This question paper conta	ins 2 printed pages.	F	
•	: 5719	ter Networks	
Sl. No. of Ques. Paper	. 234403	Computer Troubles	
Unique Paper Code	(CSHT-409) Data	Communication and Computer Networks  mputer Science	
Name of Paper	: (CSHT-409) Data : B.Sc. (Hons.) Con	mputer Science  Maximum Marks: 75	
Name of Course	: B.Sc. (Hones)	Maximum Name	•
Semester	: IV		1
Dentester	: 3 hours	op immediately on receipt of this question paper.)  Section A are compulsory. Attempt any four questions	
Duration:	Roll No. on the to	in Section A are compulsory. Attempt any four questions in Sections A are compulsory and together. the questions the questions $\frac{1}{2}$	• .
	(Write your Note.	in Section A are compulsory. Attempt any series in Section A are compulsory.	
•	a stions. All questions	in Sections should be answered to	
· The paper has tw	o Sections. 2. Subparts of	the questions	
fro	m Section B. Bush		•
	•	Section-A	•
•		ore COILIPHIOCO	•
	(All	Section-A Questions are compulsory)	ies
		s, the following encoding technique	61
	•	11100101001111, for the following	<b>.</b>
	or bit	Stream 1110010100111, for the following encoding technique (iii) Differential Manchester (iii) By the prime advantage of the sin geosynchronous orbits? What is the prime advantage of the street (iii) at the prime advantage of the street (iiii) at the street (iiiii) at the street (iiiii) at the street (iiiiii) at the street (iiiiiii) at the street (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	<b>√</b>
<ol> <li>O. 1.(a) Draw t</li> </ol>	he pulse diagram lester	(iii) Director	). [A]
(i) R7	(ii) Manchester	aunchronous orbits? What is	נ <del>יי</del> ן
(1) 102	· - catelli	ites in geosylicinos	ro3
(h) Why a	re communication satura		[3]
(b) why a	10 00		•
LEOS	). _ 1Åre	ss denote:	
	these special IP addic	<b>, , , , , , , , , , , , , , , , , , , </b>	
(c) What	S. do these special IP addre 0 0 0		
(i) 0.	0.0.0 55.255.255.255		[3]
(ii) 25	55.255.255.2		• . • • • •
(iii) 1	27.xx.yy. <sup>zz</sup>	wing protocols:	
•	e the port number of follows NET HTTP	owing protocols.  tive and Non- Adaptive algorithms. Give Example of each?  Sipelining property is used in sliding window protocols?	[4]
(d) Write	e the port number	algorithms. Give Example of our	r.43
ETI	TELNET, HTTP	tive and Non- Adaptive algorithms. Give Example of the control of	[4]
L11	, The Adapt	tive and	-07
(e) Dif	ferentiate between	sinelining property is a	[3]
	window size, how h	in networks?	
(t) Wh	at is winds	m and how is it useful as	[4]
	the Checksul	oipelining property of the property of point to point protocol.  If the point to point protocol of point to point protocol of point to point protocol.  If the point to point protocol of point to point protocol of point to point protocol.  If the point to point protocol of point to point protocol.	
(g) W	hat is means	of point to point protocol	ı is in
W.	* cterious	itting at 7000 L	[2]
(h). (	sive four char	idth for an FSK signal trans-	
	who minimum bandwi	of point to point protocol.  idth for an FSK signal transmitting at 2000bps. Transmission carriers are separated by 3000HZ.	[2]
(i) <b>F</b>	ind the lines mode and the	0	
h	alf-duplex mode un What are two features of I	HTTP protocol ?	•
· .	west are two features of		
(j) V	ynai aio c	n	
		Section -B	
		Section -B tempt any four questions from section B)	[6]
	(At	tempi any	
		leader with the help of a diagram.  and maximum frame sizes for Ethernet frames? Why can't	
•	-an arotocol H	leader Willi Live Why can't	[4]
0.2 (a)	Explain TCP protoco	frame sizes for Ethernel Hames	
Q.2. (a)	وسمو	and maximum Haire	Turn over
,	What are the minimum	leader with the help of a diagram.  and maximum frame sizes for Ethernet frames? Why can't and be zero.	
(b)	William frame let	ggus -	
	the millillium		التنسئنتين

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· <b>2.</b>	
Q.3. (a) Discuss the collision detection process in a CSMA/CD protocol can a station to receive frames at the same time.	ransmit and
(b) Briefly explain what is the important role of RPC in the communication network.	
0.4 (a) When	Ork.
operational difference between ARP and BARR	الما
V-7 44 IOULET Incide on -	
(b) A router inside an organization receives a packet with the destination address 190.240.34.95. If the subnet mask is /19, find the subnet address.	[2]
(c) How do multiple senders share the common transmission media in a network?  O.S. Franking	List the [4]
C.5 Explain the difference	الملامد:
Q.5 Explain the differences between circuit switching and packet switching. How is Q.6. (a) Explain follow:	virtual circul
Q.6. (a) Explain following terms:	[2*5
(i) Cladding	
(ii) Flow Control	:
(iii) Flooding	• •
(IV) URL	
(v) BOOTP	•
Q.7. (a) The following character encoding is used in a data link protocol:  Transmitted (in binary) for the f	
A: 01000111. D. 1600ding is used in	[6]
Transmitted (in h.: TLAG: 01111110 Transmitted (in h.:	1
A: 01000111; B: 11100011; FLAG: 01111110; ESC: 11100000 show the bit so following framing methods are used:	equence ch of the
Claracter course	
(iii) Starting and ending $G_{-}$ .	
(iii) Starting and ending flag bytes, with bit stuffing.  (b) Write any two functionalities for	
write any two functionalities for co.	
(i) each of the following	[2'
(b) Write any two functionalities for each of the following network devices:  (i) Switches (ii) Gateways	
(ii) Gateways	