

BTEC DIT



Component 3 Effective Digital practices

Learning Aim C2: Legal and Ethical

Knowledge and Assessment Organiser



Student name:



How does legislation govern the use of digital systems and data?

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Key terms

Exam question command words

Command verbs	Definition
Describe	To give an account of something, such as steps in a process or characteristics of something. The response should be developed as they are often linked, but do not need to include a justification or reason.
Discuss	Identify the issue/situation/problem/argument that is being assessed in the question. Explore all aspects of an issue/situation/problem/argument etc. by reasoning or argument.
Draw	Produce an annotated process either in the form of an information flow or data flow diagram
Evaluate	Review information then bring it together to form a conclusion, drawing on evidence, including strengths, weaknesses, alternative actions, relevant data or information. Come to a supported judgement of a subject's qualities and relation to its context.
Explain	An explanation that requires a justification/exemplification of a point. The answer must contain some element of reasoning/justification.
Give/State/Name	Require recall of one or more pieces of information.
Identify	Usually requires some key information to be selected from a given stimulus/resource.
Annotate the diagram to explain how ...	Label the diagram and provide an explanation for each identification.
Assess	Give careful consideration to all the factors or events that apply and identify which are the most important or relevant. Make a judgement on the importance of something, and come to a conclusion where needed.

Did you know...?

Negligent employees or contractors are by far the most common kind of insider, making up 62% of insider incidents, with an average per-incident cost of \$307,111.

Thinking point?

Key words

Key Vocabulary	
Discrimination	The unfair treatment of individuals (or groups) based on factors such as race, age, gender or disability.
Digital Footprint	The trail you leave when you visit different sites on the internet. You can view your footprint by visiting the browser history section of your browser.
Trademark	The recognisable design, words or symbols that have been legally registered by a company or individual for a company, product or name.
Patent	The exclusive rights granted to a person or organisation for a specific idea, design or invention.
Copyright	A legal right protecting the use of your work. There are different rules about how and when your work could be used and how long copyright is retained.
Plagiarism	Copying someone else's work or intellectual property without acknowledging them, claiming it as your own.
Peer to peer (P2P)	A way of explaining two systems that are connected and have the same rights and privileges.
Cracks	Comes from the expression 'crack the code'. This is usually a software program that removes the need to register the software to be able to use it.



What is my big question?

How does legislation govern the use of digital systems and data?



What do we mean by providing equal access to services and the benefits?



What is net neutrality and the impacts of it on an organisation?



What should be included in an Acceptable User Policy?



What is the Data Protection Act?



What is intellectual property?



How do criminals use computers?

What is Equal Access to information and services?

Equal access to information and services means that everyone should have the same access.

This includes access to:

- The Internet
- Websites
- Apps



Allowances should also be made for minority groups such as those with disabilities.

So who does have equal access?

Equal access should be given to everyone to be as inclusive as possible. Some protected groups of people are:

- **Individuals** – regardless of your background, you will be able to access all of the services provided by computers & the internet. This might be for education or finding a job for example. You will have the same advantages as others and so will have a more equal playing field to achieve based on your own merits.
- **Organisations** – businesses will also be able to thrive on their own merits. Businesses in developing countries won't be disadvantaged by not having the IT infrastructure to compete with companies operating in more-developed countries. Additionally, equal access to individuals will mean better-educated employees and the ability to hire the best person regardless of individual characteristics.
- **Society** – equal access to technology and the information they provide gives us a better educated, more knowledgeable society. This helps to fight many of the ills of society, like intolerance and discrimination. It can also help to reduce poverty and unemployment in a country.

Legal Requirements

The **Equality Act (2010)** has brought in to enforce this. This stated equal opportunities should be given to all. It helped combine over 116 pieces of legislations such as:

- Equal Pay Act (1970)
- Race Relations Act (1976)
- Disability Discrimination Act (1995)

People must be treated equally when accessing IT services and information such as apps and websites.

Guidelines and Accepted Standards

Professional guidelines & accepted standards help us to conform to legislation like the Equality Act 2010 and help us to provide equal access to all.

