

## MODEL QUESTION PAPER

### DIPLOMA IN COMPUTER ENGINEERING

#### Computer Communication and Networks

Time : 3 Hour

Max.Marks : 75

#### PART A

Answer all the following questions

(9 x 1 = 9 Marks)

1	Name any four components of data communication	M 1.01	R
2	Define full duplex mode of data communication.	M 1.02	U
3	List any two services of data link layer	M 2.03	R
4	Name two sub layers of Datalink layer	M 2.04	U
5	List any two services of network layer	M 3.01	R
6	The address space of IPv4 is -----	M 3.01	U
7	UDP is a -----layer protocol	M 3.05	U
8	List any two application layer services	M 4.01	R
9	Suggest an application layer protocol that can be used to copy files from one host to another.	M 4.03	U

#### PART B

II. Answer any 8 questions from the following. Each question carry 3 marks

(8 x 3 = 24 Marks)

1	Define network topology. Name any four network topologies	M1.02	U
2	Compare LAN vs WAN	M 1.02	U
3	Outline the layered architecture of TCP/IP protocol suite	M 1.03	U
4	Explain briefly on framing.	M 2.03	U
5	Explain the operation of CSMA protocol	M 2.04	U
6	List any three services of transport layer	M 3.04	U
7	Name the source port number and destination port number of the following UDP header in hexadecimal format CB84000D001C001C	M 3.05	U
8	Explain the architecture of WWW protocol	M4.03	U
9	Explain client server model of Internet	M 4.02	U
10	Compare persistent vs non persistent HTTP	M4.03	U

### PART C

Answer all questions. Each question carries 7 marks.

(6 x 7 = 42 Marks)

III	Compare any two network topology with its merits and demerits.	M 1.02	U
IV	OR	M 1.03	U
	Explain the functions of any two layers of OSI model		
V	Distinguish between guided and unguided media	M 2.02	U
VI	OR	M 2.06	U
	Summarize the features of IEEE802 project		
VII	Compare simple and stop and wait protocol	M2.04	U
VIII	OR	M2.05	U
	Explain ALOHA protocol		
IX	Write the algorithm for link state routing	M 3.03	U
X	OR	M 3.03	U
	Write the algorithm for distance vector routing		
XI	Summarize UDP services	M3.05	U
XII	OR	M3.05	U
	Illustrate the features of TCP		
XIII	Explain the working of Email	M4.03	U
XIV	OR	M4.03	U
	Explain the basic model of FTP		

Module	Hrs/Module	Marks/Module	Types of Questions							
			Part A		Part B		Part C		Total	
			No. of questions	Marks	No. of questions	Marks	No. of questions	Marks	No. of questions	Marks
1	8	23	2	2	3	9	2	14	7	25
2	13	37	2	2	2	6	4	28	8	36
3	13	37	2	4	2	6	4	28	8	38
4	9	26	2	2	3	9	2	14	7	25
<b>Total</b>	<b>43</b>	<b>123</b>	<b>8</b>	<b>12</b>	<b>10</b>	<b>30</b>	<b>12</b>	<b>84</b>	<b>30</b>	<b>123</b>