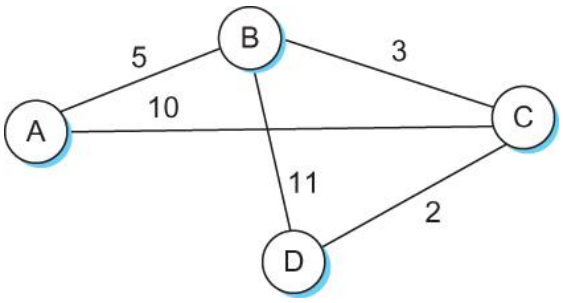
SSN COLLEGE OF ENGINEERING, KALAVAKKAM – 603 110
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
B.E. Computer Science and Engineering
CS6551 COMPUTER NETWORKS

Date: 26.02.2018, 8.00-9.30 AM **UNIT TEST – 3** **Max. Marks: 50**
Academic Year: 2017-2018 EVEN **Batch: 2016-2020**
Semester: 4 **Faculty: Mr. N. Sujaudeen / Ms. S.V. Jansi Rani**

Qn. No	Part – A (4 + (3 * 2) = 10)	Marks	(KL,COn)
1	A host in an organization has an IP address 150.32.64.34 and a subnet mask 255.255.240.0. What is the address of this subnet? What is the range of IP addresses that a host can have on this subnet?	4	K3,CO2
2	A small organization has a Class C address for seven networks each with 24 hosts. What is an appropriate subnet mask?	2	K3,CO2
3	Give the convention used for CIDR addressing	2	K2,CO2
4	What is the use of Checksum in UDP	2	K2,CO4
	Part – B Answer all questions (13+13)		
8	a) Explain ICMP with its types of Error and Control Messages.	8	K2,CO2
	b) Write in detail about the TCP Header format.	5	K2,CO4
	OR		
9	a) The following is a a UDP header in HD format 0x CB84 | 0x 000D 0x 001C | 0x 001C 1. What is the source port number? 2. What is the destination port number? 3. What is the total length of the user datagram? 4. What is the length of the data? 5. Is the packet directed from a client to a server or vice versa? 6. What is the client process?	8	K3,CO3
	b) Explain about DHCP in detail	5	K2,CO2
10	Explain the Three way Handshaking protocol used in TCP with its state transition diagram.	13	K2,CO4
	OR		
11	Write Short notes on Domain Name Service with a suitable example.	13	K2,CO5
	Part – C (14)		
12	Maggie decides to start a small company. She asks her ISP, Hathway Networks, to give her enough addresses for 205 hosts. Hathway allocates	9	K3,CO2

	a block starting from 221.240.157.0. Maggie's company has 4 departments, which has its own subnet with host as follows: A: 103 Hosts B: 49 Hosts C: 28 Hosts D: 25 Hosts Design a possible arrangement of subnets to make each department in a different subnet. For each subnet, give subnet mask and range of IP addresses.		
	b) Write down the final routing table for node D in the given network using Link State Routing Algorithm. Also show the tree construction step by step.  	5	K3,CO3

*************B E S T O F L U C K************

Prepared by	

Reviewed by HoD, CSE