

Directions: In this section, you are going to read a passage with ten statements attached to it. Each statement contains information given in one of the paragraphs. Identify the paragraph from which the information is derived. You may choose a paragraph more than once. Each paragraph is marked with a letter. Answer the questions by marking the corresponding letter on **Answer Sheet 2**.

The spoken web

- A) We're growing more used to chatting to our computers, phones and smart speakers through voice assistants like Amazon's Alexa, Apple's Siri and Microsoft's Cortana. Blind and partially sighted people have been using text-to-speech converters for decades.
- B) Out of these assistants, Siri is the most well-known. The assistant uses voice inquiries and a natural-language user interface(界面) to answer questions. The software adapts to users' individual language usages, searches, and preferences, with continuing use.
- C) Some think voice could soon take over from typing and clicking as the main way to interact online. But what are the challenges of moving to "the spoken web"?
- D) What use is written online content if you can't read? That is the situation facing illiterate(不识字的) African farmers. They are often denied crucial information the web offers many others. With a literacy rate in some parts of Africa at only 22.6%, farmers are often "underpaid for their produce because they might be unaware of the prevailing prices," says Francis Dittoh, a researcher behind Mr Meteo, a speech-based weather information service.
- E) "The most frequently heard complaint is about rainfall predictions," says Mr Dittoh, who lives in Tamale, northern Ghana. "They tell us the methods their forefathers used to predict the weather don't seem to work as well these days." This is down to climate change, he believes. Yet knowing when it's going to rain is vital for farmers wanting to sow seeds, irrigate crops or take their animals out to the fields to feed on grass.
- F) Mr Dittoh says the idea of converting online weather reports into speech came from the farmers themselves, after a workshop in the village of Guabuligah. "They came up with this," he says. Mr Meteo takes the online weather forecast, converts it to a short recording in the appropriate language and makes it available on a basic phone. Farmers ring up to receive the information. The local language Dagbani is spoken by 1.2 million people but is not served by any online translation applications. The service was designed to be cheap and easy to run, says Mr Dittoh. He plans to begin field tests this month, working with Tamale's Savanna Agricultural Research Institute.
- G) The spoken web could also help the one-in-five adults in Europe and the U.S. with poor reading skills. But building the spoken web—web-to-voice and voice-to-web—isn't straightforward. For software to understand that pizza is served at Italian restaurants is easy. To cover multiple domains and to be able to have a conversation with users on every single topic is still a long way off.
- H) So although many computer assistants can answer simple questions about the weather and play music for us, anything resembling a wide-ranging human conversation is decades away. Artificial intelligence just isn't smart enough yet. Even turning your voice into text—automatic speech recognition—is one of the hardest problems to solve, as there are as many ways to pronounce things as there are people on the planet.

- I) Siri has often been praised for its ability to interpret our casual language and deliver very specific and accurate results, sometimes even providing additional information. But it is still somewhat restricted, particularly when the language moves away from stiffer commands into more human interactions. In one example, the phrase "Send a text to Jason, Clint, Sam, and Lee saying we're having dinner at Silver Cloud restaurant" was interpreted as sending a message to Jason only, containing the text "Clint Sam and Lee saying we're having dinner at Silver Cloud restaurant". It has also been noted that Siri lacks a proper editing function, as saying "Edit message to say: we're at Silver Cloud restaurant and you should come find us" generates "Clint Sam and Lee saying we're having dinner at Silver Cloud restaurant to say we're at Silver Cloud restaurant and you should come find us".
- J) Using voice interaction feels far more intimate than surfing the net the old-fashioned way. This is intentional as the informal tone of the assistant helps create an emotional attachment. But if something speaks, it must also listen. Our phones are always near us and they are collecting data about us all the time. This has already raised privacy concerns. The American Civil Liberties Union has stated that digital assistants create a threat to privacy from hackers. Some people have other concerns. They worry assistants will one day be used to deliver advertising directly to us.
- K) But digital voices need more personality to make them popular. Robots are not yet witty, Siri is boring. The benefits of using voice instead of tapping fingers obviously depend on the context. Doctors completing online forms about their patients by speech, for example, can dictate 150 words a minute, three times faster than typing on a keyboard. This enables them to spend less time on administration and more time with patients.
- L) Last year, speech recognition company Nuance helped a doctors' surgery in Dukinfield, near Manchester, set up a speech system for the practice's six doctors. Now they can dictate notes on a patient's health condition and treatment and a smart assistant automatically enters the information into the right fields on a web form. Previously, the doctors made voice recordings that were then transcribed by secretaries—a process that was costly and likely to cause delays. The new system means letters to patients now have more detail.
- M) Using voice also makes sense when you're doing other things with your hands. Think about when you're cooking, and you just want to know what the next step in the recipe is. Your hands are covered with oil; you're not going to get on the iPad, so it's a lot more natural to talk. And speech obviously makes sense when you're driving. In the U.S., 29% of drivers admit they surf behind the wheel, according to insurance firm State Farm. This is up from 13% in 2009. No wonder using mobile phones while driving causes more crashes a year than drink driving, says the U.S. National Safety Council.
36. According to Francis Dittoh, their speech-based weather information service was meant to be inexpensive and easy to use.
37. Using voice instead of typing enables doctors to spend more time taking care of patients.
38. It is extremely difficult to convert voice into text because of different pronunciations.
39. African farmers unable to read often don't have access to important information conveyed online.
40. Some phone users worry advertisers will take advantage of voice assistants to send ads directly to them.
41. The spoken web is helpful when one's hands are occupied.
42. Some people believe online interaction would soon depend mainly on voice.
43. Setting up a spoken web is by no means an easy task.

44. Weather information is extremely important to farmers.

45. Some people are concerned about privacy because their phones are constantly collecting their personal information.