臺中健康暨管理學院
九十二學年度碩士班暨碩士在職專班招生考試試題紙

系 所 別	組 別	考試科目	考試日期	時 間	備 註
電腦與通訊學系碩士班	--	電腦網路	92.3.30	10:30-12:10	共一頁

Note: You can write your answers in Chinese or English.

1. Explain the following terms:

    (a) Half duplex,   (b) Forward error correcting (FEC),

    (c) Round-robin sharing,   (d) Application program interface (API). (5% each)

2. Consider $2^n - 1$ nodes connected as a ring. Assume the packets can go left or right, whichever is nearer. Determine the average number of hops needed for transmitting a packet from a node to another. (15%)

3. Can a bridge connect a Token Ring network to an Ethernet? Can a switch? Why or why not? (15%)

4. Explain why you can connect to the Internet by an ADSL modem with the same telephone line on which you are talking. (15%)

5. Briefly describe the distance vector routing algorithm. (15%)

6. How many bits are required individually for an IPv4 address and an IPv6 one? What are the major improvements of IPv6 over IPv4? (20%)