



# PROVA 1 - LÍNGUA INGLESA

## LEIA ATENTAMENTE AS INSTRUÇÕES ABAIXO

1. Você recebeu do fiscal o seguinte material:
  - (a) Este caderno, com o enunciado das 20 (vinte) questões objetivas, sem repetições ou falhas.
  - (b) O CARTÃO-RESPOSTA destinado às respostas das questões objetivas formuladas nas provas.
2. Todas as questões valem 5 (cinco) pontos. Assim, a prova de Língua Inglesa vale 100 (cem) pontos.
3. Após a conferência, o candidato deverá assinar, no espaço próprio do CARTÃO-RESPOSTA, a caneta esferográfica na cor azul ou preta.
4. Para cada uma das questões objetivas são apresentadas 4 alternativas classificadas com as letras (a), (b), (c), (d); só uma responde adequadamente ao quesito proposto. Você só deve assinalar UMA RESPOSTA. A marcação em mais de uma alternativa anula a questão, MESMO QUE UMA DAS RESPOSTAS ESTEJA CORRETA.
5. SERÁ ELIMINADO do Processo Seletivo Público o candidato que:
  - (a) Se utilizar, durante a realização das provas, de máquinas e/ou relógios de calcular, bem como de rádios gravadores, headphones, telefones celulares ou fontes de consulta de qualquer espécie;
  - (b) Se ausentar da sala em que se realizam as provas levando consigo o CADERNO DE QUESTÕES e/ou o CARTÃO-RESPOSTA.
  - (c) Não assinar a LISTA DE PRESENÇA e/ou o CARTÃO-RESPOSTA.

Obs.: O candidato só poderá se ausentar do recinto das provas após 1 (uma) hora contada a partir do efetivo início das mesmas. Por motivos de segurança, o candidato só poderá levar o CADERNO DE QUESTÕES, depois de 2 (duas) horas contadas a partir de efetivo início da prova.
6. Reserve os 30 (trinta) minutos finais para marcar seu CARTÃO-RESPOSTA.
7. Quando terminar, entregue ao fiscal o CARTÃO-RESPOSTA e ASSINE A LISTA DE PRESENÇA.
8. O TEMPO DISPONÍVEL PARA ESTA PROVA DE QUESTÕES OBJETIVAS É DE 2h 30min (DUAS HORAS E TRINTA MINUTOS), incluído o tempo para a marcação do seu CARTÃO-RESPOSTA.

## Part 1

Answer questions 1-10 based on the text below.

### A Software Shrink: Apps and Wearables Could Usher In an Era of Digital Psychiatry

**Zach has been having trouble** at work, and when he comes home he's exhausted, yet he struggles to sleep. Everything seems difficult, even walking—he feels like he's made of lead. He knows something is wrong and probably should call the doctor, but that just seems like too much trouble. Maybe next week.

5           Meanwhile, software on his phone has detected changes in Zach, including subtle differences in the language he uses, decreased activity levels, worsening sleep, and cutbacks in social activities. Unlike Zach, the software acts quickly, pushing him to answer a customized set of questions. Since he doesn't have to get out of bed to do so, he doesn't mind.

10           Zach's symptoms and responses suggest that he may be clinically depressed. The app offers to set up a video call with a psychiatrist, *who* confirms the diagnosis. Based on her expertise, Zach's answers to the survey questions, and sensor data that suggests an unusual type of depression, the psychiatrist devises a treatment plan that includes medication, video therapy sessions, exercise, and regular check-ins with her. The app continues to monitor Zach's behavior and helps keep his treatment on track by guiding him through exercise routines, noting  
15           whether or not he's taking his medication, and reminding \_\_\_\_\_ about upcoming appointments.

20           While Zach isn't a real person, everything mentioned in this scenario is *feasible* today and will likely become increasingly routine around the world in only a few years' time. My prediction may come as a surprise to many in the health-care profession, for over the years there have been claims that mental health patients wouldn't want to use technology to treat their conditions, unlike, say, \_\_\_\_\_ with asthma or heart disease. Some have also insisted that to be effective, all assessment and treatment must be done face to face, and that technology might frighten patients or worsen their paranoia.

25           However, recent research results from a number of prestigious institutions, including Harvard, the National Alliance on Mental Illness, King's College London, and the Black Dog Institute, in Australia, \_\_\_\_\_ these claims. Studies show that psychiatric patients, even those with severe illnesses like schizophrenia, can successfully manage their conditions with smartphones, computers, and wearable sensors. And these tools are just the beginning. Within a few years, a new generation of technologies promises to revolutionize the practice of psychiatry.

30



**01. What does the phrasal verb *usher in* mean in the title?**

- a) To change something by force.
- b) To make something realize it needs to change.
- c) To cause important changes to start happening.
- d) To suggest new changes to something.

**02. In “Zach has been having trouble at work”, the verb tense used means that:**

- a) Zach no longer has trouble at work.
- b) Zach had trouble in the past, long ago.
- c) Zach had trouble in the recent past.
- d) Zach still has trouble nowadays.

