Pearson BTEC **Level 3 National Extended Certificate in Information Technology**

Unit 1: Information Technology Systems
A Digital devices in IT systems
A2 Peripheral devices and media

Input Devices

Input devices are used to allow us to enter information into a computer system.

Keyboard	Made up of a panel of keys, this device is used to input alphanumeric characters, symbols and simple commands into a computer.	**Game Controller**	Used to control video games, this can come in a gamepad form or in the form of a joystick.
Mouse	A pointing device that allows a user to control a cursor on the screen in order to select objects that are displayed.	**Sensor**	An input device that takes readings from the environment such as temperate or light.
Microphone	An audio input device that allows a user to enter sounds into the computer system.	**Scanner**	A device that converts documents into digital data so that they can be viewed and edited on a computer system.
Webcam	A device used to input digital video or still pictures into a computer system.	**Graphics Tablet**	A flat board and a pointing device, known as a stylus, that allows a user to enter data much like they're using a pen & paper.

Output Devices

Output devices are used to send data from a digital device to a user or another device.

Monitor	A device that outputs a visual display of the user interface of any software that is currently being used on the computer.	**Plotter**	A type of printer that is designed to print out vector graphic images. It typically prints to a very high quality on very large paper.
Projector	This projects a visual display of the user interface onto a wall or screen.	**Speakers**	A device that is designed to produce audio output by converting the digital audio signal from a computer into an analogue signal.
Printer	A device that is used to produce physical copies of the documents & images produced using a computer system.	**Actuator**	An output device that produces motion. We use it to control or move things.

Storage Devices

Device	Explanation	✓	✗
Hard disk drives	Are a form of magnetic storage commonly used as the primary storage devices in a computer system.	They have a large storage capacity and are reliable as they have a long lifespan.	Their read/write time is slow compared to SSD, can be easily damaged by knocks and are not particularly portable when compared to alternatives.
Solid state drives	Are a form of flash storage often used as a portable storage device with a large capacity. They're also used commonly as primary storage in mobile devices, laptops & recently desktops.	They have fast/read-write speeds compared to HDDs, consume less power than HDDs and are not easily damaged by knocks.	They are comparatively expensive compared to HDDs and as such generally have a lower storage capacity. They also have a limited number of writes.
USB flash drives	A form of flash storage commonly used for transferring data between different computers, as well as to back up our files.	They are very portable, are durable to knocks and are very compatible with devices.	They are easily lost, have a limited number of writes, and have a comparatively low storage capacity.
SD cards	Are a form of flash storage commonly used in digital cameras, as well as in mobile devices like smartphones.	They are very small and portable and are also reliable as they aren't easily damaged by knocks.	They have a relatively small capacity and there can be some issues with compatibility.
Optical disks	Are a form of optical storage commonly used for storing music, films, tv & software, for distribution by suppliers.	They are compatible with most personal computers and are highly portable.	Their storage capacity is relatively small and they can be easily damaged.

Manual data processing	Automatic data processing	Accessibility devices
Manual data processing involves an individual entering data into the computer themselves. For example, this could be a hotel entering customer booking details or a teacher marking examination papers or coursework. Manual data entry is good at handling complex data and requires less training. However automatic data entry is more accurate, quicker and cheaper.	Automatic data processing is where the role of data entry is taken away from individual users. For example, this could be OMR used for lottery tickets or smart readers in homes to monitor energy	Accessibility devices are used to aid people with disabilities in accessing the information on computer systems. Examples include trackballs, braille keyboards, large key keyboards, touchscreens, braille embossers, screen magnifiers and eye typers.

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Projector		**Speakers**	
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