Reimagining the Internet

1. Vint Cerf has described the InterNet as a homogenous network that connects heterogeneous computers. What did he mean by that?

   The network has the same protocols but connects different devices.

2. What is Metcalfe's law? (Hint: Use Google.)

   Metcalfe's law that the value of a telecommunications network is proportional to the square of the number of connected users of the system.

3. Where geographically are the majority of Internet Users located?

   In Asia.

4. Concerning the percentage of a country's population that uses the Internet, with what are mobiles helping?

   Helping people start using the global Internet

5. In design terms, what differentiates the Internet from earlier networks such as the Telephone and Telegraph networks?

   Wired connections to wireless

6. Was there a particular logic in Vint Cerf's choice of a 32 it address space for IP addresses?

   No, it was an experiment; he didn't expect that experiment would work

7. How do digital signatures relate to closing an important vulnerability in the DNS system?

   Signatures can bind domain and IP address

8. What is a sensor network? Give an example.

   Senor that sense peek electricity consumption, for example a power grid is sensor network.

9. What does Vint serve describe as one of the hardest problems that he can imagine?

Incorrect configuration.

10. Why is cloud collaboration important?

    It is important because we want to be able to move data back and forth or share with another cloud-based server.

11. How does Vint Cerf describe the job that his Internet Design did with mobile? Specifically, what was the problem?

    He did not know that the nodes on the network had to change.

12. How does Vint Cerf describe the job that his Internet Design did with broadcast? Specifically, what was the problem?

    He did a terrible job of dealing with broadcast media in fact he turned the broadcast media into a point-to-point link.

13. What is strong authentication? Why is the lack of this an issue?

    Strong authentication is employed to identify and verify communications. There will be many anonymous machines attempting to gain access without strong authentication verification.

14. In an Internet context, what is the overrun problem?

    An overrun problem us defined as someone taking advantage of your asset to defeat you.

15. What does Cerf cite as a problem with the Internet and copyright?

    The problem is that what is created today might not be the interpretation in the future.

16. What does Cerf mean when he talks about rotten bits? Give an example.

    Cerf is referring to the concept of data decay. Information on the web becomes outdated and can be misinterpreted in the future. For example, windows office 2009 and windows office 2013

17. Briefly describe the InterPlanetary Internet. In your description, describe how this solves the point to point InterPlanetary communications problem.

    Transmitting data from one planet back to earth. Using a reply satellite that allow

data to store and forward

18. In an Internet context, what is common carriage? What implications does this have for Internet billing?

    Same rules to everybody and all customers are served under the same terms and conditions.

19. What does Cerf means when he says that in the future, the network will disappear?

    Everything is network capable