**Assignment - 1**

**Ans for Q1:** blockchain is the combination of distributed databases and cryptography. By using it, the data can't be tampered, changed and even if changed it can be verifiable whether it had changed or not. It's a type of ledger where records can be kept securely and permanently. Even when transmission of data via network, it cannot be intervened i.e secure transmission.

**Answer for Q2:** the problems which can be solved using blockchain is providing huge security, erasing decentralization, can check verifiability of data, and hacking is almost impossible.

**Ans for Q3**: it will give the features like data transparency, placing our trust in system rather than middle man, unchangeability and verifiability.

**Ans for Q4:** block contains block number, previous block key, records and mining key.

**Ans for Q5 :** verifiability can be achieved by using a simple theme which is 0+B=C and then C+D=F then F+G=H and so on. As u can see for every block there will be mix of previous block hashkey and records of current block. This cycle of blocks each represents a key. All these blocks of data is sent to many computers with same hashkeys. If in case one of the user gets different hashkey in any of the block either in middle or first when compared the blocks of all the others then he can conclude that his data has been changed somehow.