

英 語

(理工学部)

注意事項

- 1. 試験開始の合図があるまで、問題冊子を開いてはいけません。
- 問題冊子は1冊(15頁)です。解答用紙は,解答用紙(英語 マークシート)(第1
 問,第2問を解答)と解答用紙(英語 記述用)(第3問を解答)の2枚です。落丁, 乱丁,印刷不鮮明の箇所があった場合には申し出てください。
- それぞれの解答用紙の所定の欄に氏名と受験番号を記入してください。また、解 答用紙(英語 マークシート)には受験番号を正しくマークしてください。
- 4. 解答は必ず解答用紙の所定の各欄に記入してください。

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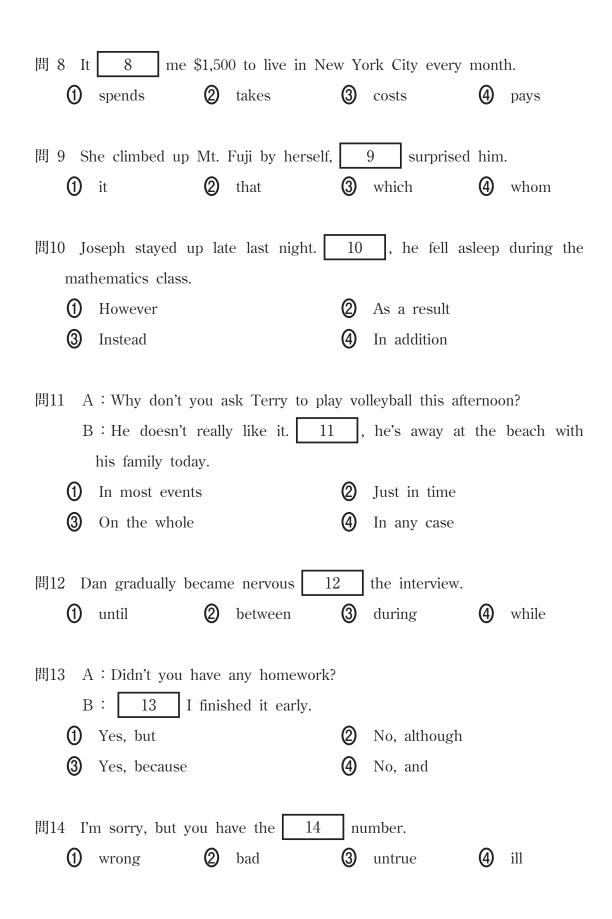
5. 第1問,第2問の解答は,解答用紙(英語 マークシート)の解答欄にマークしてください。例えば、10と表示がある問いに対して③と解答する場合は,次の(例)のように解答番号10の解答欄の③にマークしてください。

[例]	解答 番号	解答欄
	10	0 2 3 4

- 6. 解答用紙は持ち帰ってはいけません。
- 7. 問題冊子は持ち帰ってください。

第1問 次の問い(A, B)に答えなさい。

- A. 次の問い(問1~15)の 1 ~ 15 に入る最も適切なものを、それ ぞれ下の(1)~ (0)のうちから一つずつ選び、解答用紙(英語 マークシート)の解答 欄にマークしなさい。
 - 問 1 Shall we painting where we stopped yesterday? 1 (2) resume (1) assure (3) restore (4) assume 問 2 You should not 2 her while she is studying. **(2)** interpret **(3)** contract (1) attract (4) interrupt 問 3 I don't know where the station is because I am a 3 here. (1) stranger (2) local (3) neighbor (4) resident 問 4 I 4 in Spain for five years when I was a child, but I can't speak Spanish at all. (1) lived (2) have been (3) went (4) have lived 問 5 Your English is as good as 5 (3) **(1)** he's (2) him (4) he his 問 6 When I went to my English lesson yesterday, nobody 6 in the classroom. **(1)** was (2) were **3** is (4) would be 問7 The final of the college football championship last weekend was an 7 end to the season. (1) excited (2) excitedly (3) excite exciting (4)



