

(一) 名詞解釋

- (1) Intranet / Internet? (8%)
- (2) Pixel, PPI, and DPI (10%)
- (3) LAN/WAN (6%)
- (4) XML/HTML (6%)

2X3	630X450 pixels
3X5	900X630 pixels
4X6	1080X720 pixels
5X7	1260X900 pixels
6X8	1440X1080 pixels
8X10	1800X1440 pixels
8X12	2160X1440 pixels
10X12	2160X1800 pixels
11X14	2520X1800 pixels
12X15	2700X2160 pixels
12X18	3240X2160 pixels

請注意：相片尺寸=要求像素  
否則相片便會模糊

(二) 簡答題：

- (1) If you use a digital camera to take a photo and you wish to print the image file in a 4" \*6" paper, what minima size (KB) the image file will be? (Note: the minimal requirement for photo printing is shown in figure 1. Assume the file size is uncompressed and each pixel is 256 colors) Please explain how you calculate it in detail. (10%)
- (2) Please explain the relations between applications, hardware, hardware drivers, and operation system (10%)
- (3) What is BIOS? (5%)
- (4) One of your friends is asking a computer expert, you, to assemble a computer for him/her (not to purchase a all-in-one computer). The aim of this computer is to receive email, to surf on the Internet, and to print documents. His/her budget is NT\$ 25,000. What components will you suggest? Please explain as detail as possible (12%)
- (5) Please explain how you transfer 173(decimal) into hexadecimal format. (5%)
- (6) What are the characteristics of CDs and DVDs? (8%)

(三) 程式設計

Please use any programming language to write a program (20%)

- (1) Please sort the ranking by the average score of Math and English, and assign a rank for everyone
- (2) If the average scores are the same, rank by Math first and then English.

ID	Math	English	Ranking
1	50	60	
2	60	50	
3	70	40	
4	80	30	
5	90	20	
...	...	...	