## 2007 Paper 1 Question 2

**Operating Systems**

(*a*) In relation to scheduling of processes, describe the concept of a working set and briefly outline how it can be used within an operating system. [3 marks]

(*b*) Briefly explain why context switching between processes is inherently more costly than switching between threads of a process. [3 marks]

(*c*) Give *two* reasons why operating system designers often choose to make code in the kernel non-preemptive. [2 marks]

(*d*) Why would it be bad for a Unix file owned by `root` with the `setuid` bit set also to have read, write and execute access permissions granted to all users? [2 marks]

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