

計算機概論課堂測驗一(Ch.1~2)

2007/10/04

系級：_____學號：_____姓名：_____

一、是非題 (每題 3 分)

- () 1. A computer is a specific-purpose machine.
- () 2. 臺灣使用的繁體中文編碼系統稱為 ASCII。
- () 3. The term “multimedia” is used to define information that contains numbers, text, images, audio, and video.
- () 4. Memory, arithmetic logic unit, control unit, and program are the four subsystems of the von Neumann model.
- () 5. The von Neumann model states that the program must be stored in memory.
- () 6. Software engineering is the design and writing of a program in structure form.
- () 7. A step-by-step solution to a program is called an algorithm.

二、選擇題 (每題 3 分，答案不一定只有一個)

- () 1. A 17th century French mathematician invented the _____, which was a mechanical calculator.
(A) Difference Engine (B) Hollerith card (C) Mark I (D) Pascalline
- () 2. In the von Neumann model, the _____ subsystem accepts data and programs and sends processing results to output devices.
(A) ALU (B) input/output (C) memory (D) control unit
- () 3. In extended ASCII, a _____ of the bit pattern for regular ASCII code.
(A) 1 bit is added to the right
(B) 1 bit is added to the left
(C) 0 bit is added to the right.
(D) 0 bit is added to the left
- () 4. _____ is a set of instructions in a computer languages that tells the computer what to do with data.
(A) An operating system (B) An algorithm (C) A calculator (D) A program
- () 5. A 32 bit code was developed by _____ to represent symbols in all languages.
(A) ANSI (B) ISO (C) EBCDIC (D) IBM
- () 6. In the _____ graphic method of representing an image in a computer, the image can be easily rescaled to any arbitrary size.
(A) vector (B) array (C) matrix (D) bitmap
- () 7. If the ASCII for ‘h’ is 1101000, then the ASCII code for ‘t’ is _____.
(A) 1100011 (B) 1000111 (C) 1110100 (D) 1001000

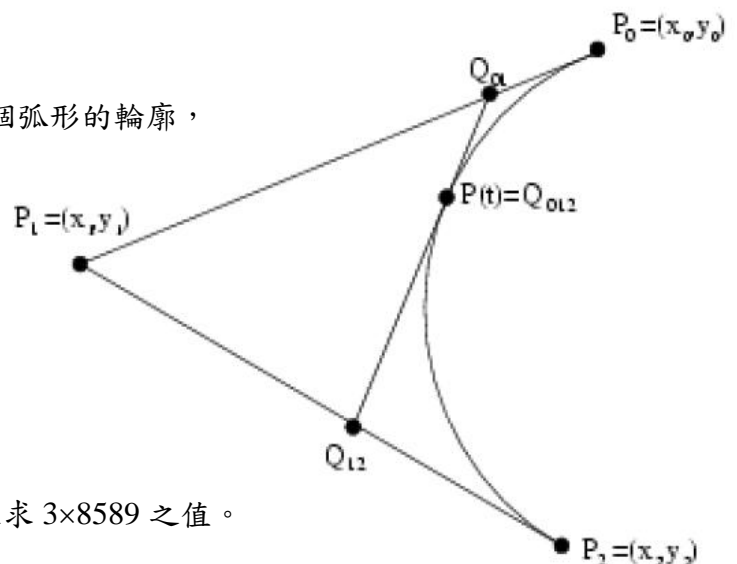
三、 填空題 (每格 4 分)

1. A(n) _____ originally worked as a manager to facilitate access of the computer components for a program.
2. Show the three necessary steps how to change the audio data to 'binary bit pattern':
_____, _____ and _____.
3. 在電腦世界裡，影像顯示通常是由三種顏色(三原色)的強度組合，請問是哪三種顏色?
_____, _____ 及 _____。
4. How many symbols can be represented by a bit pattern with 8 bits? _____.
5. The octal equivalent of the bit pattern 101110010 is _____.
6. The bit pattern for x24C is _____.
7. A video signal is sampled 90,000 times per second. Each sample is represented by 2KB in average. Total length of this video is 10 seconds. How many bits are needed to store this signal?
_____.

四、 簡答題 (每題 10 分)：

1. 右圖是是利用貝茲 (Bezier) 曲線來描述一個弧形的輪廓，
請寫出其 x、y 座標描述的方程式。

答題處：



2. 試繪圖說明如何使用 John Napier's Bones 來求 3×8589 之值。

答題處：