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DAYANANDA SAGAR COLLEGE OF ENGINEERING
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Department of Telecommunication Engineering

Internal Assessment Test - 2

Course: Computer Communication and Networking
Course Code**: 17TEDCCN** Maximum marks: **50**
Semester:VII A Duration: **90 Min**

Note: Maximum of 4 sub questions are allowed.			**Marks**
1	i.	The netid in the IP address 114.34.2.8 is a)114.34 b) 34,2.8 c) 114 d)114.34.2	1x10
	ii.	Correct IP address is a)10.10.5.6.9 b)34.256.7.8 c)14.23.45.255 d)06.7.8.255	
	iii.	Maximum Throughput for pure aloha is --------% a)36 % b)18 % c) 32 % d)100 %	
	iv.	The vulnerable time for slotted Aloha is ------- a)T_{fr} b) $2T_{fr}$ c) $4T_{fr}$ d)T_p	
	v.	114.8.6.233 is ---- class a)A b) B c) D d) E	
	vi.	The /n notation in the 255.255.255.0 is a)24 b) 8 c) 16 d)255	
	vii.	The no: bits in Ipv4 is ------ a)128 bits b) 64 bits c) 32 bits d)255 bits	
	viii.	Maximum Throughput for slotted aloha is --------% a)36 % b)18 % c) 32 % d)100 %	
	ix.	What is the address space in the IP address with 16 bit addresses a)256 b)65536 c) 128 d)16	
	x.	The vulnerable time for Pure Aloha is ------- a)T_{fr} b) $2T_{fr}$ c) $4T_{fr}$ d)T_p	
	xi.	The polling techniques is a)Random Access b) Controlled Access c) Channelization d)Reservation	
2 (a)	Prove that the maximum throughput for slotted aloha is 36%		4
(b)	With neat diagram explain CSMA/CA		6
3	An ISP granted a block of addressing with 190.100.0.0/16 .The ISP needs to distribute these address to three groups of customers as following i)First group has 64 customers each with 256 addresses ii)second group has 128 customers each with 128 addresses iii) The third group has 128 customers; each needs 64 addresses. Design the sub blocks and find out how many addresses are still available after these allocations.		10
4 (a)	An organization is granted the block 130.56.0.0/16 .The administrator wants to create 1024		10

	subnets .Find subnet Mask b)Find the number of addresses in each subnet c) Find the first and last address in subnet 1 and 1024	
	(OR)	
(b)	Design and Implement CSMA/CD protocol	10
5(a)	With neat diagram explain pure aloha A pure aloha network transmits 200 bits frames using a shared channel with a 200 kbps bandwidth. Find the throughput if the system produces a)1000 frames per Second b) 500 frames per second c)250 frames per second	10
	(OR)	
(b)	(i) Explain classful addressing in IPv4 (ii) A block of addresses is granted to a small organization. One of the addresses is 205.16.37.39/28. What is the first address, last address and number of address in the block	10