

סוג הבחינה: מבחן מתכונת
מועד הבחינה: מתכונת 5
מספר השאלון: 016582
קובץ: שאלון

GuyAI

מבית GOOL בגריות

אנגלית

מודול G - 5 יחידות לימוד

הוראות

- א. משך הבחינה: שתיים
- ב. מבנה השאלון ומפתח ההערכה: פרק ראשון - הבנת הנקרא - 60 נקודות; פרק שני - מטלת כתיבה - 40 נקודות; סך הכול - 100 נקודות.
- ג. חומר עזר מותר בשימוש: אחד המילונים או אחת המילוניות מן הרשימה שבאתר הפיקוח על הוראת האנגלית ובאתר של אגף הבחינות במשרד החינוך. נבחנים "עולים חדשים" רשאים להשתמש גם במילון דו-לשוני: אנגלי-שפת אימם / שפת אימם-אנגלי. השימוש במילון אחר טעון אישור של הפיקוח על הוראת האנגלית.
- ד. הוראות מיוחדות: יש לכתוב את כל התשובות באנגלית ובעט בלבד. על כתיב שגוי יופחתו נקודות מן הציון.
- בקובץ זה: השאלון - הטקסטים והשאלות, עם מקום לתשובות. התשובות וההסברים - בקבצים "תשובות" ו"פתרון מלא".

בהצלחה!

PART I: WRITTEN RECEPTION (60 points)

(ACCESS TO INFORMATION FROM WRITTEN TEXTS)

Read the article below and then answer questions 1–8.

SMART MACHINES ON THE FARM

- I** 1 Who will plant and pick the crops in the years ahead? On farms all over the world, there are simply not enough workers, and experts at the Food and Agriculture Organization (FAO) warn that the gap between the jobs available and the people willing to fill them will keep growing. There is, however, some good news. Smart machines guided by artificial intelligence (AI) could
- 5 help farmers produce as much food as before with far fewer hands, and some of these machines are already at work in the fields.
- II** The story of computers on farms goes back about 30 years. In the 1990s, a handful of large farms in Australia fitted their tractors with satellite navigation so that the machines could follow straight lines across huge fields. The early systems were so costly that only the richest farmers
- 10 could afford them. As prices dropped, the technology spread, and the tractors gradually learned to steer themselves. On most big farms in developed countries, self-driving tractors have now replaced tractors driven by people, and the fields are often plowed and planted through the night.
- III** The maps that these tractors make as they cross a field have turned out to be useful in another way. Researchers recently combined them with millions of plant photos to train AI
- 15 programs to tell young vegetables apart from weeds. Small robots that run on this AI now travel along the rows and burn every weed they spot with a narrow laser beam, so no chemicals are needed. "It takes a fraction of a second," explains agricultural writer Daniel Morris. "Still, farmers walk through the rows afterwards to check that nothing has been missed."
- IV** Another use of AI on farms is in drones, small flying machines with cameras. Many farmers
- 20 already send drones up for simple jobs, such as counting the fruit trees in an orchard. More advanced drones can be programmed with information about a particular field. Each morning, they fly the same route and compare the new pictures with earlier ones, noticing changes that a person might easily miss, such as leaves turning yellow. When a drone finds signs of disease, a warning appears on the farmer's phone within minutes, giving the farmer time to
- 25 treat the plants before the disease spreads.
- V** What do farmers think of all this? According to several surveys, most of them are happy to hand simple jobs over to drones, and a large majority have a positive view of weeding robots. Most of those who have tried advanced drones describe the warnings as useful. On one question, though, almost all farmers agree: the decision about when the crops are ready to be picked
- 30 must be made by people, not by machines.
- VI** Does this mean that farms will one day run without people? Morris doubts it. "Ripe peaches and berries are so soft that a machine can easily damage them," he points out. "And when a sudden storm or a new pest appears, only an experienced farmer knows what to do." Even so, he expects

AI to change farming deeply. "Machines will take over many of the hardest jobs in the fields.

35 Farmers will then be able to grow more food and spend more time planning for the future."

QUESTIONS

Answer questions 1–8 in English according to the article. In questions 1 and 6, circle the number of the correct answer. In the other questions, follow the instructions.

1. What are we told in paragraph I?

- i) Why many people no longer want to work on farms.
- ii) Why the FAO expects food prices to rise.
- iii) Why a shortage of workers might not lead to less food.
- iv) Why farmers might not trust smart machines.

(6 points)

COMPLETE THE SENTENCE.

2. According to paragraph II, what change has taken place on many large farms?

They no longer _____ .

(8 points)

PUT A ✓ BY THE TWO CORRECT ANSWERS.

3. What do we learn from paragraph III?

- i) What the tractors' field maps have been used for.
- ii) How farmers learn to operate weeding robots.
- iii) Why weeds are difficult for farmers to find.
- iv) Why weeding robots often miss weeds.
- v) How the robots get rid of weeds.
- vi) Why the robots can remove weeds so quickly.

(2x5=10 points)

COMPLETE THE SENTENCE.

4. What simple job might a farm drone do? Base your answer on lines 19–21.

It might _____ .

(7 points)

COMPLETE THE SENTENCE.

- 5.** What might a farmer do after receiving a warning from a drone?

Base your answer on lines 24–25.

The farmer might _____ .

(8 points)

- 6.** In the surveys mentioned in paragraph V, what did most farmers say about the use of AI on their farms?

They said that (–).

- i) drones are too expensive for small farms
- ii) the decision about when to pick crops should stay with people
- iii) AI has helped them earn more money
- iv) weeding robots are better than chemicals

(6 points)

COMPLETE THE ANSWER.

- 7.** What does Morris explain in lines 31–33?

Why AI _____ .

(8 points)

COMPLETE THE SENTENCE.

- 8.** According to Morris, what will be ONE benefit of increased use of AI on farms? (paragraph VI)

Farmers will _____ .

(7 points)

PART II: WRITTEN PRODUCTION (40 points)

(WRITTEN PRESENTATION)

Write 120–140 words in English on the following topic.

What qualities do you think are most important in a good friend?

Choose one or two qualities and explain your choice. You may relate to your own experience and/or that of others.

כל הבגרויות באנגלית עם פתרונות מלאים: www.guyai.co.il/bagrut/english