There are several defined guidelines for ensuring equal access and equality when using computer systems and accessing the services & information they provide.

The World Wide Web Consortium created the Web Content Accessibility Guidelines (WCAG). These provide clear guidance on ensuring websites and web apps are accessible. This defines four key principles: systems must be **Perceivable**, **Operable**, **Understandable** and **Robust**. Each principle provides several guidelines for achieving this.

Task 1

Which of the following groups of people are entitled to equal access under the equality act? Tick each of the groups that the act applies to.

Group of people	Tick if the Equality Act applies to them
People with ear piercings	
People with disabilities	
People with tattoos	
Ethnic minorities	
Pregnant women	
People who have degrees	
Elderly people	
Unemployed people	
Women / Men (Gender)	

Net Neutrality and the impact on organisations

We access the internet through Internet Service Providers (ISP) such as BT, Sky and Virgin

It is possible for ISPs to restrict data

They could restrict a video streaming service

- They could slow down access to a new app

Treating all data the same is **called net neutrality**. In the UK most ISPs have signed up to the Open Internet Code of Practice which treats data equally

Advantages for customers

- Net neutrality has many advantages for customers
- All ISPs offer the same internet service so customers choose their ISP based on:
 - Customer service
 - Speed
 - Reliability
 - Price
- Without net neutrality, services like video streaming could have higher charges



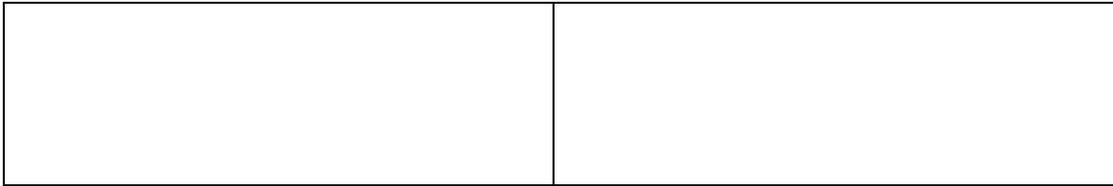
Impact on organisations

- Net neutrality treats all data the same as it passes through the network. This means that:
 - ISPs must charge heavy users of video and gaming the same as those who just browse the web
 - Small start-up organisations are free to innovate as all data is treated the same
- Internet access is often seen as a public utility like electricity or water

Task 2

Give **three** advantages and **three** disadvantages of net neutrality.

Advantages	Disadvantages



Acceptable Use Policy

- The purpose of an Acceptable Use Policy is to let everyone in an organisation know the rules related to their IT systems. It aims to:
 - Improve system security by getting people to act correctly
 - Explain what happens if people act incorrectly
- Typical sections of an AUP



Scope

- This is who the policy covers and the systems and software such as portable and personal devices

Assets

- An asset is something which is worth something and has value. Tangible assets include:
 - Hardware such as computers and printers
 - Devices such as mobiles and laptops
- Intangible assets are ones which you cannot touch. Examples include intellectual property such as:
 - Documents, video
 - Patents, brands, trademarks, processes

Behavior

- The AUP sets out the behaviours that are allowed and those that aren't. Examples include:

Acceptable behaviours	Unacceptable behaviours
Be polite in communication	Do not attempt to gain unauthorised access
Keep information secure	Do not install software – this may only be done by the IT support department
Use strong passwords	Do not click email attachments

Monitoring

The policy will explain how employees are monitored using IT. Employees may be monitored by:

- When they log in and out of computers
- What websites they visit

Sanctions

If an employee breaks the rules or breaches the AUP then sanctions are given

The AUP will state what these are

- Minor breaches could result in a manager talking to an employee
- More serious breaches could result in a formal written or verbal warning
- Very serious breaches are serious misconduct. These result in an employee losing their job and possibly legal action

Agreement

Organisations need to show that people have read the AUP and understand it

At the end of the document they will ask the employee for:

- a signature
- the date

Children may not be old enough to agree to an Acceptable Use Policy

Task 3

An Acceptable Use Policy (AUP) gives a set of rules that employers or people in an organisation must follow.

