Summative assessment – Answers

## Legal impact

Q1. Which of these options most accurately and comprehensively explains ‘legal impact’?

1. Using the law to help sue computer companies.
2. Using virtual juries in criminal cases.
3. The law prevents cybercrime.
4. **Technology provides opportunities to criminals. To help protect people, their data, and their work, several laws have been introduced in the UK.**

Q2. Which of these options lists the laws in the right order (oldest to newest)?

1. Copyright, Design and Patents Act; Computer Misuse Act; Data Protection Act; Freedom of Information Act
2. **Copyright, Design and Patents Act; Computer Misuse Act; Freedom of Information Act; Data Protection Act**
3. Computer Misuse Act; Freedom of Information Act; Data Protection Act; Copyright, Design and Patents Act
4. Computer Misuse Act; Data Protection Act; Copyright, Design and Patents Act; Freedom of Information Act

Q3. Which regulation introduced by the EU caused the UK to have to update its original 1998 Data Protection Act to a new version 20 years later?

1. **The General Data Protection Regulation**
2. The Freedom of Information Act
3. The Computer Misuse Act
4. The Copyright, Design and Patents Act

Q4. Which of these are data subjects?

1. Taxpayers
2. People with computers
3. **Everyone**
4. People resident in the UK

Q5. Which one of these is a responsibility that organisations have to their data subjects?

1. **Personal data must be fairly and lawfully processed.**
2. They should not charge more than is necessary for their services.
3. To keep their data forever.
4. They should never pass their data on to other organisations.

Q6. Which one of these is another responsibility that organisations have to their data subjects?

1. Personal data must be fairly and lawfully processed.
2. **Organisations must keep data subjects’ data safe.**
3. To keep their data forever.
4. They should never pass their data on to other organisations.

Q7. Which explanation of the word ‘stakeholder’ is most accurate?

1. The owner of a company.
2. It means the same as ‘data subject’.
3. A user of a specific technology.
4. **Stakeholders are groups or individuals who will be affected by, or can change, the way that the technology is used.**

Q8. Which explanation of the right to be forgotten is most accurate?

1. **The right to be forgotten (part of GDPR) means that an individual can request that an organisation erases all their personal data.**
2. The right to be forgotten (part of GDPR) means that a company has five years during which it can hold an individual’s data.
3. The right to be forgotten (part of GDPR) means that a company has to look after an individual’s data very carefully.
4. The right to be forgotten (part of GDPR) means that an individual does not have to remember to pay a company, but should be reminded.

Q9. Which of these can be protected by the Copyright, Design and Patents Act?

1. An algorithm in pseudocode
2. **An algorithm, but only once the source code has been created**
3. Only tangible things like a picture or a hard copy of a book
4. Anything

Q10. When is it legal to copy, publish, distribute, or sell copyrighted material?

1. When you are the copyright holder
2. When you have the copyright holder’s permission
3. When the copyright holder has chosen to give up their copyright
4. **Each of the above**

Q11. Which of these statements are true about open source and proprietary software?

1. Open source software is always free
2. Proprietary software is always paid for
3. **Open source software can be modified (provided it remains open source)**
4. Proprietary software is usually distributed with its source code

Q12. Which of these statements describe the purpose of the Freedom of Information Act?

1. **The Freedom of Information Act was introduced to give any member of the public the right to access any information recorded by public sector organisations.**
2. The Freedom of Information Act was introduced to give company owners the right to access any tax records held about them.
3. The Freedom of Information Act was introduced to protect public sector organisations from time-wasters.
4. The Freedom of Information Act was introduced to enable the public to find out secrets that were held by the public sector.

Q13. Which level and description most accurately fits this contravention of the Computer Misuse Act? “Falling appointments at a hair salon were traced back to ex-employee Marion Harrington continuing to access registrations on the company email account months later.”

1. **Level 1 — Unauthorised access to computer material**
2. Level 2 — Unauthorised access with intent to commit or facilitate commission of further offences
3. Level 3 — Unauthorised acts with intent to impair, or with recklessness as to impairing, operation of computer, etc
4. All of the above

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## Cultural impact

Q14. Which of these options most accurately and comprehensively explains ‘cultural impact’?

