PART I: ACCESS TO INFORMATION FROM WRITTEN TEXTS (70 points)

Read the interview below and then answer questions 1-8.

WHAT HAPPENED TO THE PERSONAL ROBOT?

In the last 100 years we have made amazing technological advances. But so far we haven't produced one invention that would make life a lot easier for us all – a personal robot to help around the house. As robotics engineer Dan Pinter told our reporter, making robots for home use is a huge challenge.

How close are we to having a domestic robot?

Well, we're working on it. At the moment, most robots can only perform one particular task, and they can't do the kinds of things people do routinely around the home. For instance, you and I have no problem getting a glass of water without dropping it or spilling anything. It's extremely difficult to design a robot that can do something like this, and even harder to design one that can handle all sorts of objects. However, we are getting closer.

What else are robotics engineers working on these days?

Improving robotic vision. We humans use both our eyes and our brain to make sense of what we're looking at. Robots can't do anything like that. Some can recognize a few shapes and colors, but they can't understand, for example, if the square object in front of them is a microwave oven or a cardboard box. So it will be a long time before you can sit back and let your robot cook dinner for you.

So do you think we'll ever have a personal robot?

Well, to be really useful, a personal robot will have to be able to function well in a place like a home, where things are left lying around and children run in and out. It will also have to deal with many different tasks. That hasn't happened yet, but there's been real progress recently. Andrew Ng from Stanford University has developed a robot that picks up cups and opens doors when given simple voice commands. He believes that soon his robot will be able to clean our houses, put our clothes away, and empty the garbage. And that's what it's all about, isn't it? A robot doing the jobs we hate.

(Adapted from "What became of the personal robot?" *BBC News*, 16 December 2008)

/המשך בעמוד 3/

LIVEWORKSHEETS

QUESTIONS (70 points)

Answer questions **1-8** in English, according to the interview. In questions 1, 4, 5 and 6, circle the number of the correct answer. In the other questions, follow the instructions.

1. What do we learn about personal robots from lines 1-4?

(i) When they were invented.

(ii) What they will be used for.

(iii) Why they are hard to make.

(iv) What kind of technology they use.

(8 points)

2. COMPLETE THE SENTENCE.

According to lines 5-11, engineers are trying to design a robot that .....

..... .

(8 points)

3. According to lines 12-17, what can robots already do today?

ANSWER: ..... .

(7 points)

4. What are we told about robotic vision? (lines 12-17)

(i) When it was developed.

(ii) Why it is so good.

(iii) How it is different from human vision.

(iv) What engineers are doing to improve it.

(8 points)

5. Today most robots cannot function well in the home because (–). (lines 18-25)

(i) too many people tell them what to do

(ii) things are always changing

(iii) they can't move quickly enough

(iv) the doors aren't always left open

(8 points)

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6. In what way is Andrew Ng's robot different from the other robots described in the interview?

(i) It can do all the jobs in a house.

(ii) It can learn from its mistakes.

(iii) It can talk to people.

(iv) It can do more than one thing.

(9 points)

7. COMPLETE THE SENTENCE.

Emptying the garbage (lines 24-25) is given as an example of .....

..... .

(8 points)

8. Dan Pinter believes that some day we will have a personal robot in the home.
Copy TWO sentences or phrases that show this.
Take your answers from different paragraphs.

(1) .....

(2) .....

(2×7=14 points)

/המשך בעמוד 5/

LIVEWORKSHEETS