Code: 19EC3701

IV B.Tech - I Semester – Regular Examinations - DECEMBER 2022

COMMUNICATION NETWORKS
(ELECTRONICS & COMMUNICATION ENGINEERING)

Duration: 3 hours   Max. Marks: 70

Note: 1. This question paper contains two Parts A and B.
      2. Part-A contains 5 short answer questions. Each Question carries 2 Marks.
      3. Part-B contains 5 essay questions with an internal choice from each unit. Each question carries 12 marks.
      4. All parts of Question paper must be answered in one place.

BL – Blooms Level   CO – Course Outcome

PART – A

		BL	CO
1. a)	Differentiate internet and intra net.	L2	CO1
1. b)	Interpret how HTTP is similar to FTP?	L3	CO2
1. c)	Compare connection less and Connection oriented protocol.	L4	CO3
1. d)	Produce the services of network layer.	L3	CO4
1. e)	Identify any two error detection techniques.	L2	CO4

PART – B

			BL	CO	Max. Marks
UNIT-I					
2	a)	Explain the differences between network core and network edge.	L2	CO1	6 M
	b)	Compare and contrast between ISO-OSI and TCP network models.	L2	CO1	6 M

		OR			
3	a)	Describe the ISO-OSI reference model. Discuss the functions of each layer.	L2	CO1	6 M
	b)	Explain in detail about packet switched network.	L2	CO1	6 M

UNIT-II

4	a)	Produce any three FTP models in detail.	L3	CO2	6 M
	b)	Sketch HTTP header format.	L3	CO2	6 M
		OR			
5	a)	Illustrate socket programming for connection oriented protocol.	L3	CO2	6 M
	b)	Interpret the use of Domain name system.	L3	CO2	6 M

UNIT-III

6	a)	Compare TCP and UDP header, list the fields in TCP header that are missing from UDP header. Give the reason for absence.	L4	CO3	7 M
	b)	Explain Go-back-n protocol with an example.	L4	CO3	5 M
		OR			
7	a)	Explain Transport layer services and functions.	L4	CO3	6 M
	b)	Point out the principles of the reliable data transfer.	L4	CO3	6 M

UNIT-IV

8	a)	Show IPv6 header format with a neat sketch.	L3	CO4	6 M

	b)	Compare static and dynamic routing. Illustrate distance vector routing with an example.	L3	CO4	6 M
		OR			
9	a)	Demonstrate the working of Internet control message protocol with an example.	L3	CO4	6 M
	b)	Illustrate broadcast and multi cast routing and compare them.	L3	CO4	6 M

UNIT-V

10	a)	Explain 802.11 wireless LAN.	L2	CO1	6 M
	b)	Discuss the concept of redundancy in error detection. Explain forward error correction scheme with an example.	L4	CO3	6 M
		OR			
11	a)	Differentiate single bit error from a burst error. Explain single bit error with an example.	L4	CO3	6 M
	b)	Illustrate the concept of cellular internet access with a neat sketch	L3	CO4	6 M