

# 博班資格考 資訊網路試題

命題方式：close book

考試時間：共 4 小時

第一部分：50 分

一、簡答題(30 分)：每題 2 分

1. How does TCP implement reliability?
2. What is the most popular network architecture today?
3. What is the limit on UTP cord length in Ethernet standards?
4. Why do many companies use routed LANs instead of pure Ethernet LANs?
5. What is the advantage of dedicating channels to VoIP service?
6. What is a PAN?
7. In ADSL service, what does the DSLAM do?
8. Why is metro Ethernet attractive?
9. In the IP address, 20.20.20.20, what is the network part?
10. When would you often use Layer 3 switches?
11. What is the purpose of a denial-of-service attack?
12. In digital certificate authentication, what key does the supplicant use to perform a calculation?
13. When a packet that is not part of an ongoing connection and that does not attempt to open a connection arrives at a stateful inspection firewall, what does the firewall do?
14. What is MPLS's main attraction?
15. How do WSDL and UDDI combine to help create an open market for Web services?

二、問答題(20 分)：每題 5 分

1. Create a table comparing switched and routed network.
2. A friend wants to install a wireless home network. The friend wants to use either 802.11n or 802.11g. What advice would you give your friend?
3. Several Internet access systems are asymmetric, with higher downstream speeds

than upstream speeds. Is it good for a file server? Explain.

4. Suppose that both DNS servers and DHCP servers send your client PC an IP address. Distinguish between these two addresses.

第二部分：50 分，每題 10 分

1. 試論歷年來『網路技術發展』對同期『資訊業發展變革』的影響？  
(例如：網路技術造就分散式系統，而分散式系統又對之後資訊業有何影響)
2. 試論『雲端熱』興起原由？
3. 試論繼『雲端熱』之後，網路之發展趨勢？
4. 試論為何近年來許多跨國公司廢除原本分散在各國分公司的電子郵件伺服器，而在總公司設置全球統一的電子郵件伺服器？
5. 試論公司在考量是否採行主機代管時，應考量之因素及其順序？