Exam-style Questions

1 a In a multiprogramming environment, the concept of a process has been found to be very useful in controlling the execution of programs.

   i Explain the concept of a process. [2]

   ii In one model for the execution of a program, there are five defined process states. Identify **three** of them and explain the meaning of each. [6]

b The transition of processes between states is controlled by a scheduler.

   i Identify **two** scheduling algorithms and for each classify its type. [4]

   ii A scheduling algorithm might be chosen to use prioritisation. Identify **two** criteria that could be used to assign a priority to a process. [2]

2 a Three memory management techniques are partitioning, scheduling and paging.

   i Give definitions of them. [3]

   ii Identify **two** ways in which they might be combined. [2]

b Some systems use virtual memory.

   i Identify which of the techniques in **part a** is used to create virtual memory. [1]

   ii Explain **two** advantages of using virtual memory. [4]