

JAYA GROUP OF INSTITUTIONS  
THIRUNINRAVUR  
4<sup>th</sup> Semester-B.E  
Model Exam I

Sub Title : COMPUTER NETWORKS  
Sub Code : CS6551  
Duration : 3 Hrs

Date : 02.02.15  
Branch : CSE  
Max.Marks : 100

Answer all the questions  
PART-A (10 x 2=20)

1. Write short notes on multiplexing techniques.
2. List the types of transmission errors.
3. Why we go for layering?
4. Define protocol interfaces.
5. What is bandwidth and latency?
6. Define network adaptor.
7. What is exposed node problem?
8. Define active and passive scanning.
9. Explain about broadcast and multicast.
10. What is ICMP?

PART B(5x16=80)

- 11.a) Explain in detail about OSI and Internet architecture with a neat sketch.(16m)

Or

- b) Explain the following

- i) Socket(6m)
- ii) Bandwidth and latency(6m)
- iii) Delay x Bandwidth product (4m)

- 12.a) Describe in detail about framing concepts.(16m)

Or

- b) Suppose we want to transmit the message 10011010000 and protect it from errors using the CRC polynomial 1101.(16m)

- i) use polynomial long division to determine the message that should be transmitted
- ii) Suppose the leftmost bit of the message is inverted due to noise on the transmission link. What is the result of the receiver's CRC calculation? How does the receiver know that an error has occurred?

- 13.a) Explain the concepts of sliding window protocol with a neat diagram.(16m)

Or

- b) Explain 802.3 in detail with a neat diagram.(16m)

- 14.a) Explain in detail about 802.11 and Bluetooth .(16m)

Or

- b) Explain about switching and Bridging concept in detail.(16m)

15.a)i)Find the subnet address for the given data(4m)

IP address=192.30.80.5

Mask=255.255.192.0.

ii)Describe in detail about ARP ,DHCP and ICMP .(12m)

Or

b)Explain in detail about CIDR and subnetting.(16m)