ＯＳ隨堂測驗 20170601

1. (**B**) ____ is the dynamic storage-allocation algorithm which results in the smallest leftover hole in memory.

A) First fit, B) Best fit, C) Worst fit, D) None of the above

2. (**C**) Consider a logical address with a page size of 8 KB. How many bits must be used to represent the page offset in the logical address?

A) 10, B) 8, C) 13, D) 12

3. (**A**) Assume a system has a TLB hit ratio of 90%. It requires 15 nanoseconds to access the TLB, and 85 nanoseconds to access main memory. What is the effective memory access time in nanoseconds for this system?

A) 108.5 , B) 100 , C) 22 , D) 176.5

4. (**A**) Consider a logical address with 18 bits used to represent an entry in a conventional page table. How many entries are in the conventional page table?

A) 262144, B) 1024, C) 1048576, D) 18

5. (**A**) Given the logical address 0xAEF9 (in hexadecimal) with a page size of 256 bytes, what is the page number?

A) 0xAE , B) 0xF9, C) 0xA, D) 0x00F9

6. (**D**) Consider a 32-bit address for a two-level paging system with an 8 KB page size. The outer page table has 1024 entries. How many bits are used to represent the second-level page table?

A) 10, B) 8 , C) 12, D) 9

7. (**A**) A(n) _____ matches the process with each entry in the TLB.

A) address-space identifier, B) process id, C) stack, D) page number

8. __X__Fragmentation does not occur in a paging system.

9. __O__Without a mechanism such as an address-space identifier, the TLB must be flushed during a context switch.

10. __X__A 32-bit logical address with 8 KB page size will have 1,000,000 entries in a conventional page table.