## **Blockchain Assignment**

1. What is your understanding of Blockchain?

Ans.

Blockchain is essentially a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the blockchain.

Each block in the chain contains a number of transactions, and every time a new transaction occurs on the blockchain, a record of that transaction is added to every participant's ledger.

The decentralised database managed by multiple participants is known as Distributed Ledger Technology.

2. What are the few features which Blockchain will give you?

Ans.

A.Cannot be corrupted

B.Decentrailzed technology

C.Enhanced security

D.Distributed Ledgers

E.Consensus

F.Faster Settlement

3. What all things does a block contain?

Ans.

Each block contains among other things,

the current a record of some or all recent transactions, and a reference to the block that came immediately before it. It also contains an answer to a difficult to solve mathematical puzzle the answer to which is unique to each block.

New blocks cannot be submitted to the network without the correct answer the process of mining is essentially the process of competing to be the next to find the answer that "solves" the current block.

The mathematical problem in each block is extremely difficult to solve, but once a valid solution is found, it is very easy for the rest of the network to confirm that the solution is correct.

There are multiple valid solutions for any given block only one of the solutions needs to be found for the block to be solved.

4. How is the verifiability of blockchain is been attained?

Ans.

Verifiability in blockchain is a consensus mechanism based process. Since blockchain acts as a decentralized ledger with multiple nodes in the network, the transaction must be verified by all nodes.

The transactions in a blockchain are referred to by their hash.

5. what is the core problem blockchain trying to solve?

Ans.

Blockchain addresses the problem of Data Security and Trust by Making the Ledger Public. Hardware and software errors are not the only data security issue.

The blockchain has to also protect itself from willful fraud and theft. Two blockchain design features help in this effort.