

國立中央大學97學年度碩士班考試入學試題卷

所別：網路學習科技研究所碩士班 科目：作業系統 共 二 頁 第 一 頁

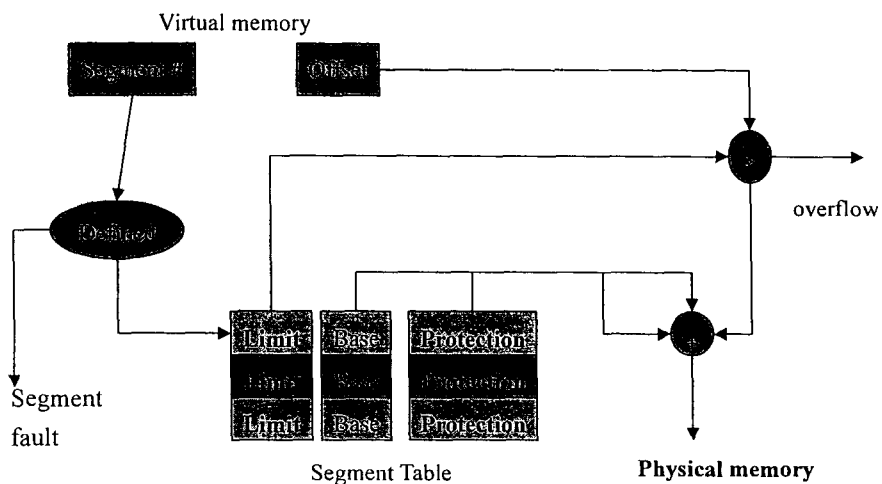
*請在試卷答案卷(卡)內作答

1. (20%) In the dynamic paging algorithm, the mechanism of working set is useful to reduce page fault. If the number of space for page is 3, with the following page request, please finish filling out the following table and indicate if page faults occur?

Page request	0	1	1	3	0	0	2	3	0	1	2	3	4
Page space 1	0*												
Page space 2	1*												
Page space 3	1												

* page fault

2. (20%) Please explain the purpose of the following flow chart (10%) and describe its operation in details. (10%)



3. (20%) The following are the scenarios of processes entering CPU,

Process ID	Arrival time	The length of Process time
1	0	30
2	1	20
3	2	50
4	3	10

- If the total waiting time = $(30) + (10) + (60 - 2) + (0) = 98$, what kind of scheduling strategy is used? (10%) And please draw the sequence of allocating CPU time for these 4 processes? (10%)

參考用

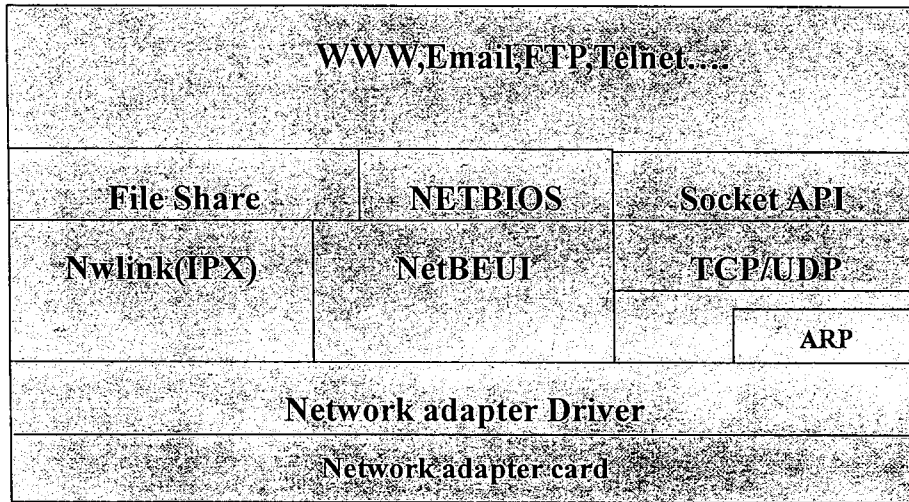
注意：背面有試題

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4. (20%) The following is the protocol stack of Microsoft network, please map it into OSI(Open System Interconnection) model(10%) and give the explanation about your mapping(10%).



5 (20%)Please describe the following terminologies in details:

- 甲、Round-Robin Scheduling (5%)
- 乙、Locality (for resources allocation)(5%)
- 丙、ARP/RARP (5%)
- 丁、Socket (5%)

注意：背面有試題