Answers

1. Jonas is a web developer at a small web development company. His manager has asked him to make sure that a new website is acceptable for disabled users under the current law.

a) State **one** Act of Parliament which covers this area. [1]

Equality Act (2010) (This act replaces the DDA.)

b) State a set of guidelines that Jonas should use to check if the website is accessible. [1]

Website Content Accessibility Guidelines (WCAG) 1.0 / 2.0

c) Describe **two** ways in which the website could be made accessible to people with disabilities. [4]

* A consistent layout and structure should be used to make it easy to navigate.   
  This would help all users, in particular those who have sight problems.
* Avoid poor contrast of colours as users who are partially sighted may have difficulty reading the text.
* Use alternative text for images so that users who are blind can have the image’s text replacement narrated by the operating system.
* Make the site usable with a keyboard / without a mouse so that users who cannot use a mouse can navigate the website.
* Make use of standard markup / web languages / HTML so that content can be read and interpreted by screen readers / text size can be altered / screen components can be reorganised by the web browser / device.

2. Andi works for a bank. She works all day at a PC, and has developed Repetitive Strain Injury (RSI).

The bank decides that it needs to make reasonable adjustments to assist Andi with her medical condition.

a) Describe **one** adjustment the bank could make to the hardware that Andi uses. [2]

Replace keyboard with an ergonomic keyboard so that typing is more comfortable.

Provide a keyboard wrist rest / support so that typing is more comfortable.

Provide a specially adapted mouse / foot mouse so that mouse movements no longer need to be made with hands.

b) Describe **one** adjustment the bank could make to the software that Andi uses. [2]

They could activate ‘sticky keys’ so that she does not have to press two keys simultaneously for keyboard shortcuts.

They could activate ‘filter keys’ so that accidental repeated keystrokes are ignored.

c) Describe **one** further measure the bank could take that does not involve IT   
hardware or software. [2]

They could allow her a phased return to work if she has had time off so that she can slowly build up use of a keyboard slowly / explain if the pain starts to get too much.

They could give her alternative tasks to using the computer so that she doesn’t have   
to use a keyboard so much.

They could give her advice on how to take regular breaks from her work so that the condition is not aggravated.

3. Lee is a senior citizen with poor sight and hearing. He has a tablet computer which his children gave him to stay in touch with them through video chat and email. He uses the tablet to also contact organisations such as Social Services and Citizens’ Advice Bureau.

a) Describe **two** difficulties that he may face when using the tablet computer to contact   
an organisation. [4]

He may find the screen difficult to read, if the text is small / not well laid out.

He may find it difficult to accurately click/select to use a form to make an appointment when he needs one.

He may find typing on a virtual keyboard difficult due to his poor sight.

He may have difficulty hearing sound on videos due to hearing loss / deafness.

b) Describe **two** ways in which the websites Lee visits could be made more   
accessible to him. [4]

Allow text to be resized by the user so that Lee can select the size that is easiest to read.

Make sure that good contrast is used so that it is easy to differentiate text from the background.

Leave enough space between fields in a form so that Lee can select a field without accidentally selecting the wrong one.

Include an alternative method of contacting organisations / receiving information such as telephone / large print.

Make sure the site uses markup / HTML so that screen readers will work.

Use closed captions for video so that he can read what is being said.

Keep the structure and layout of pages consistent to that Lee doesn’t get confused or find it difficult to navigate.

[Total 20 marks]