Cambridge IGCSE™

GLOBAL PERSPECTIVES   **0457/11**

Paper 1 Written Examination   **May/June 2022**

INSERT   **1 hour 15 minutes**

INFORMATION
- This insert contains all the sources referred to in the questions.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.
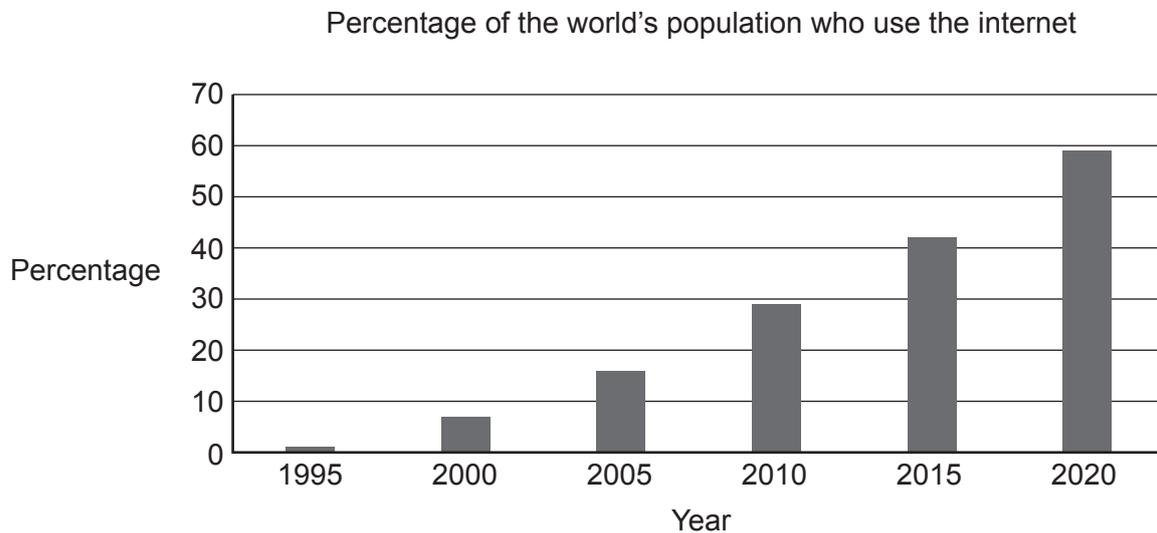
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Source 1

A main cause of globalisation is the rapid growth of digital technologies such as computing, artificial intelligence, and telecommunications. For example, about 90 per cent of the world's population now live within range of a mobile telephone network.

The trend in worldwide internet use since 1995 is shown in the following graph.

Percentage of the world's population who use the internet

Source 2: Some benefits and challenges of digital technology

Benefits		Challenges
Faster global communication		Pressure and stress from the number of messages
Greater access to information and data		Too much information
Easier to share ideas and perspectives globally		Hacking and theft of personal details and data
Greater opportunity for freedom of speech		Loss of privacy and confidentiality
Easier to network through social media		Difficult to verify the accuracy of some sources of information
Greater access to business and shopping		Loss of direct human interaction
New forms of digital entertainment		Internet crime and bullying

Source 3: Data from digital technologies improves our lives

Advances in digital technology and computing mean that we can now collect and analyse much more information and data. This helps scientific research and the development of other new technologies.

Data from our online shopping, internet searches and social media helps businesses to advertise their products.

Our health data can be used in medicine to diagnose disease, guide treatments and create new drugs. Even my doctor says this is true.

Artificial intelligence uses data to control machines and manufacture products like cars on production lines. This improves quality and makes businesses more profitable. The government are supporting this work.

Digital communication strengthens our relationships and helps us to express our opinions and be creative. This makes society more open, supports freedom of speech and protects our political rights.

Source 4: An online discussion – does collecting digital data destroy our privacy?

Kari

We must stop businesses, governments and organisations stealing our personal information and data.

Why should a business know about my use of the internet and track my online shopping? Just to send me annoying advertisements? It wastes my time!

If a government reads my emails and social media and disagrees with my views, I could be monitored and accused of things that are not true. Some political parties use data to spread fake news and false information to get your vote. This is bad for democracy.

There is also digital crime. Data can be misused, computers hacked and identities stolen. Our computers are attacked every 39 seconds according to a security magazine.

My data should only be used with my permission. All other data should be destroyed before it gets into the wrong hands.

Lars

I understand your concerns, but secure data is extremely valuable. My work for a large data storage company gives me a great understanding of the risks.

Recently, using the data from mobile phones to track people saved many lives in the virus pandemic. Medical data helped doctors to find cures for diseases and to produce vaccines. Biological engineering could reduce poverty and food shortages in developing countries and help with climate change.

Research in our local university shows that computer data can forecast extreme weather conditions, preventing disaster. Smart meters in homes and factories can save energy and help to reduce climate change. Video cameras can help control traffic and that saves fuel.

Data can make businesses more successful and profitable, giving more income to governments from taxes.

Data is so valuable that it has been called 'the new gold'. We should not waste the opportunities for a few fears about privacy.

4

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