試題一:選擇題〈50分,每題五分〉

- 1. Connections between networks that use different communications protocols are accomplished via a(n):
 - A. gateway.
 - B. router.
 - C. IP switch.
 - D. bridge.
- 2. How does DSL technology improve transmission speed over conventional modems?
 - A. By eliminating the need to convert analog signals to digital and vice versa
 - B. By making use of fiber optic cable
 - C. By spreading analog signals over a wide range of frequencies
 - D. By utilizing coaxial cable
- 3. Encryption is provided for sensitive information when it is sent over the Internet via:
 - A. banner advertising.
 - B. portal security.
 - C. SSL.
 - D. firewalled intranets.
- 4. The term bricks-and-clicks refers to:
 - A. companies that combine traditional retail stores with Internet sales.
 - B. companies that do business exclusively on the Internet.
 - C. construction companies doing business on the Internet.
 - D. mail-order retailers doing business on the Internet.

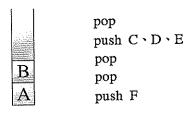
5.	Because the personal computer is networked to main corporate computers and databases,						
	allov	ving easy download capabilities, PC managers must deal with issues related to:					
	A.	decision support models.					
	B.	information centers.					
	C.	data security and integrity.					
	D.	EIS software access.					
6.	The	act of bombarding a system with such a high volume of requests that it results in an					
	inab	ility to allow legitimate users to access the system is called:					
	A.	bombing.					
	B.	data diddling.					
	C.	denial of service.					
	D.	zapping.					
7.	A	continuously links the activities of buying, making, and moving products from					
		liers to purchasing firms, as well as order entry systems.					
	A.	MRP system					
	В.	ERP system					
	C.	VCM system					
	D.	SCM system					
8.	Java	a Server Pages is most similar to which of the following?					
	A.	VBScript and ActiveX					
	В.	CGI and ASP					
	C.	ColdFusion					
	D.	JavaScript					
9.	將數	個磁碟視爲單一磁碟使用稱爲什麼?					
	A.	RFID					
	В.	DAT					
	C.	DVD					
	D.	RAID					

- 10. 下列何者可以用來定義系統中所有資料的類型?
 - A. 資料流程圖
 - B. 實體關係圖
 - C. 資料字典
 - D. 系統流程圖

試題二: 〈15 分〉

假設堆疊 S = (A, B), 其中 B 爲頂端, A 爲底端, 試問:

(1) 在經過下面推入及彈出的動作後,堆疊的最終狀態爲何? (5%)



(2) 寫出運算式 A + B / C - D * 3 + E 的後序表示法與前序表示法。(10%)

試題三: 〈10 分〉

給定數列 23、12、58、85、72、98、13、37,請以「選擇排序法」將它由小排到大,記錄 你的過程。(10%)

試題四:〈10 分〉

比較瀑布式模型和物件導向分析設計的不同。(10%)

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試題五:〈15 分〉

下圖爲一資料庫,其中表S代表供應商。表P代表零件。表SP代表出貨。

- (1) 請指出這三個表格的所有外來鍵(foreign key),及其參考對象(referenced attributes) (5%)
- (2) 請寫出『找出供應商「史密斯」所供應的零件名稱』的 SQL 命令。(結果請列出零件 名稱)(5%)
- (3) 請寫出『每個零件各有多少個供應商供應』的 SQL 命令。(結果請列出零件名稱與供應商數量)(5%)

S	<u>S#</u>	SNAME	STATUS	CITY	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	SP	<u>S#</u>	<u>P#</u>	QTY
? <u></u> [S1	史密斯	20	倫敦			S1	P1	300
1	S2	瓊斯	10	巴黎		1 1	S1	P2	200
1 1	S3	布萊克	30	巴黎		1	S1	P3	400
1 1	S4	查克	20	倫敦		1	S1	P4	200
) ; ;	S 5	亞當	30	雅典	; ; !	1	S1	P5	100
,					·		S1	P6	100
P	P#	PNAME	COLOR	WEIGHT	CITY	 	S2	P1	300
 - -	P1	螺帽	紅	12	倫敦	1 1 1 1	S2	P2	400
1 1	P2	門栓	綠	17	巴黎		S3	P2	200
1 1	Р3	螺絲	藍	17	羅馬	: :	S4	P2	200
	P4	螺絲	紅	14	倫敦		S4	P4	300
1	P5	凸輪	藍	12	巴黎	: : :	S4	P5	400
1	Р6	齒輪	紅	19	倫敦	1 1 1			- -