

ITEC350

Study Guide for Midterm Exam

Please study based on the powerpoint slides which we used in class. All the powerpoint slides are posted in D2L.

✚ Classification of Interconnected processor by scale

- BAN
- PAN
- LAN
- MAN
- WAN
- Internet

✚ Difference between Connectionless and Connection oriented

✚ OSI 7 layer

- You should memorize the OSI 7 layer protocol stack.
- You need to understand what each layer does.

✚ TCP/IP

- Protocol stack (4 layers)

✚ Segmentation & Reassembly

✚ Multiplexing

- What is Frequency Division Multiplexing?
- What is Time Division Multiplexing?
- What is Wavelength Division Multiplexing?

✚ Difference between a packet and a frame

✚ What do the following acronyms stand for?

- HTTP
- TCP
- UDP
- IP
- OSI
- DNS
- RTP
- ICMP
- ARP

✚ Encapsulation

✚ What are Domain Name, IP address, and MAC address?

✚ IP addresses

- Special IP addresses
- Class A, Class B, Class C
- Conversion between the dotted decimal representation and the binary representation of IP addresses
- Subnetting

- please review your homework 1
- Why subnets?

✚ VLSM (Variable Length Subnet Masking)

✚ Nonroutable addresses

✚ What is promiscuous mode in LAN?

✚ DNS

- What is DNS? (You should state that DNS translates Domain name to IP address.)
- How DNS works? (<http://cr.yp.to/djbdns/intro-dns.html>)
- .arpa
- Why do we need .arpa?
- What is reverse lookup?
- How the reverse lookup works? (<http://cr.yp.to/djbdns/intro-dns.html#reverse>)

✚ What is difference between a Router and a Gateway?