GuyAI
מבית GOOL בגרויות

סוג הבחינה: בחינת גמר ממלכתית
מועד הבחינה: קיץ 2024 מועד ב'
סמל השאלון: 99911
שם התלמיד/ה: _____

אנגלית

מכינה טכנולוגית · מכינה טכנולוגית

הוראות

א. משך הבחינה: שלוש שעות.

ב. מבנה השאלון ומפתח ההערכה: בשאלון זה ארבעה חלקים: חלק א' - הבנת הנקרא - 35 נקודות חלק ב' - הבנת הנקרא - 25 נקודות חלק ג' - אוצר מילים וכתיבת משפטים - 24 נקודות חלק ד' - הוראות - 16 נקודות

ג. חומר עזר מותר בשימוש: מילון דו-לשוני (אנגלית - שפת אם) רגיל או אלקטרוני. המילון יהיה ללא חומר האסור בשימוש או אפשרות לגלישה באינטרנט. חל איסור להשתמש בתרגומון מכל סוג שהוא (לדוגמא: קוויקשנרי).

ד. הוראות מיוחדות: הוראות מיוחדות: 1. יש למלא את כל הפרטים הנדרשים בדף המקדים המצורף לשאלון זה. 2. תשובות יש לכתוב רק בתוך שאלון זה ולא במחברת בחינה, גם אם ניתנה לכם. הוראות כלליות: 1. יש לקרוא בעיון את ההנחיות ואת השאלות בבחינה, ולוודא שהן מובנות לכם. ניתן לענות על השאלות לפי הסדר הרצוי לכם. 2. יש לכתוב את התשובות בעט כחול או שחור בלבד ובכתב יד ברור. 3. אין לסמן או להדגיש תשובות במרקר. 4. אין לתלוש דפים משאלון הבחינה.

השאלות בשאלון זה מנוסחות בלשון רבים, אף על פי כן על כל תלמידה וכל תלמיד להשיב עליהן באופן אישי.

בהצלחה!

השאלות

1. Part I – READING COMPREHENSION (A)

.Read the following passage carefully and answer the questions in English (35 points)

קראו את הקטע שלפניכם וענו על השאלות שאחריו באנגלית.

Smart Technologies for Disabled People

I

There are more than 2.5 billion disabled people in the world. Some of them cannot do daily tasks without help. In addition, many disabled people cannot get jobs because of their disability. Today there are AI (artificial intelligence)* programs that help disabled people. Some AI programs use computer vision to "see" the world. These programs can help blind students or workers by reading texts aloud from books or screens. In addition, these programs can recognize other people's faces and emotions and describe them to the .blind person. This can be useful for social interactions

*AI (artificial intelligence) - בינה מלאכותית

II

People with speech disabilities can benefit from AI voice programs. For example, disabled people can type what **they** want to say, and a voice program can read it aloud. Some people with brain injuries can talk, but their speech is unclear. A program called Parrotron can help. It studies the disabled person's way of talking by listening to how he or she speaks for a period of time. As a result, it knows how to translate the person's .unclear speech into clear speech that other people can easily understand

III

AI can also help people with hearing disabilities. GnoSys is an application that instantly translates sign language* into text or speech. Another AI tool can do lip-reading. The system learned how to understand speech from lip movements by watching over 5000 hours of TV programs and analyzing 118,000 sentences. People with hearing disabilities can use the system to understand what people around them are saying, especially in challenging situations such as busy social events. The system reads people's lips and tells .the disabled person what they are saying

*sign language - שפת הסימנים

IV

Moreover, people who cannot walk may benefit from living in a smart house. In a smart house, the disabled person can activate lights, appliances, and thermostats by just saying a word or two. With the help of such technologies, disabled people can become more .independent at home, earn more money, and enjoy a better social life

Adapted from: SmartClick

.Answer the following questions in English (35 points)

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ענו על השאלות הבאות באנגלית.

A. List two difficulties that disabled people have: (paragraph I)

1. ____

2. ____

(4 נקודות)

B. How can AI with computer vision help blind people study? (paragraph I)

(3 נקודות)

C. How can AI with computer vision help blind people in social situations? (paragraph I)

(4 נקודות)

D. What does the word **they** in line 8 refer to?

(2 נקודות)

E. What is the main idea of paragraph II? Circle the correct answer:

a. People with brain injuries need help so they can speak more clearly.

b. People with speech disabilities can use AI to communicate better.

c. AI programs can listen and learn all about the way a person speaks.

d. Typing what they want to say can help people who cannot speak.

(4 נקודות)

F. How does the Parrotron program know how to translate a person's unclear speech into clear speech? (paragraph II)

(3 נקודות)

G. Check (✓) the TWO statements that are true: (paragraph III)

1. ___ GnoSys helps people understand the sign language used by hearing-disabled people.

2. ___ The translation of sign language into speech or text by the GnoSys app is not immediate.

3. ___ The AI that reads lips is not helpful for hearing-disabled people in busy social situations.

4. ___ An AI tool learned lip-reading by watching TV programs and analyzing sentences.

(8 נקודות)

H. Complete the sentence: (paragraph IV)

_____ Smart home technology may be very useful for people who are not able to.

(3 נקודות)

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I. Mark the following statement True or False: (paragraph IV) (1+3 points)

(a) Circle the correct answer:

Devices in smart homes are operated through speech. TRUE / FALSE

(b) Support your answer from the text:

(4 נקודות)

2. Part II – READING COMPREHENSION (B)

Read the following passage carefully and answer in ENGLISH (25 points).

