

EXAME FINAL NACIONAL DO ENSINO SECUNDÁRIO

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**Prova Escrita de Inglês**

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11.º Ano de Escolaridade – Continuação – bienal

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Decreto-Lei n.º 139/2012, de 5 de julho

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**Prova 550/2.ª Fase**

7 Páginas

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Duração da Prova: 120 minutos. Tolerância: 30 minutos.

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**2016**

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Utilize apenas caneta ou esferográfica de tinta azul ou preta.

É permitida a consulta de dicionários unilingues ou bilingues, sem restrições nem especificações.

Não é permitido o uso de corretor. Risque aquilo que pretende que não seja classificado.

Para cada resposta, identifique a parte e o item.

Apresente as suas respostas de forma legível.

Apresente apenas uma resposta para cada item.

Responda aos itens, preferencialmente, pela ordem em que se apresentam, dado que cada um deles se integra numa sequência que contribui para a realização da tarefa final.

Nas respostas aos itens, não forneça elementos da sua identificação pessoal, como, por exemplo, o seu nome.

As cotações dos itens encontram-se no final do enunciado da prova.

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Nos termos da lei em vigor, as provas de avaliação externa são obras protegidas pelo Código do Direito de Autor e dos Direitos Conexos. A sua divulgação não suprime os direitos previstos na lei. Assim, é proibida a utilização destas provas, além do determinado na lei ou do permitido pelo IAVE, I.P., sendo expressamente vedada a sua exploração comercial.

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Your final task is to write a comment on the positive and negative effects of technology.  
Parts **A** and **B** will provide you with input for Part **C**.

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## PART A

1. From the list below (**A** to **D**), choose which of these aspects of new technologies you consider to be the most dangerous.

Justify your choice in 20 to 30 words.

Write only the letter and the justification.

- (A) machines taking over the world
- (B) addiction
- (C) online fraud
- (D) cyber bullying

2. Read the text below and decide which answer (**1**, **2**, **3** or **4**) fits each gap.

Write only the letters and the numbers.

Some high-profile technologists claim that artificial intelligence (AI) may destroy the human race. AI has been on the \_\_\_\_\_ **a)** \_\_\_\_\_ of technology leaders for decades, and while we don't yet have fully autonomous machines helping us make \_\_\_\_\_ **b)** \_\_\_\_\_ or enabling us to carry \_\_\_\_\_ **c)** \_\_\_\_\_ very complex tasks, most companies have \_\_\_\_\_ **d)** \_\_\_\_\_ some benefit from AI. From "intelligent" networks that redirect data in the event of a hardware or network failure to advanced systems that do everything from estimating the risk of \_\_\_\_\_ **e)** \_\_\_\_\_ money to directing aircraft to appropriate gates, machines are developing an \_\_\_\_\_ **f)** \_\_\_\_\_ ability to perform tasks that were once only done by humans.

- a) 1 – line
- 2 – radar
- 3 – take
- 4 – top

- b) 1 – sense
- 2 – amends
- 3 – decisions
- 4 – way

- c) 1 – up
- 2 – out
- 3 – on
- 4 – over

- d) 1 – offered
- 2 – accepted
- 3 – included
- 4 – reaped

- e) 1 – earning
- 2 – investing
- 3 – owing
- 4 – taking

- f) 1 – ideal
- 2 – intellectual
- 3 – immediate
- 4 – increased

3. Complete the following text about artificial intelligence (AI) with a new word formed from the one given in brackets.

Write only the letters and the corresponding words.

Over the last few decades, we have relied on AI to provide us with     a)     (mass) amounts of data about everything around us. However, the     b)     (grow) of AI has also led to heated discussions about the potential risks associated with it. In fact, some scientists are concerned that “superintelligent” AI systems could     c)     (threat) the survival of the human race. It’s only natural that new technologies may trigger people’s     d)     (anxious) leading them to act     e)     (rational).

4. Read the following sentences and organise them into a coherent paragraph about artificial intelligence (AI).

Write only the sequence of letters.

- (A) Nonetheless, this raises the question of whether they should be the only ones to have a say in the matter.
- (B) As of late, there have been many serious discussions about the impact of AI on humanity.
- (C) In other words, the opinion of the ordinary citizen should not be ignored.
- (D) Many people think it doesn’t really make a difference, although I do believe we should all be heard on the issue.
- (E) However, like it or not, much of this debate only takes into account the opinions of the scientific community.

5. Complete the following sentences with a word/expression from the box below.

Use each word/expression only once. Two of them do not apply.

Write only the letters and the numbers.

- a) World leaders are expected to comment on the risks of artificial intelligence                      its alleged benefits.
- b) Many people fear the further development of artificial intelligence                      it seems to be unstoppable.
- c) In the future, machines will be able to take on greater responsibilities                      their intelligence.

(1) including	(2) in addition to	(3) owing to	(4) in case	(5) as
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## PART B

Read the following text.

### Where are we going?

Human brains will be boosted with artificial intelligence (AI) at some point after the year 2030, one of the foremost thinkers on AI has said. Ray Kurzweil, director of engineering at Google, has suggested that the brain will connect to online AI to become a “hybrid of biological and non-biological thinking”. Tiny “nanobots” made from DNA strands would connect our brains to the Internet, thus allowing us to augment our own intelligence with artificial intelligence.

