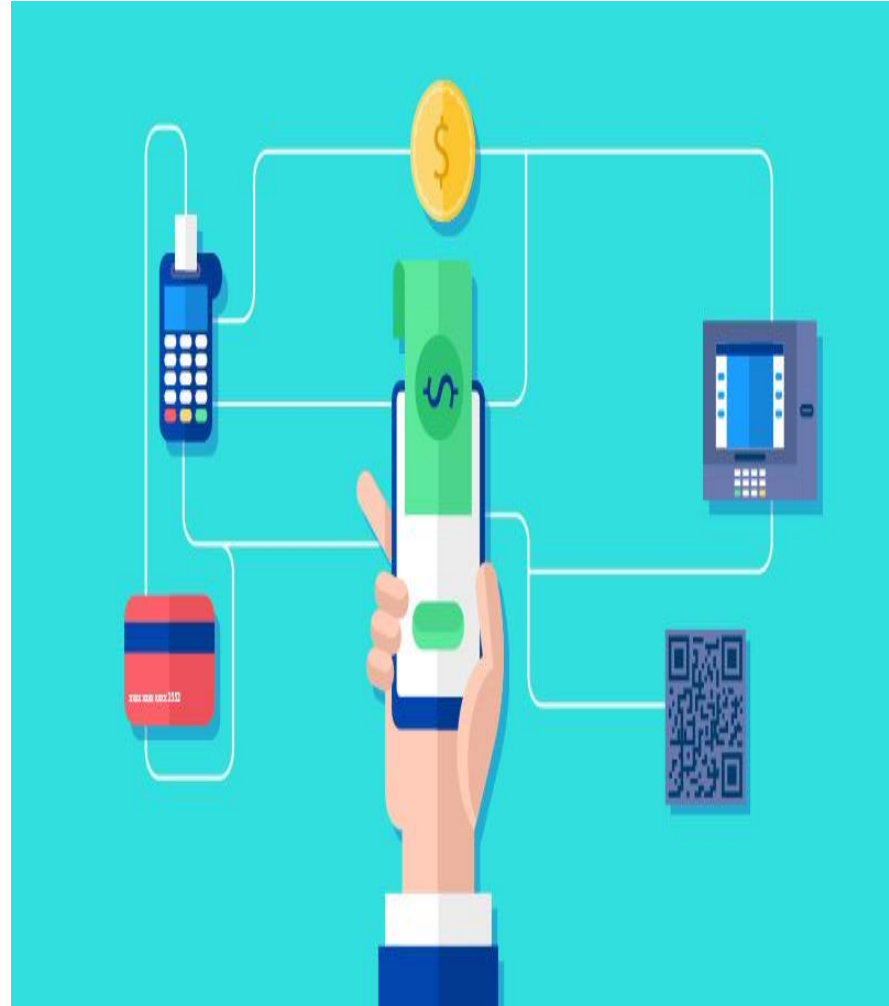
## ***Q1. Methods of E-payments***

**Ans.** Electronic payments is a financial exchange that takes place online between buyers and seller. The content of this exchange is usually some form of digital financial instruments ( such as encrypted credit card numbers, electronic cheques or digital cash ) that is backed by a bank or an intermediary, or by a legal tender.

- ❑ Electronic payment system is a system which helps the customer or user to make online payments for their shopping.

# *Methods of E- Payment*

- ☐ *Payment Card*
- ☐ *Electronic Card*
- ☐ *Check Free*
- ☐ *Check Share*
- ☐ *Internet Cash*
- ☐ *Wallet*
- ☐ *Smart Card*



# **PAYMENT CARDS**

❑ ***Payment cards are all types of plastic cards that consumers use to make purchases:***

➤ ***Credit cards***

- Such as a Visa or a MasterCard, has a preset spending limit based on the user's credit limit.

➤ ***Debit cards***

- Removes the amount of the charge from the cardholder's account and transfer it to the seller's bank.

➤ ***Charge cards***

- Such as one from American Express, carries no preset spending limit.

# *ELECTRONIC CASH*

- ❑ Electronic cash is a general term that describes the attempts of several companies to create a value storage and exchange system that operates online in much the same way that government-issued currency operates in the physical world.
- ❑ Concerns about electronic payments methods include:
  - Privacy
  - Security
  - Independence
  - Portability
  - Convenience

# **CHECK FREE**

- ❖ Check Free provides online payments processing services to both large corporations and individual Internet users.
- ❖ Check Free permits users to pay all their bills with online electronic checks.
- ❖ Check Free provides part of the technology that the Web portal Yahoo! Uses to provide its Yahoo! Bill Pay services.

