Velegapudi Ramakrishna Siddhartha Engineering College::Vijayawada

(Autonomous)

VR20

III /IV B Tech Degree Examinations(Month/Year)

Fifth Semester

Department of Information Technology

20IT5301:COMPUTER NETWORKS

Time:3Hrs	**MODEL QUESTION PAPER**	Max Marks:70

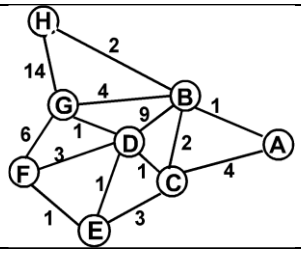
Part – A is Compulsory

Answer one (01) question from each unit of Part – B

Answers to any single question or its part shall be written at one place only

Cognitive Levels(K): K1-Remember;K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create

Q. No		Question	Marks	Course Outcome	Cog. Level
Part - A					**10X1=10M**
1	a	**Define Point-to-point networks?**	1	CO1	K1
	b	**List the differences between OSI and TCP reference models**	1	CO1	K2
	c	**Do routers have IP addresses? If so, how many?**	1	CO3	K4
	d	**Write the purpose of cookies?**	1	CO4	K4
	e	**How is Host aliasing used?**	1	CO4	K1
	f	**Convert the IP address 223.1.3.27 in to 32-bit binary equivalent.**	1	CO3	K3
	g	**What is subnet?**	1	CO3	K4
	h	**Discuss single-hop infrastructure based wireless networks**	1	CO2	K2
	I	**Why network need security?**	1	CO2	K4
	j	**Define firewall**	1	CO2	K1
Part - B					**4X15 =60M**
		UNIT - I			
2	a	**“Computer networks are useful for real time applications”, Justify.**	8M	CO1	K4
	b	**Describe in brief the design issues for the layers**	7M	CO1	K4
		(OR)			
3	a	**Explain in detail about OSI Reference Model with neat sketch.**	10M	CO1	K2
	b	**Differentiate a circuit-switched network with a packet-switched network.**	5M	CO1	K2
		UNIT - II			
4	a	**Outline the general formats of HTTP request and response message for a web page**	8M	CO4	K1
	b	**Summarise the process of how people send and receive messages with SMTP.**	7M	CO4	K2
		(OR)			
5	a	**Analyse the causes and cost of congestion control with an example scenario**.	8M	CO4	K4
	b	**Evaluate UDP checksum with an example**.	7M	CO4	K3
		UNIT - III			
6	a	**What is Virtual circuit network, explain in detail?**	9M	CO3	K2
	b	**Explain error detection and correction techniques.**	6M	CO3	K5
		(OR)			
7	a	**Illustrate the distance vector routing algorithm with an example.**	8M	CO3	K3
	b	**Consider the network shown below, with the indicated link costs. Use Dijkstra's shortest path algorithm to compute a table to find the shortest past from F to all network nodes.**	7M	CO3	K3

					
UNIT - IV					
8	a	**Analyse CDMA with simple example.**	7M	CO2	K2
	b	**Explain 802.11 architecture.**	8M	CO2	K2
(OR)					
9	a	**Describe the functioning of DES algorithm with a neat sketch**	7M	CO2	K2
	b	**What is firewall? Explain the categories of firewall.**	8M	CO2	K1