→ crypto economics model
→ Types of Block chain
→ consenso mechanism

→ Bitcoin ethereum
→ mining and validation
→ hasing and digital signature
→ Layers of Block chain.

① Block chain and types of Block chain:-

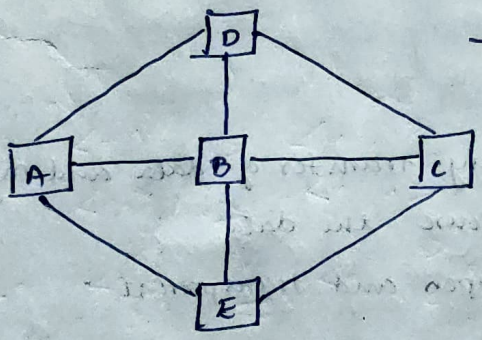
→ Block chain technology is one of the latest and leading data base storage model in moderen generation

→ Block chain model contains blocks of individual data elements (or) groupe of people data elements which are interlinked using nodes.

→ By the help of this model We can easily able to transfer the data from one node to another node. and that exchange data from one block to another block.

→ Block chain model is the base for UPI transactions.

~~Types of Block chains~~



→ This is a basic Block chain structure where each blocks are connected to each other and transfer the data across the blocks

Block chain technology is mainly developed for ~~block chain~~ bitcoin technology and UPI transactions to make secure.

so they have classified block chain into four major types.

→ Public Blockchain
→ private Blockchain
→ hybrid Block chain
→ Consortium Block chain

① public blockchain:-

→ It is a permissionless, non-requestine block chain distributed technology.
→ Any one with internet connectivity can sign up to that block chain model and make themas one node of block chain procers.
→ each pier of Node have distinct address and by address the data transfer takes place.

advantages:-

→ easy transfer of data and maintaince
→ Scure the data
→ open and transparent.

disadvantages:-

→ each and every transaction is transparent we need to maintain proof of work
→ Security past is as the main issue in public block chain

Private block chain:-

→ It is a permission (or) request based block chain model where each block should ask request to another block to access the data

→ It is one customised model with some people can only accesses this data and with third party Network no other people are allowed inside.

advantages:-

1. Speed of data processing is high as less people are available
2. Security of the model is high and volatily increases
3. Backup should be maintained and payslips are not required.

disadvantages:-

1. cost of making the blck model is high
2. high use of power and maintance
3. scalability is less.

hybrid block chain:-

→ It is a combination of both private and public block chain model and they are inter connected

→ To accesses some blocks permission is required and to accesses both Request and permission are not required

→ The volatility of data transfer and maintaince decreases

→ with public network we can directly get into block chain structure.

advantages:-

→ easy maintainace

→ data tranfer speed increases

→ Security of the model is much developed than Privati block chain

disadvantages:-

→ Less scalability

→ Less volatility and should maintain some custumised blocks

→ Non-scalability

Consoritium Block Chain:-

→ It is a developement of hybrid block chain and it is called decentralised block chain

→ In this various organisation can colobrate and be a part of complex model of Block chain

→ This is easy in developing complex block chain structure with scalability.

advantages:-

① easy maintainace

② more data accessability at single place

③ data transparancy and redundancy.

disadvantages:-

① more power consumbtion

② maintainace is ditficut as complex structure and should maintain proof of work.

(2)

Crypto economics model:-

→ crypto economics states the study of economic interactions

→ economic transactions are difficult to do in P2P network processing model as no person and server acts as centralised data maintaince part.

→ So by block crypto economics model we can able to do transactions easily and securely.

mechanism of crypto economic model

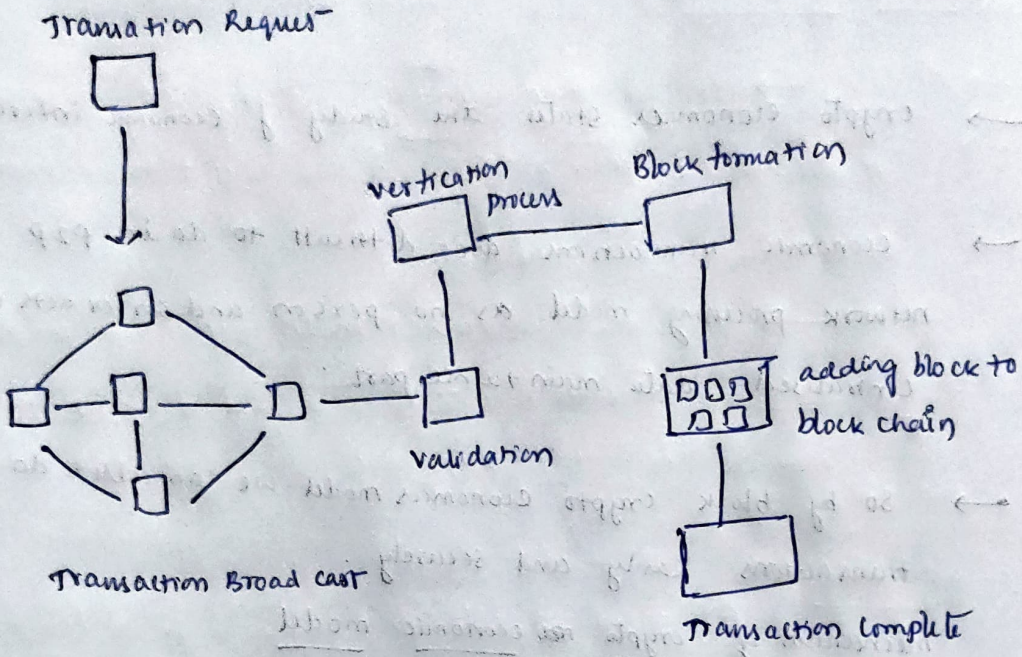
(1) **proof of work:-** It is a consenous mechanism of the Bitcoin network similar to Block chain.

→ It is a set of rules and procures that define the multiple nodes agregate on true state network.

→ As there will be proof of work there is no way to skip the transaction pay slip and the money (or Bitcoins are secure.

Crypto economic model:-

→ Transaction Request
→ Transaction Broadcast
→ Transaction validation
→ verification procen
→ Block formation
→ Adding the block to block chain
→ Transaction complete



→ Transaction Request:- Transaction Request states that activating processes of Transaction. To acomplish transaction we should have wallet and that contains money and bitcoins model.

→ Transaction Broadcast:-

→ As the request is broadcasted over various computers connected in p2p model and which person accepts the request get the notification

→ now the both Requests get connected to some primary network and that is first written in Proof of work.

→ validation:-

→ As the user accepts the Requests the systems by default check the validation and authentication of the request sent

→ As all the nodes are linked the validation checks for connectivity and encrypts the data

→ Verification process:-

→ verification processes helps in checking both the sender and receiver are properly connected to data lines

→ previous history of both the transactions done before.

→ verification is done then block formation gets enabled.

→ Creating a Block:-

→ As the transaction Request is formed the Request Sender is now made into block and this help in tracking transactions by ledger

→ The ledger authenticates and complete the transactions

→ Adding the block to the block chain:-

→ Now this block transaction is added to the central block chain as the transaction status is stored

→ The updation of values from changing money is in blocks of transactions is maintained at block chain central model

→ With this entire proof of work statement is developed with all the attributes and requests.

→ Transaction Complete:- After completing all the processes it gives us transaction complete