Complete the table below to say whether the rule is likely to be included in an Acceptable Use Policy. The first one has been done for you.

Rule or expectation	Likely to be included	Not likely to be included
Email use is for work purposes and not personal use	✓	
You may use social media for personal use as much as you want during work time		
Social media such as Facebook and Instagram may not be used during work hours		
You must not share your password with anyone else		

Personal devices can be connected to the network without any security permissions being set		
You may not eat or drink near computer equipment		
Monitoring will occur of your use of IT equipment		
You may use the IT equipment even if you haven't signed to say you have agreed to the AUP		

There are a number of different sections in an Acceptable Use Policy. For each of the following rules or expectations, tick which section they are likely to be part of.

	Scope	Assets	Behaviours	Monitoring	Sanctions	Agreement
We log all websites that you visit						
As you enter through the security gates you may not allow anyone else to enter on your pass						
Emails sent must always be professional and polite in tone						
Breaches of the AUP may result in dismissal and/or legal action						
Please sign to show that you have read and understood the AUP						
The AUP will cover all company items of value, including those that are electronic						
Employees may not eat or drink by a computer						
Outlines who the AUP applies to						

Social and Business Boundaries

The line between personal time and work time has been blurred in recent years with the growth of modern technologies. This has had a number of impacts on individuals.

Social Media for Business

Social media websites like Facebook have always been a place for individuals to connect and keep in touch. However, they have become perhaps more important for businesses in modern times.

Pretty much all businesses will use social media in order to advertise and communicate with their customers.

They might do this by creating a group on the social media site that customers can join and post comments to. Or this could be advertisements that appear in individuals timelines, targeted to them based on their profile information.

The use of social media for business can lead to some issues for employees. For starters, there may be pressure for you to always be available to respond to customer queries, even outside of office hours.

Also, you might find that when working on the business's social media, you may be distracted by your own social media profile.

Personal Use of Digital Systems in Work Life

With the growth of IT, the Internet and particularly remote working technologies, we've seen the line between personal and work time being blurred. We have home access to work email, access to our cloud storage and software, video conferencing for holding meetings and more.

It has reached the point where some businesses expect employees to be available in their home time, even though they're not being paid for it. This has been linked to increased work-related stress and anxiety and some countries have started to legislate against it as a result.

56% of workers say that social media distracts them from their job.

How many times do you get distracted whilst working?

Task 4

BigDog Effects is a Visual Effects company that works in the film industry. They are currently recruiting for a new 3D compositor and have told all the candidates that they will be looking at social media.

- a) What are three features they may find out about a candidate that may make them not want to employ them?

Data Protection Principles

Data protection is about looking after the personal data of people. The Data Protection Act (2018) is the law that covers this:

In 2018, the EU General Data Protection Regulation (GDPR) was added to the UK Data Protection Act.

Originally it consisted of 8 principles, but now it

Consists of 6 principles.

What personal data does the school collect of you?

What should we do and don't do with that data?

There are six reasons for lawful processing:



Lawful processing reasons:

