

## **EXTENDED MODEL ANSWER**

### **Operating Systems 2003 Paper 1 Question 4 (SMH)**

#### **Preemptive schedulers**

This is true – a preemptive scheduler needs to be able to set a timer to cause an interrupt. Otherwise it cannot reliably preempt a running process.

#### **Unix shell**

This is false, being effectively nonsense. Unix shells do of course support redirection, but only to files (or at least fds).

#### **Context switches**

Again false, again nonsense.

#### **Non-blocking I/O**

This is false; the notion of blocking/non-blocking is completely orthogonal to the character/block split of devices.

#### **Shortest job first**

This is true in at least one sense: SJF is optimal in terms of throughput. Worth noting that optimality is not however the most important concept in scheduling.