R13

Code No: 117BY

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, November/December - 2017

COMPUTER NETWORKS

(Common to ECE, EIE, BME)

Time: 3 Hours **Max. Marks: 75**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

Part- A (25 Marks)

1.a)	What is CRC checker?	[2]
b)	Write the advantages of layered architecture of network.	[3]
c)	Define exponential Back off.	[2]
d)	What is piggy backing? How does it useful?	[3]
e)	Write the functions of LLC.	[2]
f)	Write the responsibilities of network layer.	[3]
g)	What is miultiplexing? Give different types of multiplexing?	[2]
h)	Write about Tunneling.	[3]
i)	What is DNS? Write its properties.	[2]
j)	Explain MIME header	[3]

Part-B (50 Marks)

2.a)	Compare TCP/IP and OSI reference model.	
b)	Explain about framing.	[5+5]
	OR	
3.a)	Explain stop and wait protocol.	
b)	Give a detail note on Hamming code.	[5+5]
4.a)	Explain CSMA/CD protocol and how does it detect collision?	
b)	Discuss about switched and fast Ethernet.	[5+5]
	OR	
5.a)	Explain MAC sub layer protocol in detail.	
b)	Discuss about spanning tree bridges.	[5+5]
6.a)	Explain link state routing algorithm in detail.	
b)	Write the optimality principle of routing algorithms.	[5+5]
	OR	
7.a)	Describe hierarchical routing algorithm in detail.	
b)	Write a note on load shedding.	[5+5]

8.a)	Explain IPV6 packet format.	
b)	Describe fragmentation in internet working with an example.	[5+5]
	OR	
9.a)	Explain Address resolution protocol in detail.	
b)	Write the principles of network layer in internet.	[5+5]
10.a)	Explain TCP sliding window protocol.	
b)	Give a detail note on HTTP request-response model.	[5+5]
	OR	
11.a)	Explain File transport protocol.	
b)	Compare TCP and UDP protocols.	[5+5]

--ooOoo--