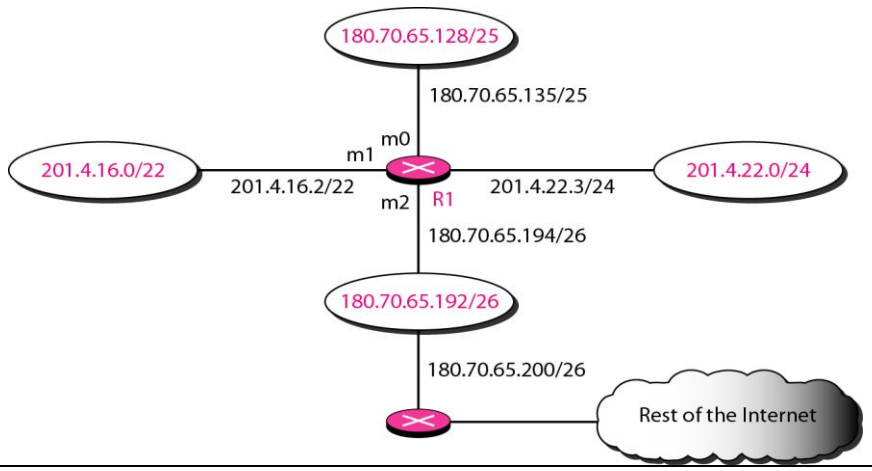
M S RAMAIAH INSTITUTE OF TECHNOLOGY
(Autonomous Institute, affiliated to VTU)
DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

Term:	17.08.2016 to 17.12.2016	**Course Code:**	IS531
Course:	Computer Networks	**Semester:**	V – A, B & C
CIE:	Test – II	**Max Marks:**	30
Date:	10.11.2016	**Time:**	9.30 AM – 10.30 AM

Portions for Test: Lecture Nos. from 15 to 35 as per lesson plan.

Instructions to Candidates: Answer any two questions.

Note: Mobiles and Programmable Calculators are strictly prohibited.

Sl. #	Question	Marks	Bloom's Level #	COs
1.	a. Define socket address. The following is a dump of a TCP header in hexadecimal format. 05320017 00000001 00000000 500207FF 00000000 1. What is the source port number? 2. What is the destination port number? 3. What the sequence number? 4. What is the acknowledgment number? 5. What is the length of the header? 6. What is the type of the segment? 7. What is the window size?	8	A	CO3
	b. With example illustrate the process of routing table updating in distance vector algorithm.	7	U	CO2
2.	a. With neat diagram, describe the process of connection termination in TCP.	8	R	CO3
	b. Show the forwarding process if a packet arrived at R1 in below fig with destination address 180.70.65.140. 	7	A	CO2

3.	a. Enumerate fast retransmission scenario in TCP. Calculate the number of bytes to be send, if the value of cwnd is 3000 and the value of rwnd is 5000.Assume that host has sent 2000 bytes which has not been acknowledged.	8	A	CO3
	b. Describe two node loop instability problem in distance vector & its solutions.	7	U	CO2

#R – Remember; U – Understand; A – Apply; An – Analyze;

ANSWER SCHEME

Q. No.	Answer
1.	a. Definition of socket address : 1 mark Calculation of TCP header in hexadecimal format: each 1 mark b. Diagram : 3 marks Explanation : 4 marks
2.	a. Diagram : 4 marks Explanation : process of connection termination in TCP 4 marks b. Step by step calculation of forwarding process 7 marks
3.	a. Fast retransmission explanation + diagram : 4+2 marks problem : 2 marks b. two node instability explanation : 4 marks diagram : 3 marks