APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
Seventh Semester B.Tech Degree Examination (Regular and Supplementary), December 2020

Course Code: EC407

Course Name: COMPUTER COMMUNICATION

Max. Marks: 100   Duration: 3 Hours

PART A
Answer any two full questions, each carries 15 marks.   Marks

1	a)	Differentiate circuit switching and packet switching.	(5)
	b)	Explain the OSI model.	(10)
2	a)	Explain the various guided media of transmission.	(10)
	b)	Draw the frame format in a character-oriented protocol. Also describe byte stuffing and unstuffing.	(5)
3	a)	Explain stop-and-wait protocol with an example.	(5)
	b)	Explain the types of addressing implemented by various layers of TCP/IP protocol suite.	(10)

PART B
Answer any two full questions, each carries 15 marks.

4	a)	Find the class of each address (1) 00000001 00001011 00001011 1101111 (2) 11000001 10000011 00011011 11111111 (3) 14.23.120.8 (4) 252.5.15.111	(4)
	b)	What is subnetting and supernetting?	(4)
	c)	Explain the different types of IPV6 addresses.	(7)
5	a)	Explain the distance vector routing with an example.	(10)
	b)	Explain RIP with a simple example.	(5)
6	a)	Describe the format of an ARP packet.	(7)
	b)	Explain path vector routing implementation in BGP.	(8)

PART C
Answer any two full questions, each carries 20 marks.

7	a)	Explain any one security protocol implemented at the transport layer.	(5)
	b)	Describe UDP operation. List the uses of UDP protocol.	(10)
	c)	Draw and explain the TCP segment format.	(5)
8	a)	Explain open-loop and closed-loop congestion control.	(10)

b) Explain any two common attacks in computer networks. (5)

c) Explain the modes of operation of TELNET. (5)

9 a) Explain the different modes of operation of IPSec. (7)

b) Explain the services provided by PGP. (5)

c) Define firewall. Differentiate packet-filter firewall and proxy firewall. (8)

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