

King Saud University
College of Computer and Information Sciences
Computer Science Department

CSC 227: Operating Systems
Course Instructor: Dr. Abdullah Alshalan

QUIZ# 5: Main Memory

NAME: _____ ID: _____ SECTION#: _____

Question 1: Given a logical address with the following format:

Page #	Page Offset
22-bits	10-bits

1. What is the maximum number of pages?
2. What is the page size in Kilobytes?
3. What is the maximum number of entries in the page table?
4. Given that each entry in the page table requires 8 bytes:
 - a. How much memory is required to store the page table in Megabytes?
 - b. How many pages are required to store the page table?
5. Consider a TLB is used where access time to the TLB is 10ns, while access time to physical memory is 200ns. What is the Effective Access Time (EAT) if the hit ratio is 70%.