問15 She is y	younger than her brother	15	three years.		
() by	2 in	3	with	4	on

- B. 次の問い(問16~30)の各文は誤った英語表現を含んでいます。訂正の必要な箇所を下線部(1)~(4)のうちから一つずつ選び, 解答用紙(英語 マークシート)の解答欄にマークしなさい。
 - 問16 After <u>having tried</u> both of them, I think this wine is inferior than that ① one in flavor.
 - 問17 <u>On</u> my way to school <u>this morning</u>, I <u>was spoken by</u> a tourist <u>on</u> the train.
 - 問18 Tom and Jerry often enjoyed to play golf together when they were <u>in their fifties</u>. ④
 - 問19 You <u>had</u> <u>not better</u> go <u>into</u> the <u>banned area</u>. ① ② ③ ④
 - 問20 I'm sorry, but <u>I'm</u> impossible to <u>go shopping</u> with you. ① ③ ③ ④ ④
 - 問21 <u>Nowadays</u>, the price of vegetables is <u>expensive</u> in <u>most</u> supermarkets. ① ③ ③ ④
 - 問22 A: How <u>many</u> do you <u>eat out</u>? B: Two or three <u>times</u> a month. ③ ④
 - 問23 My grandfather is still <u>live</u> and <u>well</u>. He will <u>turn</u> ninety <u>next week</u>. ④ ④
 - 問24 <u>Once</u> we <u>access</u> the Internet, we can collect <u>quite a few</u> information <u>online</u>. <u>④</u>

- 問25 The United States of America is the three largest country in the world. ④
- 問26 My <u>younger brother</u> is belonging to the baseball club at school. ① ② ③
- 問27 After I <u>came</u> <u>back home</u> last night, I <u>saw</u> TV <u>for three hours</u>. ④ ④
- 問28 This social debate is with great importance to solve the problems of today.
- 問29 I ran into Mary's brother at the bus stop yesterday. I thought he resembled to her. ④ her.

第2問 次の問い(A, B)に答えなさい。

A. 次の英文を読み、下の問い(問 $1 \sim 5$)の 31 ~ 35 に入る最も適切なものを、それぞれ下の($\mathbf{1} \sim \mathbf{0}$ のうちから一つずつ選び、解答用紙(英語 マ $-2 \sim \mathbf{0}$)の解答欄にマークしなさい。

The First Meeting

Until 2002, computers were used for robot brains. Then, in 2005, Dr Robertson invented something called the positronic^{*} brain. In 2007, Dr Susan Calvin joined the company *U.S. Robots*. She was the company's robot -psychologist. For exactly fifty years, she worked with robots. She studied how their minds worked. And she saw scientists develop robots that were more intelligent and more powerful. Now she was seventy-five, and her working life with *U.S. Robots* was finishing. She was about to retire.

This was the information I had. But I wanted more personal facts about her.

"Dr Calvin," I said, smiling at her. "Please tell me about your own experiences with robots. I want to know about you and your life with robots. I want to hear your own story."

Susan Calvin did not smile at me. I do not think that she ever smiles. But she did not look angry. "How old are you?" she asked suddenly. Her sharp, intelligent eyes stared at me.

"Thirty-two," I replied.

"Then you don't remember a time without robots," she said. "For thousands of years, humans were alone. But now we're no longer alone. Now we have robots to work for us. They're stronger, more faithful, and more useful beings than humans. Have you ever thought of that?"

"No, I haven't," I replied.

"You look at a robot, and you see a machine. A machine of metal and electricity," she said. "But you haven't worked with robots, so you don't know them. They're cleaner and better than we are."

"Please tell me your stories," I said. "We send our news to more than three billion people. They should know what you can tell them about robots."

But the robot-psychologist was not listening to me. She was thinking about the past. "Fifty years ago, *U.S. Robots* did make robots that were used here on Earth," she said. "No one on Earth has a robot now. But I remember a robot named Robbie. He was destroyed one year before I joined the company."

She stopped speaking, and looked down. The silence continued. It was obvious she was thinking about something painful. I did not say anything. Finally, she started speaking again.

(I, Robot から一部内容を変更して引用)

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*positronic:陽電子の

問 1 What situation does the passage describe? 31

- (1) A negotiation.
- **(2)** An interview.
- **3** A counseling session.
- (4) A debate.

- 問 2 According to the passage, what is true about Dr Susan Calvin? 32
 - () She invented the positronic brain.
 - 2 She is still going to work for many more years.
 - 3 She was twenty-five when she started at U.S. Robots.
 - **(4)** She makes robots.
- 問 3 What expression does Dr Calvin NOT use to describe robots? 33

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- (1) Stronger than humans.
- 2 Cleaner than humans.
- **(3)** More useful than humans.
- (4) More intelligent than humans.

問 4 According to the passage, when was Robbie destroyed?

- **()** 2002.
- **2** 2005.
- **3** 2006.
- **(4)** 2007.

問 5 How does Dr Calvin probably feel at the end of the passage?

- **()** Bored.
- **2** Happy.
- 3 Sad.
- **(4)** Excited.

B. 次の英文を読み、下の問い(問 $1 \sim 5$)の 36 ~ 40 に入る最も適切なものを、それぞれ下の①~④のうちから一つずつ選び、解答用紙(英語 マ $-2 \sim -5$)の解答欄にマークしなさい。

A Bright Future

The sunlight that reaches Earth in one hour has as much energy as all the power that people use in a year. But how can we get this energy and use it on earth?

