Question Bank for Unit 1 ACN - Review of Network Models and Ethernet

1) Discuss the History of Internet in detail.

2) What do you mean by an Internet Standard? Discuss the different levels of an RFC.

3) What are the requirement levels of an RFC?

4) Discuss Internet Administration in detail.

5) What is a protocol? Explain the advantages of Protocol Layering.

6) Discuss the principles of Protocol Layering.

7) Discuss the TCP/IP Protocol Suite with the description of each layer.

8) Discuss encapsulation and decapsulation, multiplexing and demultiplexing w.r.t.TCP/IP protocol suite.

9) What are the Unit of data transfer and addresses used in TCP/IP Networks?

10) Discuss the OSI reference model with the description of each layer.

11) Compare OSI model with TCP/IP model.

12) Explain switched network with an example topology.

13) Discuss the characteristics of Virtual Circuit Switching.

14) Discuss the characteristics of Packet Switching (Datagram Networks).

15) Explain in detail the Set up phase of Virtual Circuit Switching with an example topology.

16) Discuss how much delay will be there in Virtual Circuit Networks and in Datagram Networks.

17) Discuss about the Crossbar switch used in Circuit Switching.

18) Discuss in detail about the working of multistage switched used in Circuit Switching.

19) What are the drawbacks of multistage switches? How it can be solved using Clos criteria.

20) Discuss the Time Division switch with a neat diagram.

21) Discuss the structure of a packet switch.

22) Discuss the structure of Banyan switch.

23) Discuss how Routing happens in Banyan switch with two examples.

24) What is the drawback of Banyan switch? How it can be solved?

25) What are the two sublayers of the Data Link layer? What are their functionalities?

26) Discuss the characteristics of Standard Ethernet with its Frame format.

27) Discuss the Frame Format of Ethernet with the description of each field.

28) Discuss the Access method of Ethernet in detail.

29) Write a note on Ethernet addresses.

30) What do you understand by the term Collision Domain?