

1. (30%) Briefly describe the following terms:
 - (a) ADSL and TCP/IP (in computer Network)
 - (b) port ID (in TCP)
 - (c) HTML, CGI, and HTTP (in World Wide Web)
 - (d) flash memory (in data storage)
 - (e) paging (or swap) file (in computer OS)
 - (f) ActiveX (in MS Windows programming)
 - (g) MAC address (in network adapter)
2. (10%) What are the two most popular operation systems in PDA (Personal Digital Assistant)? Briefly describe these two systems.
3. (20%) A computer uses all kinds of ports to communicate (pass data) with external devices, e.g. printer. Illustrate three types of ports in PC and briefly describe their features (特徵).
4. (10%) Using the voltage and bit length to define the resolution and sensitivity for A/D and D/A converters.
5. (5%) In a program, we often need to open files with binary or ASCII (regular) mode. What are the differences between these two types of files?
6. (5%) In a program, we could declare variables as static variables. What is the major advantage of using a static variable?
7. (20%) Write a function with your favor computer language (or use pseudo language) to reverse the bit order of the content of a variable. (You need to identify the input argument(s) of this function.)