1. **The ways in which society and the ways that we interact have been impacted**
2. The impact on theatre bookings
3. The ways in which cells etc are maintained in conditions suitable for growth
4. The effect on the planet

Q15. Which of these phrases most accurately describes ‘downtime’?

1. Downtime is usually scheduled for Friday afternoons.
2. Downtime is always caused by cybercrime.
3. **Downtime describes situations where an organisation loses some or all of its IT systems for a period of time.**
4. Downtime has no associated costs for an organisation.

Q16. What is the digital divide?

1. The digital divide is the difference between people who use social media, and people who do not.
2. **The digital divide is the division that exists between people who have access to and can use technology, and people who don’t have access or cannot use it.**
3. The digital divide is the line between the screen and keyboard on a laptop.
4. The digital divide is the “/” sign.

Q17. What drives social media sites and can have an adverse effect on mental health?

1. Computers
2. Kind thoughts
3. **Algorithms**
4. Politics

## Privacy impact

Q18. The Investigatory Powers Act 2016 specifies which of the following?

1. **Phone companies and internet service providers are required to keep copies of users’ emails and browsing histories for 12 months.**
2. The police have no right to look at private browsing histories.
3. Phone companies and internet service providers are required to keep copies of users’ emails and browsing histories forever.
4. The security services have no right to look at phone records.

Q19. The following statement describes which Act? “It allows any Secretary of State to give secret directions to Ofcom or any providers of public electronic communications networks. For example, after the 9/11 attacks, the UK Security Service MI5 was able to acquire bulk communications data under the Act.”

1. **The Data Protection Act 2018**
2. The Investigatory Powers Act 2016
3. The Telecommunications Act 1984
4. The Freedom of Information Act 2000

Q20. Businesses need to register to use CCTV with which organisation?

1. The security services
2. **The Information Commissioner’s Office**
3. The police
4. The local council

## Environmental impact

Q21. Which of these options most accurately and comprehensively explains ‘environmental impact’?

1. Preventing global warming
2. Protecting the polar bears
3. **The effect that technology has on the world around us**
4. Helping choose paint colours to enhance a room

Q22. In the 2005 Reith Lectures, what did Lord Broers say about the environment and technology?

1. “Technology progression is inevitable.”
2. “Technology is harmful to the environment.”
3. “Turn the lights off.”
4. **“Technology can and should hold the key to the future of the human race.”**

Q23. Why is e-waste harmful?

1. Depletion of rare chemical elements
2. Use of non-recyclable materials
3. Harmful effect of pollution caused by disposal and recycling to the environment and health of recyclers through exposure to toxins
4. **All of the above**

Q24. ‘The cloud’ is just interconnected huge what around the world?

1. Gases
2. Individual computers
3. **Data centres**
4. Individual servers

Q25. As well as streaming videos, what other condition required by the servers uses up significant amounts of energy?

1. **Keeping them cool**
2. Keeping them on
3. Keeping them hot
4. Keeping them dry

## Ethical impact

Q26. Which of these options most accurately explains ‘ethical impact’?

1. Using technology to stick to a strict code of religious rights and wrongs
2. Using technology to do the best thing for the most people
3. Considering the laws of each country in balance
4. **Considerations about right and wrong, morality and power**

Q27. Which of the following describes one of the key ways in which AI is supposed to work?

1. Quickly
2. **Like a human**
3. In an efficient way
4. Like a computer

Q28. What are the two main ways in which AI operates?

1. **Using symbolic and machine learning**
2. Using facial recognition and symbolic learning
3. Using machine learning and large data sets
4. **Using large data sets and facial recognition**

Q29. What is the purpose of the Moral Machine project?

1. To improve the efficiency of AI
2. **To make machines more moral**
3. To make better legal decisions for driverless cars
4. To make driverless cars more efficient

Q30. Which of these options most accurately describes an ‘algorithm’?

1. **An algorithm is a set of instructions that describes how to get something done.**
2. An algorithm is the same as a program.
3. An algorithm is getting something done.
4. Algorithms are evil.

Q31. What (beginning with ‘B’) do we have to be careful of when programming algorithms, particularly in relation to human behaviour?

1. Badges
2. **Bias**
3. Binary
4. Bing

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