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Sixth Semester B.E. Degree Examination, Aug./Sept. 2020
Computer Network – II

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

PART – A

- 1 a. Differentiate connection oriented and connectionless services. (05 Marks)
 b. Consider the network in Fig Q1(b). Use Dijkstras algorithm to find shortest path.

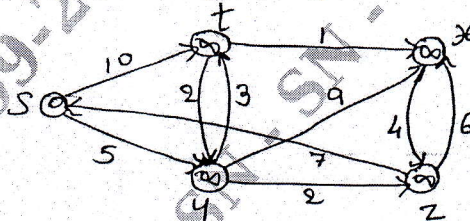


Fig Q1(b)

- c. Explain briefly the structure of generic packet switch with the help of diagram. (07 Marks) (08 Marks)
- 2 a. Describe briefly the Random early detection. (05 Marks)
 b. Explain Traffic management at flow aggregate level. (10 Marks)
 c. Discuss FIFO and priority queue scheduling for managing traffic at packet level. (05 Marks)
- 3 a. Explain IPV4 Header in detail with neat diagram. (10 Marks)
 b. Discuss the migration issues from IPV₄ to IPV₆. (10 Marks)
- 4 a. Describe in detail the 3-way handshake for establishing a TCP connection. (06 Marks)
 b. Discuss the Header fields of OSPF operation. (06 Marks)
 c. Write a note on : i) DHCP ii) Mobile IP. (08 Marks)

PART – B

- 5 a. What do you mean by remote login and also Secure Shell (SSH) protocol? (06 Marks)
 b. What is SNMP? List the PDU of SNMPV₂? Explain SNMP PDU format. (08 Marks)
 c. Apply RSA and do the following :
 i) Encrypt $a = 3$, $b = 11$, $x = 3$ and $m = 9$.
 ii) Find corresponding y
 iii) Decrypt the cipher text. (06 Marks)
- 6 a. List the benefits of creating VPNs, explain VPN types. (10 Marks)
 b. What is an MPLS network? Explain with diagram how the packets are forwarded using MPLS? (10 Marks)
- 7 a. Briefly explain various compression methods without loss. (12 Marks)
 b. List and explain different servers of SIP. (08 Marks)
- 8 a. List the security issues in adhoc network. Explain types of attacks. (10 Marks)
 b. Write note on : i) Zigbee Technology ii) Intra cluster routing protocols in WSN. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
 2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.