Nan	ıе :										
Roll	<i>No.</i> :					The Associate and Explicate					
Invigilator's Signature :											
CS/B.Tech(ICE/EIE[O])/SEM-6/CS-611/2010											
2010											
COMPUTER NETWORK & INTERNET WORKING											
Time Allotted: 3 Hours					Full Marks : 70						
The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.											
GROUP – A											
(Multiple Choice Type Questions)											
1.	Choose the correct alternatives of the following : $10 \times 1 = 10$										
	i)		v many link ology?	required	for	a fully connected ring					
		a)	n(n-1)		b)	n					
		c)	n (n-1)/2		d)	(n-1).					
	ii) Which one is a DCE devise ?										
		a)	Modem		b)	Computer					

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Which one is not an application layer protocol?

d)

b)

d)

b)

d)

Which one iis a UNIX command to check your IP?

None of these.

ipconfig

showip.

Telnet

DNS.

Network Card

c)

a)

c)

a)

c)

ip

ifconfig

SMTP

TCP

iii)

iv)

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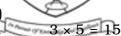
v)	FTP	runs on which port		\A/			
	a)	23	b)	21 Annual (y Exercising and Excision)			
	c)	80	d)	1023.			
vi)	The process of converting analog signals into digital signals so that they can be processed by a receiving computer is referred to as						
	a)	modulation	b)	demodulation			
	c)	synchronizing	d)	digitizing.			
vii)	vii) The x.25 standard specifies a						
	a)	technique for dial acce	ess				
	b)	DTE/DCE interface					
	c)	data bit rate					
	d)	none of these.					
viii) Which of the following is considered a broad communication channel?							
	a)	Coaxial cable	b)	fiber optics cable			
	c)	microwave circuits	d)	all of these.			
ix)	method of TI carrier is						
	a)	bipolar	b)	NRZ			
	c)	manchester	d)	binary.			
x)	A protocol is a set of rules governing a time sequence events that must take place						
	a)	between peers	b)	between an interface			
	c)	between modems	d)	across an interface.			
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GROUP - B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$



- 2. a) Discuss advantages and disadvantages of bus topology.
 - b) Give some daily life example of Data communication.

3 + 2

- 3. a) Describe simplex, half duplex and duplex data transmission.
 - b) Describe role of computer network?

3 + 2

- 4. Explain MODEM technology in respect of data communication.
- 5. Describe TCP header format.

5

- 6. a) What do you mean by network security? Explain.
 - b) What do you mean by CSMA? How it differ from CSMA/CD? 3+2

GROUP - C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

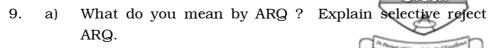
- 7. a) Write about unguided media communications.
 - b) Received data is 10010100101. Find the error by Haming code.
 - c) Explain LLC and MAC sub layer.

5 + 5 + 5

- 8. a) Compare circuit switch, message switch and packet switch.
 - b) Compare GSM and CDMA.
 - c) What do you mean by Class A, B and C IP? 6+6+3

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- b) Discuss digital to digital encoding techniques.
- c) What is www? How it works?

6 + 6 + 3

- 10. a) What type of cogestion control are used in networking system? What types of policies are used?
 - b) What is the difference between open loop and closed loop congestion control?
 - c) What do you mean by Gateway, HUB and repeater?
 - d) What is ethernet LAN?

6 + 4 + 3 + 2

- 11. a) What are the basic security requirements in a network security?
 - b) Discuss about the algorithm for confidentiality.
 - c) What is Data Encryption Standard (DES)?
 - d) Discuss briefly about RSA algorithm. 3 + 4 + 4 + 4
- 12. Write short notes on any *three* of the following : 3×5
 - a) Sliding window protocol
 - b) MODEM
 - c) B-ISDN
 - d) Error detection and correction
 - e) X.25 inter networking
 - f) SONET
 - g) DWDM.

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