

大同大學 九十三 學年度 轉學考試 試題

考試科目：計算機概論 系別：資訊工程學系 第 頁，共 1/1 頁

註：本次考試不可以參考自己的書籍及筆記； 不可以使用字典； 不可以使用計算器。

1. (a) What are the three methods to represent signed integers? Compare and contrast them. (6%)
(b) Name two uses of unsigned integers. (2%)
2. (a) What are the advantages of a high-level language over a machine language? (3%)
(b) Name some high-level languages. (3%)
(c) What is a source file? What is an object file? What is an executable file? How are they related? (6%)
3. List and describe briefly the five phases that most system development cycles contain. (10%)
4. (a) Distinguish among LAN, MAN, and WAN. (6%)
(b) What are the three common topologies for LAN? Which is the most popular today? (4%)
(c) What is a wireless LAN? (2%)
5. (a) Explain the differences between an IP address and an email address. (4%)
(b) Is there a one-to-one relationship between the two addresses? (2%)
6. (a) What is booting? (2%)
(b) How is a cold boot different from a warm boot? (4%)
(c) How is memory-resident part of an operating system different from a nonresident part of an operating system? (4%)
7. Computer users need a lot of memory, especially memory that is very fast and very inexpensive. But, this demand is not always possible to satisfy. Very fast memory is usually not cheap. A compromise needs to be made. The solution is hierarchical levels of memory. List and describe the components that the memory hierarchy may contain. (9%)
8. (a) How is sequential access different from direct access? (4%)
(b) How is a file processing system approach different from the database approach? (4%)
(c) What are the three database models? Which is the most popular today? (4%)
(d) What is SQL? (2%)
9. What does each of the following acronyms stand for? (8%)

(a) CPU	(b) ALU
(c) RAM	(d) ROM
(e) RISC	(f) HTML
(g) FTP	(h) WWW
10. (a) How is procedural programming different from object-oriented programming? (4%)
(b) Why is C a popular language among programmers? (4%)
(c) Define the three constructs used in structured programming. (3%)