1. a) **Explain three** reasons why it is important that the CPU can be interrupted. [6]

b) The CPU is processing ordinary application code. **Describe** what happens   
to enable the CPU to run the interrupt service routine. [2]

c) **Explain** why the execution of an INPUT statement generates an interrupt. [2]

2. a) **Explain** why virtual memory may be necessary in a computer. [2]

b) **Describe** **two** benefits of using paging for managing memory allocation. [2]

3. **Compare** the round **robin scheduling** algorithm to the **shortest remaining time**   
algorithm for processing a long job. [6]

[Total 20 marks]