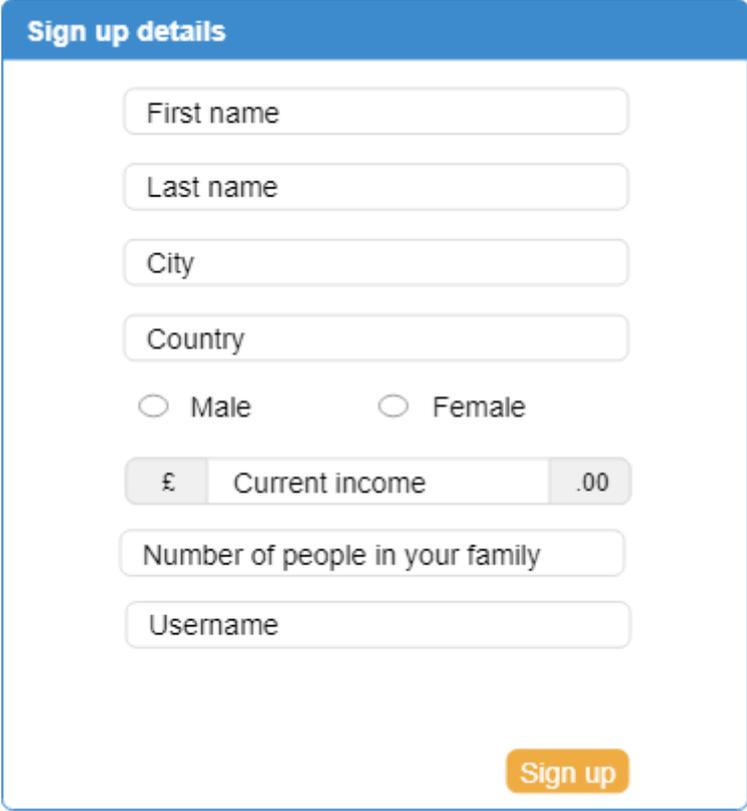
Lawful reason	Meaning	Example
Consent	A person has agreed to their data being used	A tick box to consent to receive a newsletter
Contract	Processing is needed for a contract	A contract for buying a house
Legal obligation	Processing the data is needed to meet the law	Keeping tax records
Vital interests	Processing is needed to protect someone's life	A teacher gives a collapsed student's name to a paramedic
Public task	For performing an official task	A criminal court
Legitimate interests	There is a clear benefit to the user or company	Processing customer data

Task 5

A Youtuber is well-known for their use of health products. They currently recommend health products on their website. They would like to add the ability for users to set up an account and then comment on what they think of the products.

a) What is the specific purpose used for collecting personal data in this case?

b) The following form will be used for signing up details:



The form is titled "Sign up details" and contains the following fields and options:

- First name
- Last name
- City
- Country
- Gender selection: Male Female
- Current income: £ [input field] .00
- Number of people in your family
- Username
- Sign up button

i) Which of the data items are not part of the specific purpose for collecting data?

ii) Circle or highlight the correct statements below:

People have the right to withdraw consent for data collection

You have no right to update inaccurate data

Data must not be kept longer than necessary

Fines can be 4% of company turnover

All data breaches will result in a fine or prison sentence

Advertising can be sent with the lawful reason of 'Vital interests'

Data and the use of the internet

As we use the internet and visit websites, these sites are gathering more and more data on us. This might be personal information, like our email or location, browsing information like the pages we visit and how long we spend on those pages, or transactional information like the products that we buy and our card details.

Once gathered, this data may exist on their systems for years, possibly even indefinitely. However, there have been laws passed, including GDPR, which have increased our rights to our data to help us protect our privacy.

The Right to be Forgotten

GDPR moved the 6th principle of the Data Protection Act 1998 into its own section which expanded on the rights we have to our data. One of these rights is the right to be forgotten (called the right to erasure).

This means we can make a request to organisations that hold personal information on us to delete our data. They then have one month to comply.

It's worth noting, not all organisations have to comply for all data. A criminal couldn't contact the police and tell them to delete his entire criminal record. However, for most businesses, and most data, they will have to comply.

Cookies & Other Transactional Data

A cookie is a small text file that is stored on your device when you visit a website, so the website can read that cookie when you return. This lets it remember things about you even if you don't have a user profile on that site.

GDPR protects personal data that organisations store on you, including that stored in cookies. However, there is a lot of data other than personal data that businesses will store in cookies that still affect our privacy.

To help protect our privacy, the EU implemented the Cookie Law. In the UK this was implemented in the Privacy and Electronic Communications Regulations 2003.

This law says that websites must:

- tell people the cookies are there
- explain what the cookies are doing and why
- get the person's consent to store a cookie on their device.

That's why all websites that use cookies have that popup that informs you they use cookies and ask you to agree.

Dealing with intellectual property

Intellectual property is something which is not physical but has value

- Brands and logos
- Inventions
- Product design
- Books, music, video

What do the symbols ©, ® and ™ mean?