'Solar' means 'coming from the sun', so when you use sunlight to make things hot, it is called solar thermal power. Many buildings use materials like glass and plastic to catch sunlight and warm the building. In Africa, people use solar cookers. When light hits the surface of the cooker, it is reflected into the middle. The middle becomes hot enough to heat water or cook food. In countries like Turkey and China, people put solar water heaters on their roofs. These are metal and glass boxes with water pipes in them. The glass catches heat and the metal reflects sunlight onto the water pipes, which carry the hot water down into the houses.

We can use sunlight to make electricity too, with devices called solar cells, which are made of silicon. When sunlight hits the silicon, particles inside it move, and this makes electricity. One solar cell does not produce much power, so we put the cells together to make big solar panels.

At the moment, the best solar cells can only use about 25 percent of the sunlight that hits them, and they are an expensive way to produce electricity. But people are inventing better and cheaper solar cells all the time. In the future, we will use them to do more and more things. You can already buy solar lights, solar radios, and small solar panels for things like computers and phones.

We can use solar power to travel too. In July 2010, Andre Borschberg

flew a solar plane called *Solar Impulse* for 26 hours before he stopped. Power for the four engines came from 12,000 solar cells on the wings of the plane. It was able to fly at night because of batteries inside the plane which kept solar energy. There are also solar boats, and in the future there may even be solar buses and trains. Moreover, every two years, in the World Solar Challenge, cars that are powered by solar energy travel over 3,000 kilometers in Australia. The fastest cars can reach speeds of 100 kilometers per hour!

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- 問 1 According to the passage, solar thermal power 36
 - (1) is used to catch sunlight
 - (2) is heating things with sunlight
 - (3) means 'coming from the sun'
 - (4) catches sunlight like glass and plastic

問 2 What is NOT given as an example of solar thermal power?

- (1) Solar lights.
- **(2)** Solar cookers.
- **(3)** Solar water heaters.
- **(4)** Building heating.

問 3 According to the passage, what is true about solar cells?

- (1) They use most of the sunlight that hits them.
- (2) They are inexpensive.
- (3) They make electricity through the movement of particles.
- (4) They are used for making hot water.

- 問 4 According to the passage, what forms of transport use solar power now? 39
 - (1) Cars, trains, and boats.
 - **2** Trains, buses, and airplanes.
 - **3** Airplanes, cars, and boats.
 - **4** Boats, cars, and buses.

問 5 What is the best summary of the passage? 40

- () People should use more solar power.
- ② Solar power has many applications.
- 3 Solar power is getting cheaper.
- (4) Solar planes are amazing.

第3問 次の二つの英文(A, B)中の下線部 41 ~ 60 に入る適切な英単語 を, 解答用紙(英語 記述用)の解答欄に書きなさい。

注意 1. 一つの下線部につき単語一つを書くこと。 2. 例にならって書き出しの文字を含めた英単語を書くこと。

例

I went to the <u>lib</u>例 to return a book but it was closed. 解答:*library*

А.

Many Different Medicines

People buy some medicines from a pharmacy, like pills to treat a headache or a sore throat. Some medicines can only be given to you by a $\underline{\text{doc}}$ 41. Today, there are medicines that treat diseases that spread quickly, and there are medicines that treat diseases that stay with people all their life. There are also useful medicines that assist surgeons. For example, these medicines <u>h</u> 42 surgeons during operations. When surgeons replace a heart or another part of the body, the medicines stop the patient's body killing the new parts.

Traditional Medicines

In many places <u>ac</u> 43 the world, people mostly use traditional medicines. Traditional medicines are medicines that people have used for hundreds of years, or longer. Traditional medicines are made from plants and from <u>an</u> 44, like snakes. For example, most people in Africa use traditional medicines, and a lot of people in Asia do, too. In some

places, people use traditional medicines because they don't <u>1</u> 45 near a hospital, or because traditional medicines are cheap. In other places, people use both traditional medicines and medicines that are made by scientists in laboratories.

Making Medicines

The medicines <u>t</u> 46 are made in laboratories and factories are often copies of medicines made from plants. Malaria is a disease that causes fever and can kill people. People can get it when an insect called a mosquito bites them. To <u>cu</u> 47 malaria, people made a medicine from a substance that comes from a rainforest tree. Then scientists started to make copies of this medicine in a laboratory. Today, these drugs are made <u>w</u> 48 plants.

Testing Medicines

Scientists discover thousands of new drugs e 49 year. They test all new drugs to see if they work and to find out if they are safe for people to use. Scientists also test drugs to find out how much is safe for people to take. Medicines are tested very car 50 in laboratories. Then they are tested on people. Drug companies pay scientists to make new drugs and to test for new drugs, and doing these things can take a very long time. That's why some drugs are very expensive.

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Marie Curie



(Who was Marie Curie?から一部内容を変更して引用)