## 考試題

### 考試科目: 資訊網路
### 系所別: 資工三B
### 命題教師: 楊偉儒

### 考試日期: 94年11月14日

*答題須知: 請按照順序回答，並於答案卷上標明題號。答案請簡明扼要！！！未按照上述方式答題者，該題不予計分。

### 問答題：(115%)

1. What is the OSI reference model? Describe the functions of each layer. (20%)
2. Explain the meaning in the TCP and UDP header. (30%，UDP：5%，TCP：25%)

```plaintext
1. Source port  Destination port
2. Sequence Number
3. Acknowledge Number
4. Header Length  Reserved  flag  Receiver Window
5. checksum  Urgent Pointer
6. Options  Padding

Data begins …
```

3. What is the function of DHCP? What is the purpose of NAT? (10%)
4. What is a socket address? Why would an application use UDP instead of TCP? (15%)
5. What is the difference between persistent HTTP with pipelining and persistent HTTP without pipelining? Which is used by HTTP 1.1? (10%)

6. What is circuit switched network and packet switched network? (10%)

7. Who invent ICQ, the first instant messaging service? When was it invented? Who invented Napster? When was it invented? (20%)