Copyright and patents

Inventions are covered by patents

- A patent prevents anyone else using the invention for 20 years

Copyright protects books, video and music

- Copyright typically lasts 70 years after publication or an author's death
- Copyright lets an author or musician decide how their work should be used

Copyrighted materials and patents are protected by the Copyright, Designs and Patents Act (1988)

Trademarks and brands

Trademarks are names or symbols used by a company so that they cannot be used by others

- If a company registers them they are a registered trademark

Brands are made up of trademarks like company logos and product names. They also include:

- Advertising
- Business stationery
- Customer service
- A company's personality

Protecting intellectual property

Copying books, webpages, music or video is known as copyright infringement

Copyright or trademark infringement can result in:

- Fines
- Up to 10 years in prison

Using intellectual property

If you use someone's work and pretend it is your own, it is plagiarism

- You must acknowledge who originally produced the work
- This includes the author's name and year it was produced
- Use quote marks around any text copied

To make copies of images, books, music you need:

- Permission from the owner or author
- You may need to pay for a licence to use the work
- You will need to acknowledge who the author or creator was

Task 6

The table below shows three symbols used to protect intellectual property. For each symbol state what it represents and give an example of what the protection could be used for.

Symbol	Symbol meaning	Example of use
®		
™		
©		

- b) If you use a trade mark or copy someone's work without permission what are the potential punishments?

Criminal use of computer systems

Computer misuse is made illegal by the **Computer Misuse Act 1990**. This law identifies four different computer misuse offences that can be punished.

- Offence 1 – Unauthorised access to computer material.
 - E.g. the hacking of a computer system.
 - Punished by up to 2 years in prison and/or a large fine.
- Offence 2 – Unauthorised access with intent to commit or facilitate commission of further offences.
 - E.g. using the data obtained by hacking to blackmail someone.
 - Punished by up to 5 years in prison and/or a large fine.
- Offence 3 – Unauthorised acts with intent to impair, or with recklessness as to impairing, operation of a computer.
 - E.g. altering the data found when hacking a system, spreading malware which damages data, or committing a DOS attack.
 - Punished by up to 10 years in prison and/or a large fine.
- Offence 3a – Making, supplying or obtaining anything which can be used in computer misuse offences.
 - E.g. creating a malware program, such as a virus or worm, that can be used to gain access to a system and/or harm data.
 - Punished by up to 2 years in prison and/or a large fine.

The Police and Justice Act (2006) makes it illegal to

- Create malware or items that may be used in computer misuse

Committing these crimes can result in up to 10 years in prison and a fine

Task 7

For each of the following statements in the table below, tick whether they are legal or illegal.

Statement	Legal	Illegal
Using a mobile device to break into and steal a keyless car		
Police downloading the contents of a mobile phone without a warrant		
Using someone else bank information to shop online without their permission		
Sending an email with a virus attached on purpose		
British intelligence monitoring activity of a known terrorist by watching his computer		
Creating a virus with the intention of sending it		
Using someone's password to log in to a computer without their permission		

C2: Exam Questions

A doctor's surgery provides medical care for people in the local area. The surgery uses Information Technology to collect, store and process patient data.

The surgery manager will create a password policy for staff.

Changing passwords regularly is one rule they will include.

Give **two other** rules they could include in this policy.

(2)

Jim has created a logo for his business.

The logo and training plans are examples of his intellectual property.

Explain **two** ways Jim can protect his intellectual property.

(4)



State – to recall a piece of information.

Explain – identify a reason and then expand how.

Articles for Wider Reading and Flipped Learning

Subscribe and watch the YouTube clips to help you revise for BTEC Tech Award Component 3.

<https://www.youtube.com/watch?v=rp0tHYNElrE&list=PLmyUnKEeJk-6gijRiVKEfcvZhwj6LWpo&index=3>

Legal and Ethical - Know it all Ninja

Read through the topics on **Legal and Ethical**. Remember to complete the on-line quiz to gain house points!

<https://www.knowitallninja.com/>