ACN Question Bank UT1 K scheme

CHAPTER 1:- Internet Architecture and Network Layer

2M

1. Give the Structure of Internet
2. What is the role of Role of Internet Service Provider (ISP)
3. Draw and label sketch of IPv4 packet format
4. State the concept of fragmentation in IPV4
5. Define the term (ICANN)
6. State the need of IPv6

4M

1. Compare IPv4 and IPv6.
2. Describe the sub-network address if the destination address is 200.45.34.56 and the subnet mask is 255.255.240.0.
3. Describe packet Header format of IPv4.
4. Describe packet Header format of IPv6.
5. Describe working and message format of ARP
6. Describe working and message format of RARP

CHAPTER 2 :- Routing Protocols

2M

1. Define queueing and switching
2. List types of ICMPv4 messages
3. State importance of Routing table.
4. List all 4 Routing Algorithms.
5. Define Inter-Domain Routing Protocol. List them.
6. Define Unicasting and Multicasting

4M

1. Explain ICMP protocol. Describe the header format of ICMP
2. Explain following address types:
    - Unicast address
    - Multicast address
    - Anycast address

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3. Explain the 3 Intra Domain Routing Protocols.
4. Describe modern computer use Dynamic Routing. Explain with example how Distance Vector Routing is used to route the packet
5. With a suitable example, explain Link State Routing algorithm. What are the serious drawbacks of Link State Routing Algorithm?
6. Explain Distance vector routing and open shortest path first routing protocol in detail.
7. Differentiate between RIP & OSPF routing protocol.
8. Explain difference between Distance Vector and Link State Routing. (Any four points).
9. Describe the RIP message format.
10. Give use of OSPF with its reason.
11. Write Stepwise Procedure to configure IP routing with RIP.
12. Distinguish between Dynamic Routing and Static Routing on the basis of Configuration ,Security, Routing Protocols and Cost.

CHAPTER 3 :- Routing Protocols

2M

1. What is Process to Process Delivery
2. Define Connectionless vs.Connection-Oriented Service
3. What is UDP? Which services are provided by UDP
4. List any 2 features of TCP.
5. List two advantages of using UDP over TCP
6. List applications of UDP

4M

1. The dump of a UDP header in hexadecimal format is BC82D00D002B001D
   Obtain the following:
   - Source port number
   - Destination port number
   - Total length
   - Packet direction

2. Compare TCP with UDP on any four points.