

2005 Paper 1 Question 12

Operating Systems

- (a) Describe with the aid of a diagram the structure of the Windows XP operating system. Sketch the functions of each component, and clearly indicate which parts execute in kernel mode and which in user mode. [6 marks]
- (b) Compare and contrast the *object namespace* in Windows XP with the *directory namespace* of UNIX. [4 marks]
- (c) Compare and contrast *blocking*, *non-blocking* and *asynchronous* I/O. [6 marks]
- (d) Give *four* techniques which can improve I/O performance. [1 mark each]