

## MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

Paper Code: OE-EE 702 C Computer Network

Time Allotted: 3 Hours

Full Marks:70

The Figures in the margin indicate full marks.

Candidate are required to give their answers in their own words as far as practicable.

## Group-A (Very Short Answer Type Question)

. /	Answer any ten of the following :	14 - 10 - 101
	Write full form of UDP	$[1 \times 10 = 10]$
	(II) What HTTPS means?	
	What are the main networking components?	
	(IV) What are Routers?	
	(V) What is Link Control Protocol (LCP)?	
	(VI) Write functions of a Switch.	
	(VIII) What is BGP in networking?	
	(VIII) What is secret key in encryption?	
	What is simplex communication?	
	(X)—Give the relationship between propagation speed and propagation time.	
	(XI) Explain cross talk and what is needed to reduce it?	
	(XII) Is Ethernet a wireless?	
	Group-B (Short Answer Type Question)	
	Answer any three of the following	[5 x 3 = 15]
2.	Compare datagram networks and virtual circuit networks.	[5]
3.	What is HDLC and what is its role in networking?	[5]
4.	Differentiate between IPv4 and IPv6.	[5]
5.	What are the advantages of Ethernet?	[5]
6.	Why CSMA is used?	[5]
	Group-C (Long Answer Type Question)	
	Answer any three of the following	[ 15 x 3 = 45 ]
7.	(a) What Is Circuit Switching?	[3]
	(b) What is Packet Switching?	[2]
	(c) Write Advantages and Disadvantages of Circuit Switching	[5]
	(d) Write Advantages and Disadvantages of Packet Switching	[5]
8.	(a) What is Quality of service?	[4]
	(b) Write some techniques to improve the QoS.	[5]
	(c) What is Leaky bucket algorithm?	(3)
	(d) What is Token bucket algorithm?	[3]
9.	(a) Write a short note on TDM.	[3]
	(b) Write a short note on FDM.	[3]
	(c) Write the differences between Circuit Switching and Packet Switching.	[5]
	(d) What is the difference between Hub, Switch, and Router?	[4]
	Describe the selective repeat ARQ protocol in computer networks.	[15]
11.	What are the different flow control protocols? Explain them with proper diagrams.	[15]