

END TERM EXAMINATION**FOURTH SEMESTER [BCA] APRIL- MAY 2019****Paper Code: BCA 210****Subject: Computer Networks****Time : 3 Hours****Maximum Marks : 75**

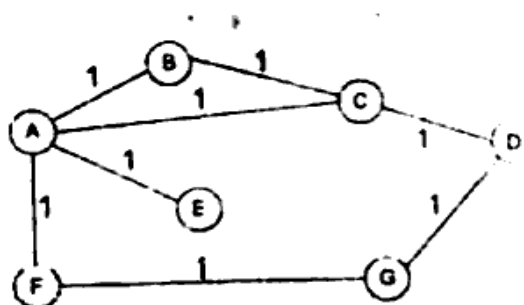
**Note: Attempt any five questions including Q. No. 1 which is compulsory.
Select one question from each unit.**

Q1. Attempt **any five** of the following: **(5x5=25)**

- a) Differentiate between LAN, MAN and WAN.
- b) Write a short note on DNS.
- c) Differentiate between TDM and FDM?
- d) How router boots up.
- e) What are the differences between physical & logical address? Give examples.
- f) Discuss 4 different topologies in detail with examples.

Unit-I

- Q2. a) Explain the process of link state routing. Explain the events when the routing table is exchanged between routers? **(6)**
- b) For the following topology, find the best path between each pair of nodes maintained in routing table using link state routing. Show the status of routing table at router A: **(6.5)**



- Q3. Discuss the different components required for data communication? Compare OSI and TCP/IP models. Discuss different layers & their functions briefly. **(12.5)**

Unit-II

- Q4. a) What is multiplexing? Explain various types of multiplexing. **(6.5)**
- b) Discuss ISDN, its services & layers. **(6)**
- Q5. a) What do you understand by the error detection and error correction? Explain any one of the error correction technique with suitable examples? **(6)**
- b) Which layer(s) is responsible for error detection and correction in OSI model? **(6.5)**

Unit-III

- Q6. a) What is flow control? Which two layers provide the functionality of flow control? How does their work differ? **(6)**

P.T.O.

- b) Differentiate between circuit switching, packet switching, and message switching. Which one of the following switching is shown in figure (a), figure (b) and figure (c)? Justify your answer. (6.5)

Figure (a)



Figure (b)

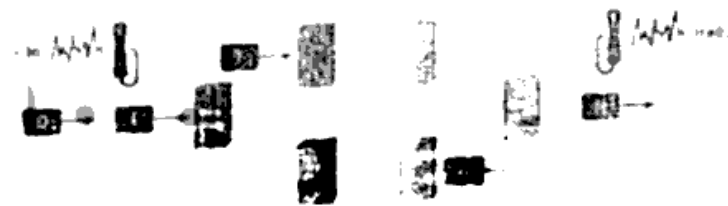


Figure (C)



- Q7. What do you understand by routing? Explain any routing protocol in details? Differentiate between static & dynamic routing. (12.5)

Unit-IV

- Q8. a) What are functions of session layers, presentation layers & applications in OSI models? (6.5)
 b) Explain three way handshaking in TCP. (6)
- Q9. a) Compare TCP and UDP protocols. (6)
 b) Explain TCP packet format in detail. (6.5)
