

國立勤益技術學院九十四學年度研究所碩士班招生筆試試題卷
所別：流通科技管理研究所 組別：科技應用組
身分別：一般生
科目：計算機概論 准考證號碼： (考生自填)

考生注意事項：

- 一、考試時間 100 分鐘。
- 二、答題時需標註標題。

Section I: Multiple Choice 30 分，每小題 3 分，答錯不倒扣

1. 下列數系轉換何者正確？
(a) $10101111_2 = 177_{10}$ (b) $10101101_2 = 257_8$ (c) $10101110_2 = AE_{16}$
(d) 以上皆非。
2. 設流管系有學生 250 名，若使用二元搜尋(Binary Search)某一特定學生姓名，最多需比對幾次？
(a) 7 (b) 8 (c) 9 (d) 10。
3. 設有一數據機(Modem)傳送速率為 9600 bps，今有一張影像 3 M bytes 傳輸多少時間？
(a) 6 分(b) 12 分(c) 16 分(d) 42 分。
4. 有關 IP 協定，下列敘述何者錯誤？
(a) IP 位址由 32 bits 組成 (b) IP 位址有 5 種等級(Class)
(c) Class A 網路位址為 8 bits (d) Class B 可用主機位址有 256 個。
5. 下列何種網路型式適合使用集線器(Hub)搭配 RJ45 插槽來建構網路：
(a) 星狀網路 (b) 環狀網路 (c) 匯流排網路 (d) 環狀與匯流混合網路
6. Which of the following is not part of Central Processing Unit?
(a) ALU (b) Register (c) RAM (d) Control Unit
7. A computer has 128MB of memory. Each word is 8 bytes in this computer. How many bits are needed to address any single word in memory?
(a) 24 bits (b) 27 bits (c) 16 bits (d) 7 bits
8. In memory management, memory is divided into equally sized frames and the program is also divided into equally sized sections. The sections of a program need not be contiguous, but all sections must be present in memory for execution. The technique is called _____ ?
(a) Partitioning (b) Segmentation (c) Paging (d) Demand segmentation.

9. About the software, which of the following is not correct ?
- (a) Window XP is an operating system software.
 - (b) JPG file is a document type opened by the Adobe Acrobat Reader.
 - (c) Java is an object-oriented language.
 - (d) SQL is a structured language and used to retrieve information of a database.
10. Which of the following is true ?
- (a) The FTP is used to transfer a file from one machine to another.
 - (b) The TELNET is used to access and transfer documents on the World Wide Web.
 - (c) The SMTP is used to download email messages.
 - (d) The POP is used to send the email.

Section 2: Short Essay (70%)

1. Identify the differences between an assembler and a compiler? (6%)
2. Suppose a main program calls procedure A, which in turn calls procedure B, and after B is completed, procedure A calls procedure C. Follow this scenario, maintaining the stack of return locations. (10%)
3. Identify the difference between an object and a class? (10%)
4. Given a brief definition of the following items (15%)
 - a. Register (3%)
 - b. Cache memory (3%)
 - c. Indexed file (3%)
 - d. Mass storage (3%)
 - e. Multiprogramming (3%)
5. (1) Explain the concept of OSI? (3%)
(2) Name the layers of the OSI model. (7%)
(3) Please describe the function of each layer of the OSI model. (7%)
6. 當瀏覽至一網站為: <http://www.ncit.edu.tw/>
 - (1) 請問該網址之通訊協定為何? (4%)
 - (2) 寫出該網站所屬之組織名稱。 (3%)
 - (3) 如何使用 Windows DOS 模式下之指令以確定該主機是否連上網路? (5%)