**03. In “Since he doesn’t have to get out of bed to do so”, what does “so” refer to?**

- a) Answer the questions the psychiatrist suggested.
- b) Answer the questions the app chose for him.
- c) Answer the questions he choose in the app.
- d) Answer the questions randomly.

**04. The pronoun *who* (line 10) can be replaced by:**

- a) that
- b) which
- c) whose
- d) none of the above

**05. Which pronoun best completes the gap in line 15:**

- a) him
- b) her
- c) them
- d) its

**06. We learn, in line 16, that Zach isn’t a real person, but what does the article say about his example?**

- a) That it was just an example and not something that will happen in the near future.
- b) That although it was just an example, the situation could have been real since we already have the technology for that.
- c) That his example is just something for the distant future and not viable now.
- d) That his example is only a far-fetched dream.

**07. Which of the words below best replaces the word *feasible* (line 16)?**

- a) inconvenient
- b) difficult
- c) doable
- d) believable

**08. Which word best complete the gap in line 20?**

- a) These
- b) Those
- c) Them
- d) They

**09. Which verb best completes the gap in line 25?**

- a) refute
- b) confirm
- c) refer to
- d) believe in

**10. How do the “prestigious institutions” mentioned in the article feel about digital psychiatry?**

- a) Psychiatry has to be done in the presence of the doctor and therefore digital psychiatry is not viable.
- b) The claims against digital psychiatry are irrefutable.
- c) They believe it is viable because patients can use the apps to monitor themselves successfully.
- d) Psychiatric patients cannot be trusted with their own treatments.

## Part 2

*For questions 11 to 20, choose from the words listed below the ones which best fit the spaces of the text AI to Ensure Fewer UFOs, A, B, C or D.*

- |                       |                 |                |                 |           |
|-----------------------|-----------------|----------------|-----------------|-----------|
| 11. a) can            | b) be able to   | c) must        | d) have         | (line 02) |
| 12. a) keep pace with | b) get close to | c) rely on     | d) fall back on | (line 06) |
| 13. a) will buy       | b) bought       | c) have bought | d) had bought   | (line 08) |
| 14. a) for            | b) such as      | c) as well as  | d) on and on    | (line 11) |
| 15. a) before         | b) behind       | c) between     | d) below        | (line 16) |
| 16. a) in             | b) at           | c) on          | d) with         | (line 18) |
| 17. a) so that        | b) because      | c) due to      | d) for          | (line 19) |
| 18. a) in             | b) at           | c) on          | d) with         | (line 23) |
| 19. a) wins           | b) will win     | c) has won     | d) had won      | (line 27) |
| 20. a) sent           | b) hired        | c) living      | d) deployed     | (line 28) |

## AI to Ensure Fewer UFOs

1            Is it a bird? A plane? Or is it a remotely operated [quadrotor](#) conducting surveillance or  
2 preparing to drop a deadly payload? Human observers won't (11) \_\_\_\_\_ guess—or keep their  
3 eyes glued to computer monitors—now that there's superhuman [artificial intelligence](#) capable of  
4 distinguishing [drones](#) from those other flying objects. Automated watchfulness, thanks to  
5 machine learning, has given police and other agencies tasked with maintaining security an  
6 important countermeasure to help them (12) \_\_\_\_\_ swarms of new drones taking to the skies.

7            The security challenge has only grown over the past few years: Millions of people (13)  
8 \_\_\_\_\_ consumer drones and sometimes flown them into off-limits areas where they pose a  
9 hazard to crowds on the ground or larger aircraft in the sky. Off-the-shelf drones have also  
10 become affordable and dangerous weapons for the Islamic State and other militant groups in  
11 war-torn regions (14) \_\_\_\_\_ Iraq and Syria.

12           The need to track and possibly take down these flying intruders has spawned an  
13 antidrone market [projected to be worth close to US \\$2 billion by the mid-2020s](#). The lion's  
14 share of that haul will likely go to companies that can best leverage the power of machine-  
15 learning AI based on neural networks.

16           But much of the antidrone industry still lags (15) \_\_\_\_\_ the rest of the tech sector in  
17 making effective use of machine learning AI, says David Romero, founder and managing  
18 partner of [Black Sage Technologies](#), based (16) \_\_\_\_\_ Boise, Idaho. "With machine learning,  
19 90 percent of the work is figuring out how to make it so simple (17) \_\_\_\_\_ the customer  
20 doesn't have to know how machine learning works," says Romero. "Many companies do that  
21 well, but not in the defense community."

22           He and Ross Lam, his Black Sage cofounder, are poised to take advantage of this  
23 opening for the upstarts looking to take (18) \_\_\_\_\_ the defense industry's giants. They initially  
24 collaborated on a project that trained machine-learning algorithms to automatically detect deer  
25 on highways based on radar and infrared camera data. Eventually, they realized that the same  
26 approach could help spot drones and other unidentified flying objects.

27           Since the self-funded startup's launch in 2015, it (19) \_\_\_\_\_ multiple contracts from  
28 the United States government—including for U.S. military forces (20) \_\_\_\_\_ in Iraq and  
29 Afghanistan—and from U.S. allies.



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