

國立臺北科技大學

九十六學年第一學期電機系博士班資格考試

網際網路工程試題(公告用)

填學生證號碼

第一頁 共一頁

--	--	--	--	--	--	--	--

注意事項：

1. 本試題共【10】題，配分共 100 分。
2. 請按順序標明題號作答，不必抄題。
3. 全部答案均須答在試卷答案欄內，否則不予計分。
4. 考試時間：二小時。

1. (10%) Briefly explain what the difference is between congestion and flow control.
2. (10%) In the Internet protocol stack, briefly explain what the basic difference is between the functions of the transport and the link layers ?
3. (10%) Briefly explain in what sense HTTP is said to be a 'stateless' protocol, but FTP is not.
4. (10%) Why is an ARP query sent within a broadcast frame? Why is an ARP response sent within a frame with a specific LAN address?
5. (10%) Suppose the IEEE 802.11 RTS and CTS frames were as long as the standard DATA and ACK frames. Would there be any advantage to using the CTS and RTS frames? Why?
6. (10%) A class B network on the Internet has a subnet mask 255.255.248.0. What is the maximum number of hosts per subnet?
7. (10%) Briefly explain what the difference is between an IP address and a port number.
8. (10%) What is a three-way handshake? What is the three-way handshake used for TCP?
9. (10%) What is a slow-start algorithm ? What is the slow start algorithm used for TCP?
10. (10%) What is the difference between an active and a passive intruder?

第二頁 共二頁

