Part A

Answer all questions (5x4=20 marks)

1. Why does ARP use a soft state cache?
2. How does UDP compute header checksum?
3. What are the techniques used to avoid slow convergence problem?
4. What is anonymous FTP?
5. Explain multicast forwarding tree.

Part B

(Answer any one full question from each module. Each question carries 20 marks.)

MODULE -1

6. (a) Explain IP datagram format (10 mark)
   (b) Write short note on CIDR. How can the longest prefix search be done efficiently? (10 mark)

OR

7. (a) Explain the layering principle with examples. (10 mark)
   (b) Write a note on
      (i) Silly window syndrome (5 mark)
      (ii) Techniques to avoid Silly window syndrome (5 mark)

MODULE-2

8. (a) Explain advantages and disadvantages of core routing architecture (10 mark)
(b) Explain the message format of HELLO message (10 mark)

OR

9. (a) Summarize the implementation of IGMP. (10 mark)
   (b) What are the characteristics of mobile IP? (4 mark)
   (c) Briefly explain the MPLS operation. (6 mark)

MODULE-3

10(a). Summarize the difference between FTP and TFTP (10 mark)
   (b) Write a note on
       (i) MIME(5 mark)
       (ii) IMAP(5 mark)

OR

11(a) Explain DNS message format.(10 mark)
   (b) What are the characteristics of HTTP? (10 mark)

MODULE-4

12(a). Explain Management Information Base (10 marks)
   (b) . Differentiate between RTP and RTCP protocols (10 mark)

OR

13(a) Explain IP Telephony. (10 mark)
   (b) Write a note on
       (i) RSVP protocol(5 mark)
       (ii) SNMP message format (5 mark)

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