

## 2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

IV B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS  
**INTERNET INTRANET & MULTIMEDIA**  
 (ELECTRONICS & TELEMATICS)

Apr/May 2006

TIME – 3 HOUR  
 MARK – 80

**Answer any FIVE Questions**  
**All Questions carry equal marks**

1. With the help of an illustrative diagram explain how a combination of virtual and physical address schemes can result in interconnecting heterogeneous computers for a Global internet. Specify the protocols used at each stage. [16]
2. (a) With the help of a diagram, explain the functions of each layer in the TCP/IP model. [10]  
 (b) How does the TCP/IP model differ from the ISO reference model? [6]
3. (a) With the help of an example, explain what is an IP datagram? [6]  
 (b) In the following routing table, what will be the next hop for a datagram destined for 192.4.10.3.  

DESTINATION	MASK	NEXT HOP	
30.0.0.0	255.0.0.0	40.0.0.7	
192.4.10.0	255.0.0.0	DELIVER DIRECT	
192.4.10.0	255.255.0.0	DELIVER DIRECT	
192.4.10.0	255.255.255.0	128.1.0.9	[10]
4. Draw and explain the basic architecture of an intranet, along with its key hardware and software components. [16]
5. (a) Discuss the basic organization of the Domain Name System.  
 (b) Suppose an IPX based LAN (such as Novell Netware) is running in an organization. How will intranet based applications be run on this LAN without the complete overhead of TCP/IP? Why will a DNS server not be essential in such a configuration? [8+8]
6. Explain about the hardware requirements of a multimedia system. What are software requirements of a multimedia system. [16]
7. (a) Describe following animation techniques
  - i. cell animation
  - ii. computer animation
 (b) Explain how you can create an animated scene with an example. [8+8]
8. (a) Explain with a diagram about the general service architecture for networkbased multimedia services.  
 (b) Explain in detail about Advanced Call Services (Tele services) and Access services (Bearer services) [16]