

系所別: 網路學習科技研究所 科目: \_\_\_\_\_

計算機網路

1. Describe the characteristics of connectionless communication and connection-oriented communication? (10%) Give two existing network services, one employs connectionless communication and the other uses connection-oriented communication and please describe the reasons why the two services employ the two different communications, respectively? (15%)
2. Please describe why the 802.11 employs CSMA/CA(Carrier Sensing Multiple Access/Collision Avoidance) instead of CSMA/CD(Carrier Sensing Multiple Access/Collision Detection)(15%)
3. In the internet, there are two types of addresses, one is IP address and the other is MAC Address. Which protocol is employed to translate the two types of addresses (10%) and how to do the translation?( 10%)
4. Owing to the rapid development of telecommunication and information technology, the limit of space and time in the physical classroom was broken. Please describe how to extend learning in the classroom to outside of the classroom with network technology.(10%) And list its advantages and disadvantages. (10%)
5. Please describe the following terminology:
  - 甲、NAT(Network Address Translation) ( 5%)
  - 乙、ICMP (Internet Control Message Protocol) ( 5%)
  - 丙、QoS ( Quality of Service ) ( 5%)
  - 丁、Mobile device ( 5%)

