



Anisse High School
Academic Year: 2018 / 2019
Level: 2nd Year Baccalaureate

Date: 16 / 05 / 2019
Test N° 6
Duration: 1 hour 30 minutes

Name:
Class:
Final Mark / 20

1 Nowadays it's all about data – a small, rather dull word which is profoundly changing our world. New technologies, such as voice-controlled speakers, "Internet of Things" (IoT) sensors, connected cars to fitness wearables, are vastly increasing the amount of digital data we produce. And artificial intelligence (AI), machine learning and cloud computing are transforming the way we store, analyse and apply it.



2 Yet data in the wrong hands could threaten world peace, some commentators warn. "Deepfakes" – manipulated digital videos that overlay a person's face onto another's body or change what people actually said – pose a growing threat, argues Katja Bego, data scientist at innovation foundation, Nesta. "**They** are still a relatively new technology that is evolving incredibly fast; they not only make it harder for the naked eye – or even specialists – to identify them, but have become even easier and cheaper to create, as well."

3 **She** envisages a nightmarish scenario in which a world leader could appear to declare war or spread damaging information, with potentially devastating results. If we cannot trust what we see or hear any more, is this "the end of truth as we know it?" she asks. Andrew Tsonchev, director of technology at cyber security company Darktrace Industrial, also believes the Internet's openness and lack of accountability – qualities its founders cherished – can be misused by those with malicious intent. "Ultimately, manipulating the public discourse might prove to be a greater cyber-risk than the hacking of our devices," he says.



4 Cybersecurity companies are notorious for scaring us in the drive to sell more of their products. But that doesn't mean their warnings are worthless. "A new kind of AI-powered malware will infect an organisation's system, sit undetected gathering information, adapt to its surroundings, and start a series of bespoke attacks targeted to demolish a company from the inside," predicts Jason Hart, chief technology officer, data protection, at security firm Gemalto. Greg Day from Palo Alto Networks says, "Cybersecurity will be a machine versus machine fight with humans alongside to help and adjudicate."

5 But it's not all bad news. "We predict that by mid-2020, two in three patients with any condition will be supported by AI and AI-related technologies, either as part of diagnostics, treatment, or medicine administration," says John Gikopoulos, global head of AI and automation at Infosys Consulting. Wearable devices are already giving us increasingly sophisticated data about our health and welfare. "Your Apple Watch can deduce your heart health, mood, and sleep patterns. Your genome can tell you your risk for inherited cancer and heart disease and traits that impact everything from your caffeine sensitivity to your ability to metabolise medicine."



6 While data – how it is produced, stored, analysed and applied – will be a future key issue, developing technologies, like voice control, superfast 5G mobile and connected cars, will gather pace. But these will only emphasise further how vulnerable our data is and how much harder we need to work to protect, own and value it.

I COMPREHENSION (15 POINTS) {BASE ALL YOUR ANSWERS ON THE TEXT}

A Are these statements TRUE or FALSE? JUSTIFY your answers. (3 pts)

- 1 The gadgets we use in our daily life generate more and more data.
.....
- 2 People now can easily distinguish reality from fabrication.
.....
- 3 Controlling data may soon become more important than stealing it.
.....

B Answer these questions with information from the text. (4 pts)

- 1 What are the two changes that Deepfakes consist of? (2 pts)
.....
- 2 Who can exploit the most valued qualities of the Internet?
.....
- 3 Which types of wars will we have in the future?
.....

C Complete the following sentences with information from the text. (3 pts)

- 1 People think that this is "the end of truth as we know it" due to
.....
- 2 Cybersecurity's warnings are important although
.....
- 3 AI and AI-related technologies can diagnose a disease as well as
.....

D Find in the text words which mean almost the same as the following. (2 pts)

- 1 cover (para. 2):
- 2 adapted (para. 4):

E What do the underlined words in the text refer to? (3 pts)

- 1 it (para 1):
- 2 They (para 2):
- 3 She (para 3):

III WRITING (10 POINTS)

Answer the following email.

Those are the things that I hold dear and without which I don't think I can survive a single day. I hope I've answered all your questions and satisfied your curiosity. Well, me too, I'd like to know about the most important things in your life that you can not get along without.

Take care

Jean

May 16th, 2019

Dear Jean,

A series of horizontal dotted lines for writing the response.