# **CLICK SHARE**

- ❑ Click share is an electronic cash system aimed at magazine and newspaper publishers.
- ❑ Users with an ISP that supports Click share are automatically registered with click share.
- ❑ Click share tracks users with the standard HTTP Web protocol.

# **SMART CARD**

- A smart card is a plastic card with an embedded microchip containing information about you.
- A smart card can store about 100 times the amount of information that a magnetic strip plastic card can store.
- A smart card contains private user information, such as financial facts, private encryption keys, account information , credit card numbers, health insurance information, etc.
- E.g. Mondex smart card , Octopus smart card.

# **CREDIT CARD**

- ❑ The most popular payment methods.
- ❑ Cards are issued by a bank.
- ❑ Unique 16- digit number ( including check digits ) and an expiration date.
- ❑ Third party authorization companies verify purchase.



# *ELECTRONIC WALLET*

- ❖ An electronic wallet serves a function similar to a physical wallet :
  - i. Holds credit card, electronic cash, owner identification, and owner contact information.
  - ii. Provides owner contact information at an electronic commerce site's checkout counter.
- ❖ Some electronic wallets contain an address book.

# *ELECTRONIC WALLET*

- ❖ Electronic wallets make shopping more efficient.
- ❖ Electronic wallets fall into two categories based on where they are stored:
  - i. Server-side electronic wallet
  - ii. Client-side electronic wallet
- ❖ Electronic wallets store shipping and billing information, including a consumer's first and last names, street address, city, state, country, and zip or postal code.
- ❖ E.g. Microsoft, NET passport, yahoo ! Wallet.

# ***DIGITAL CURRENCY***

- ✓ Digital cash account like traditional bank accounts.
- ✓ Buyers deposit cash in the account and spend it at E-Commerce sites (acct # is passed using secure proprietary protocol).
- ✓ E-Commerce merchants can feel sure of payment.
- ✓ Customers do not need a credit card and spending limited to account balance.



# ***ELECTRONIC FUNDS TRANSFER ( EFT )***

- EFT is used for transferring money from one bank account directly to another without any paper money changing hands.
- It can be direct debit payments or Electronic bill payment in online banking.



## *National Electronic Funds Transfer ( NEFT )*

- National Electronic Funds Transfer (NEFT) is an electronic funds transfer system maintained by the Reserve Bank of India (RBI). Started in November 2005, the setup was established and maintained by Institute for Development and Research in Banking Technology (IDRBT).
- NEFT enables bank customers in India to transfer funds between any two NEFT-enabled bank accounts on a one-to-one basis. It is done via electronic messages.
- Unlike real-time gross settlement (RTGS), fund transfers through the NEFT system do not occur in real-time basis. NEFT settles fund transfers in hourly batches with 23 settlements occurring between 00:30 hrs. to 00:00 hrs.
- From December 16, 2019, there would be 48 half-hourly batches occurring between 00.30 am to 00:00 am everyday regardless of a Holiday or otherwise,
- As of November 30, 2019, NEFT facilities were available at 1,48,477 branches/offices of 216 Banks across the country and online through the website of NEFT-enabled banks.
- There is no limit – either minimum or maximum – on the amount of funds that could be transferred using NEFT.

# **Real-time gross settlement ( RTGS )**

- ❑ The acronym 'RTGS' stands for real time gross settlement. The Reserve Bank of India (India's Central Bank) maintains this payment network. Real Time Gross Settlement is a funds transfer mechanism where transfer of money takes place from one bank to another on a 'real time' and on 'gross' basis.
- ❑ This is the fastest possible money transfer system through the banking channel. Settlement in 'real time' means payment transaction is not subjected to any waiting period.
- ❑ The transactions are settled as soon as they are processed. 'Gross settlement' means the transaction is settled on one to one basis without bunching with any other transaction. Considering that money transfer takes place in the books of the Reserve Bank of India, the payment is taken as final and irrevocable.
- ❑ Fees for RTGS vary from bank to bank. RBI has prescribed upper limit for the fees which can be charged by all banks both for NEFT and RTGS. Both the remitting and receiving must have core banking in place to enter into RTGS transactions.
- ❑ Core Banking enabled banks and branches are assigned an Indian Financial System Code (IFSC) for RTGS and NEFT purposes. This is an eleven digit alphanumeric code and unique to each branch of bank. The first four letters indicate the identity of the bank and remaining seven numerals indicate a single branch.