Q1: What is normalization?

Ans- Normalization is a database design technique that reduces data redundancy and eliminates undesirable characteristics like Insertion, Update and Deletion Anomalies. Normalization rules divides larger tables into smaller tables and links them using relationships.

Q2. What is 1NF? Explain with examples.

Q4. What is BCNF? Explain with examples.

Ans - Boyce–Codd normal form (or BCNF or 3.5NF) is a normal form used in database normalization. It is a slightly stronger version of the third normal form (3NF).

Q5. What is Operating system? Give examples?

Ans - An operating system (OS) is system software that manages computer hardware, software. Some examples include versions of Microsoft Windows (like Windows 10, Windows 8, Windows 7, Windows Vista, and Windows XP), Apple's macOS.

Q6. What is Linux operating system? Why it is considered as better alternative than windows?

Ans - Linux can be introduced and utilized it as a work area, firewall, a record worker, or a web worker. Linux permits a client to control each part of the working frameworks. As Linux is an open-source working framework, it permits a client to alter its source (even source code of uses) itself according to the client necessities.

Q7. What is trojan horse?

Ans - A Trojan horse is a sort of malware that is frequently camouflaged as genuine programming. Trojans can be utilized by digital hoodlums and programmers attempting to access clients' frameworks. Clients are normally deceived by some type of social designing into stacking and executing Trojans on their frameworks.

Q8. What is MD5 hash and exlpain its significance using a practcal example?

Ans - In cryptography, MD5 (Message-Digest algorithm 5) is a widely used cryptographic hash function with a 128-bit hash value. As an Internet standard (RFC 1321), MD5 has been employed in a wide variety of security applications, and is also commonly used to check the integrity of files. MD5 processes a variable-length message into a fixed-length output of 128 bits. The input message is broken up into chunks of 512-bit blocks (sixteen 32-bit words); the message is padded so that its length is divisible by 512.

Q9. What is dark web?

Ans - The dark web is the shrouded group of web locales just open by a particular internet browser. It is utilized for keeping web movement mysterious and hidden, which can be useful in both lawful and illicit applications.

Q10 – How can be we access dark web?

Ans - The use of an anonymizing browser called Tor can be used to access it.

Q11. What is black and white hat hackers?

Ans - Some hackers are criminals and use their computer skills to harm or damage computer systems. These people are called black hat hackers. White hat hackers, on the other hand, use their computer skills to perform ethical hacking.

Q12. Which operating systems are used for hacking and penetration testing?

Ans - Kali Linux.

Backbox.

Parrot Security Operating System.

DEFT Linux.

Network Security Toolkit.

Q13. Why windows are more prone to viruses?

Ans - Malware is everywhere, but computers that run Windows—the world's most popular operating system—are especially prone to attacks.

Q14 - What is open source softwares?

Ans - Open source software is software with source code that anyone can inspect, modify, and enhance.

Q15. Why windows Vista was a big failure?

Ans – 1. Vista was too slow.

2. It broke too much stuff.

3. Apple successfully demonized Vista.

4. Windows XP is too entrenched