1.5 SYSTEMS SOFTWARE

Operating Systems: runs the computer, manages the hardware and applications.

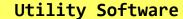
Device Drivers: communicate with the peripherals and internal hardware.

User Interface: allows the user to interact with the device. This can be a Graphical User Interface (GUI) which are visual and easy for someone to use or a command line interface where the user needs to type in commands to make it work.

Multitasking: The operating system manages the programs so that you can run several at the same time.

File and Disk Management: The operating system manages the movement, editing and deletion of data.

User Accounts: The operating system manages the accounts of the different users.



Utilities are the programs that help maintain and configure a program. Most utility software is installed with the Operating system.

Defragmentation: Defragging a magnetic hard drive groups all of the files for each program together and all of the free space together. This makes it read and write quicker.

Back Up Utilities: Schedules and manages back ups. Full back ups = all data is backed up. Incremental = only files since the last back up are copied.

Compression: reduces the size of large files so that they take up less space. Files then need to be extracted before they are used.

Encryption: scrambles the data to protect it so that if someone else gets hold of it they cannot access it.

Open Source and Proprietary Software

Ī	Open Source	Proprietary
i	It's usually free and the source	Usually has to be paid for
i	code is available so it can be	Only the compiled code is
	adapted for individual needs	released so it cannot be edited
Į	Others can improve the code	Good customer support
ļ	Strong online support communities	May not fit the users exact needs

EXAM QUESTIONS

- 1. Evaluate the benefits and drawbacks of releasing a piece of software as open source rather than proprietary.
- 2. Explain three functions of the operating system in a computer
- 3. Evaluate the difference between doing an incremental back up and a full back up.