קראו את הקטע שלפניכם וענו על השאלות שאחריו באנגלית.

Flooding in a Warm World

I

As the planet becomes warmer, there is more rain and higher risk of flooding. Since 1880, the planet has become about 1°C warmer. By the end of the 21st century, the number of places in the USA at risk of flooding will grow by 50%. In Europe, around 170,000 people are at risk yearly because of floods, and this could increase to 480,000 by the end of the century.

II

There are ways to reduce the risks of flooding. The city of Milan, Italy, built a large system of canals* which drains a lot of the rain that falls in the city, and the region of Navarre, Spain, developed an early warning system that allows residents in risky areas to escape before a flood arrives.

*canals - תעלות

III

A good way to reduce flooding from rivers is to plant bamboo near the river. The roots of the bamboo hold the soil near the river in place, so the river does not flood. Bamboo plants grow big enough to reduce flooding very soon after they are planted. This is because bamboo grows 4 cm every hour. We must continue looking for creative ways to reduce flooding in a warming world.

Adapted from: NRDC

Answer the following questions in English (25 points).

קראו את הקטע שלפניכם וענו על השאלות שאחריו באנגלית.

A. Complete the following sentence: (paragraph I)

In _____, the planet was 1°C cooler than it is today.

(3 נקודות)

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B. What does 50% represent? Circle the correct answer: (paragraph I)

a. The expected decrease in rainfall by the end of the 21st century.

b. The increase in the number of people who are at risk from floods.

c. The expected increase in places in the US that are at risk of flooding.

d. The decrease in temperatures that has happened over the past century.

(4 נקודות)

C. How many people in Europe will be at risk because of floods by the end of the 21st century? (paragraph I)

(3 נקודות)

D. Fill in the following table about places that are taking action to reduce risks from flooding: (paragraph II)

	Place	The action	How the action can help
1.	___	built a large system of canals	___
2.	___	___	allows residents in risky areas to escape before a flood arrives

(8 נקודות)

E. Which part of the bamboo plant makes the soil stronger? (paragraph III)

(3 נקודות)

F. Mark the following statement True or False: (paragraph III) (1+3 points)

(a) Circle the correct answer:

It takes a long time before new bamboo plants can start reducing floods. TRUE / FALSE

(b) Support your answer from the text:

(4 נקודות)

3. Part III- Vocabulary and Unscrambling Sentences

Total Points: (24 points)

Part A (18 points)

In each question match three items 1-6 to the definitions on the right.

Write the number of the item next to its definition (3 points each).

בכל שאלה התאימו שלושה פריטים 1-6 להגדרות מימין.

כתבו את מספר הפריט ליד ההגדרה שלו (3 נק' לכל אחד).

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1. 1. similarity

2. expensive

3. plenty

4. unusual

5. century

6. speed

___ how fast something moves or works

___ a period of one hundred years

___ costs a lot of money

(9 נקודות)

2. 1. search

2. protect

3. efficient

4. escape

5. square

6. mountain

___ to break free or run away

___ to make sure something or someone is safe

___ to look for something

(9 נקודות)

4. Part III- Vocabulary and Unscrambling Sentences

Part B (6 points)

Put the words in the correct order and copy them onto the line below. Pay attention to capitalization and punctuation. (2 points each)

סדרו את המילים בסדר הנכון והעתיקו אותן לשורה למטה. שימו לב לאותיות גדולות ולסימני פסוק (2 נק' לכל אחת).

1. harms / environment. / Plastic / the natural

(2 נקודות)

2. small / of / Parents / babies / in the morning. / are tired

(2 נקודות)

3. under / use / the age of two / screens. / should not / Children

(2 נקודות)

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.5 Part IV – INSTRUCTIONS

.Read the questions below and match them to the answers that follow (16 points)

קראו את השאלות שמופיעות והתאימו אותן לתשובות.

How to Maintain Your Computer

:Answers

.a. Wipe it lightly once a week and clean it more carefully once a month

.b. Make sure to stop charging it when it reaches 100%

.c. Because it can add 5-8 years to your computer's life

d. It is probably because there is dirt stuck in the space around the keys.\ne. Back them up .on a cloud service, so if something happens to your computer, they are safe

.f. Your computer may get stuck if it overheats, or it may even stop working

.g. Uninstall programs that you don't use, and the computer will work faster

.h. Do not use strong chemicals when cleaning it and do not put pressure on it

.1 ?Why is computer maintenance important

(2 נקודות)

.2 ?Why is it hard to press some of the keys on my keyboard

(2 נקודות)

.3 ?How often should I clean my computer keyboard

(2 נקודות)

.4 ?What should I avoid doing with when I clean my computer screen

(2 נקודות)

.5 ?How can I make the battery of my computer last longer

(2 נקודות)

.6 ?My computer is working slowly. What should I do

(2 נקודות)

.7 ?What can happen if my computer becomes too hot

(2 נקודות)

.8 ?What is the best way to make sure I don't lose any files or photos

(2 נקודות)

כל מבחני מה"ט עם פתרונות מלאים: www.guyai.co.il/mahat