QUESTION BANK

Subject Code / Title: CS1451 / Network Protocols

Year / Sem: IV / VIII

*UNIT - I*

*FRAME RELAY AND ISDN*

*PART- A*

1. Define frame relay.

2. What are advantage and disadvantage of frame relay?

3. Lists the applications of frame relay.

4. What are the two planes in frame relay protocol architecture?

5. What are the stages involved in Data transfer data transfer?

6. How many messages are need to establish a connection in frame relay?

7. Define ISDN.

8. List out the some ISDN Services.

9. Define digital pipe.

10. What are the two principal standards for bit pipe?

11. What are the Objectives of ISDN?

12. What are the four reference points defined by CCITT?

13. Which of the three channels are used to construct the access link?

14. How many connections can be set over B channel?

15 Which of the three formats are used as a common for all messages?

16. Write the two services of LAPD?

17. Draw the LAPF.

**PART-B**

1. Explain in detail about Frame Relay Protocol Architecture.

2. Difference between frame relay and packet switching network.

3. Discuss in detail about the call control alternatives.

4. Explain in detail about the two types of logical connections.

5. Compare X.25 with frame relay protocol stacks.

6. Explain in detail about user data transfer in frame relay.

7. List and explain the objectives of ISDN.

8. Draw and explain the block diagram of ISDN functions.

9. Explain in detail about the different types of ISDN channels.

10. Draw and explain the ISDN protocols.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**UNIT-II**

**ATM AND BISDN**

**PART-A**

1. Define Asynchronous transmission.

2. Define Asynchronous transfer mode (ATM)

3. What is meant by VCC?

4. Define ATM adaptation layer (AAL)..

5. Define ATM cells.

6. What are Advantages of ATM cells?

7. What is meant by CLP?

8. List out the AAL Services.

9. Define convergence sub layer.

10. Why segmentation and reassembly sub layer is used in ATM?

11. Define B-ISDN.

12. What is meant by Management Plane?

**PART-B**

1. Explain the architecture of ATM protocol in detail. .

2. Explain in detail about the following.

i) Cell based physical layer with state transition diagram

ii) SDH Based physical layer.

3. Discuss in detail about different types of services provided by AAL.

4. Some of the congestion-control schemes are inadequate for ATM

networks. Why?

5. Discuss in detail about ATM logical connections

6. Draw and explain the functional architecture of B-ISDN.

**UNIT-III**

**INTERNETWORK PROTOCOLS**

**PART-A**

1. Mention some of the basic protocol function

2. Define Encapsulation and fragmentation

3. What are the three general categories in a control information?

4. What are the three phases in a connection?

5. What is the use of ordered delivery?

6. Define flow control and error control

7. Define address

8. What are the issues in addressing?

9. What are the characteristics of a global address?

10. What is the use of connection identifier?

11. What are the advantages of connection identifier?

12. Define multiplexing

13. Define IP services

14. What are the two types of primitives in a IP service?

15. Mention the parameters associated with the primitives

16. What are the design issues in a IP?

17. Differentiate between routing information and routing algorithm

18. Define the following

a) AS

b) IRP

c) ERP

19.Mention the approaches for routing

20.Distinguish between datagram and stream

21.Mention the some of the Internet application protocols

22.Define SIP

23.Deine RTP

**PART – B**

1.Explain in detail about basic protocol function.

2.Discuss about IP operation

3.Differentiate between IPv4 and IPv6

4. Explain in detail about various Routing protocols

5.Briefly explain about TFTP

6.Discuss in detail about the following

i)HTTP

ii)SMTP

iii)POP3

iv)FTP

7.With a neat diagram explain about SIP

8.Explain about RTP

9.Discuss in detail about VOIP

**UNIT- IV**

**NETWORK MANAGEMENT FUNDAMENTALS**

**PART-A**

1. Define fault management.

2. What is meant by accounting management?

3. Define SNMP.

4. Define MIB.

5. List out the requirements of network management.

6. Define polling.

7. Define event reporting.

8. Define availability.

9. What is meant by accuracy?

10. Difference between response time and throughput.

11. What are the two time sequences for online transactions?

12. What are the three components of performance monitoring?

13. What is meant by configuration management?

14. Define configuration information.

15. Give the examples for physical and logical resources.

16. Define relationship.

17. Explain private MIBs.

**PART- B(16 marks)**

1. Explain in detail about various requirements of network management.

2. Draw and explain the network monitoring configurations.

3. Give the shorts on polling and event reporting.

4. Explain the following

a. Availability

b. Response time

c. Utilization

5. Discuss in detail about the problems of fault monitoring and what are all

the tests used in fault monitoring system

6. Briefly discuss about accounting monitoring.

7. Define security threat and explain in detail about different types of threats.

8. Discuss in detail about three categories of security management.

9. Explain in detail about the basic concepts of SNMP

10. Explain the data types in UNIVERSAL class of ASN.1 for SNMP MIB

11. Explain the data types in Application class of ASN.1 for SNMP MIB

**UNIT-V**

**NETWORK MANAGEMENT PROTOCOLS**

**PART-A**

1. Define RMON.

2. What are the design goals of RMON?

3. Explain RMON MIB.

4. What are the advantages of SNMPv2?

5. Explain SNMPv3.

6. What are the disadvantages of SNMPv1/v2?

7. Where does RMON used in network?

8. List all the data types of SNMPV2.

9. Explain PDU handling documents.

**PART-B**

1. Explain the architecture of SNMPV3 with neat diagram.

2. Compare SNMPV2 and SNMPV3

3. Discuss about MIB

4. Write note on RMON

5. Explain the architecture of SNMP entity and traditional SNMP manager,

6. Explain in detail about the design goals for development of SNMP