In the late 2030s or early 2040s, after the power of artificial intelligence has exceeded that of our own, our hybrid thinking will be predominantly non-biological. “We’re going to gradually merge and enhance ourselves. That is the nature of being human – we transcend our limitations.” He suggested that we would be able to back up the information in our brains and save it online. Mr Kurzweil, the author of *The Age of Spiritual Machines*, has been described by Bill Gates, the former boss of Microsoft, as “the best person I know at predicting the future of artificial intelligence”. Mr Kurzweil believes that artificial intelligence will surpass human intelligence in 2029 at a point known as the “singularity”. However, he also believes that a superintelligent being would be subservient to the needs of humans because it would have been created by man.

In the past year, a number of scientific figures, including Stephen Hawking, have discussed the perils of allowing AI research to continue without limiting what computers and robots will be able to do. Professor Hawking said in December that the development of full artificial intelligence could spell the end of the human race. Nick Bostrom, a professor of philosophy at the University of Oxford, wrote in *Superintelligence: Paths, Dangers, Strategies* that the first artificially superintelligent being would probably wipe out the human race.

Mr Kurzweil, however, has said that although humans should be aware of the potential dangers of AI, there is a moral imperative to keep developing it. “Technology is a double-edged sword,” he told the *Exponential Finance* conference in New York. “Fire kept us warm and cooked our food but also burnt down our houses. Every technology has had its promise and peril.”

He went on to say that AI was “not an alien invasion of these intelligent machines to displace us. We will use them to make ourselves smarter”. He suggested that search engines would soon know us very well. “They’ll watch everything we’re reading, writing, saying and hearing. They’ll be like a search engine assistant,” he said, which would “answer your questions before you ask them, or even before you realise you have a question”. He also predicted that people would switch from desktop to portable computers and that computer displays would be built into spectacles, which has already happened with Google Glass. However, he had also said that self-driving cars would be on the road by 2009. “If I had said 2015, I think it would’ve been correct,” he commented, “so even the predictions that were wrong were directionally correct.”

*The Times*, June 5, 2015 (abridged and adapted)

1. Match three of the following headings to paragraphs 1, 3 and 5. Two of the headings do not apply.

Write only the letters and the paragraph numbers.

- a) Plugging in
- b) A singular example of creativity
- c) Experts warn about AI
- d) The ability to anticipate innovation
- e) The end of human expertise

2. Choose the correct option (A, B, C or D) to complete the sentences.

Write only the numbers and the letters.

2.1. The main issue discussed in the text is

- (A) the implications of the interdependence of man and machine.
- (B) the risk artificial intelligence poses to mankind.
- (C) the way we will become virtual beings.
- (D) the process by which “nanobots” will take over our brains.

2.2. In the text, the writer

- (A) predicts what will happen to AI.
- (B) makes a case in favour of AI.
- (C) highlights the role scientists play in the creation of AI.
- (D) presents predictions scientists have made about AI.

2.3. In paragraph 3, Professor Hawking

- (A) predicts the first superintelligent being will destroy mankind.
- (B) expresses his deep concern about the boundaries of AI.
- (C) shows he is worried about what robots can already do.
- (D) claims that AI scientists are being irresponsible.

2.4. In paragraph 4, it is suggested that

- (A) technology creates chaos.
- (B) progress is at stake.
- (C) AI is extremely dangerous.
- (D) evolution is inevitable.

3. Identify what the following words refer to.

Write only the letters and the corresponding answers.

- a) “That” (l. 8)
- b) “it” (l. 14)
- c) “which” (l. 33)

4. In the paragraphs given in brackets, identify the word that can be used to replace the underlined words/ expressions in the sentences below.

Write only the letters and the corresponding words.

- a) The potential dangers of AI have been studied by some of the leading scientists of the day. (paragraph 1)
- b) The human being is on the road to becoming a fusion of living and synthetic material. (paragraph 2)
- c) Many advances have been made towards the creation of inorganic beings. (paragraph 2)
- d) For many people, computers should remain servile. (paragraph 2)
- e) The workplace is changing. Sooner or later machines will force humans out. (paragraph 5)

5. Complete the sentences according to the text. You must use between two and five words and include the word given in brackets.

Do not change the word given.

Write only the letters and the corresponding answers.

- a) Bill Gates stated that Ray Kurzweil is \_\_\_\_\_ scientist that he can predict the future of AI. (SUCH)
- b) According to Kurzweil's previous predictions, self-driving cars \_\_\_\_\_ on the road by 2009. (SUPPOSED)

6. Explain the meaning of the following expressions in the text.

Write between 10 and 20 words for each answer.

Write only the letters and the corresponding answers.

- a) "self-driving cars" (I. 34)
- b) "even the predictions that were wrong were directionally correct" (II. 35-36)

## PART C

*The Times* wants to know what young people think about technology. It is going to publish the best comments on Mr Kurzweil's statement "Technology is a double-edged sword".

Write an opinion text commenting on this statement.

Write between 150 and 220 words.

You may use the input provided by Parts **A** and **B** as long as you use your own words.

**Do not sign your text.**

**FIM**

## COTAÇÕES

Parte	Item						Cotação (em pontos)
	Cotação (em pontos)						
A	1.	2.	3.	4.	5.		
	10	10	10	5	5		40
B	1.	2.	3.	4.	5.	6.	
	5	20	15	15	10	15	80
C	Item único						80
TOTAL							200

**Prova 550**

2.<sup>a</sup> Fase