*Read pages 312 - 320 then answer questions 1 – 4.*

1. The two components of the Operating System are the Kernel and the Shell. The shell is responsible for handling communication with the user and it generally achieves this using a Graphical User Interface (GUI). The kernel contains the basic software functions that maintain and run the operating system such as the File Manager.
2. Application Software is the software that users run and utilize such as a word processor or a spreadsheet application. Utility software is software that is core to the operating system and handles tasks that aren’t built into the operating system itself such as formatting a disk or compressing data.
3. Virtual memory is extra memory that is created by the OS to fulfil a shortfall in main memory. If an application required 800MB of memory and there is only 500MB of memory it will use a page file on mass storage to store the balance 300MB, it can then switch the data in between the two locations as it sees fit, hence the name ‘virtual’ memory as it doesn’t really exist.
4. In the boot (bootstrapping) procedure the computer power is first turned on. The CPU then has a pre determined instruction to execute, this activates the ROM (volatile memory) which activates and places the Operating System into main memory, the ROM then transfers control to the operating system which then activates.