B.E. (Computer Engineering) Third Semester (C.B.S.) **Introduction to Computer Network**

P. Pages: 2 Time: Three Hours			S	
	Notes	5: 1. 2. 3. 4. 5. 6. 7. 8. 9.	All questions carry marks as indicated. Solve Question 1 OR Questions No. 2. Solve Question 3 OR Questions No. 4. Solve Question 5 OR Questions No. 6. Solve Question 7 OR Questions No. 8. Solve Question 9 OR Questions No. 10. Solve Question 11 OR Questions No. 12. Due credit will be given to neatness and adequate dimensions. Assume suitable data whenever necessary.	
1.	a)		Computer Network? What are the different categories of Network. Explain each examples.	7
	b)		difference between OSI model and TCP/IP model? Explain a three design f Data link layer.	7
			OR	
2.	a)	Explain	a Data representation of TCP with diagram ?	6
	b)	Explain	a Topology ? Define a LAN topologies with advantages and disadvantages.	8
3.	a)	What is	Transmission Media and explain a types of guided media with examples ?	7
	b)	Explain switching	a switching? What is difference between circuit & switching and packet ng.	6
			OR	
4.	a)	i) Dig	difference between: gital Transmission & Analog Transmission. ided Media (wired media) & Unguided media (wireless media)	7
	b)	State &	explain three causes of transmission impairment.	6
5.	a)		the need of bit stuffing? Explain with suitable example bit stuffing and er stuffing?	7
			the automatic Repeat Request (AREA) - lective Repeat ii) Go back N	7
			OR	

NRT/KS/19/3336 1 P.T.O

6.	a)	Explain Error correction method? What is the basic difference in Error detection and correction.	7
	b)	Explain IEEE std. for LAN 802.3 & 802.4.	7
7.	a)	Explain the classful addressing in IPV_4 ? What is difference between IPV_4 & IPV_6 ?	8
	b)	How does distance vector routing Algorithm works? Explain with example?	5
		OR	
8.	a)	A network is divided into four subnets since one of the address in subnet? IS 141.14.120.77. Find the subnet address?	4
	b)	Explain the following terms - i) Logical address iii) Physical address iii) Physical address	6
	c)	Explain the difference between Default mask and subnet mask?	3
9.	a)	Explain about quality of services under Transport layer.	6
	b)	Define socket, explain it with socket system calls ?	7
		OR	
10.	a)	For connection establishment in transport layer write the process of three - way handshake protocol ?	6
	b)	Draw and explain TCP segment header ?	7
11.	a)	Explain cryptography? What is difference between symmetric cryptography & asymmetric cryptography algorithm?	7
	b)	Explain in detail architecture of Browser ?	6
		OR	
12.	a)	Write short notes on any three.	9
		i) DNS	
		ii) X.25	
		iii) Digital signature	
		iv) Authentication	
	b)	What are the AAL Services ?	4
