1 次の英文を読んで，設問に答えなさい。

Over the past 20 years I have had the opportunity to observe the Dalai Lama in a variety of settings — at his home in India, during visits to other countries, sitting in small intimate gatherings or speaking before tens of thousands. Wherever he travels he gives off an unmistakable warmth and friendliness; even those meeting him for the first time often say that it is like meeting with an old friend. For a man of 65, he displays a remarkable vitality and a hearty sense of humor. He laughs easily, yet he is equally quick to engage in serious discussion, tackling difficult problems in a thoughtful and intelligent manner.

When asked how he perceives his own self-identity, the Dalai Lama remarks that he identifies most strongly with his role as a simple Buddhist monk. Having been a monk from a very early age, his daily routine includes rising at 3:30 each morning and spending several hours in prayer and meditation. While his daily practice may include several different types of meditation, such as single-pointed meditation (which seeks to focus one's attention on a chosen object), the Dalai Lama often recommends a particular form of Buddhist meditation called analytic meditation.

"In this type of meditation one uses reasoning," the Dalai Lama explains. "Reasoning can help create positive states of mind and overcome the attitudes, thoughts and emotions that lead to suffering and dissatisfaction. In analytic meditation, one brings about inner change through systematic investigation and analysis. In this way we can properly use our human intelligence, our capacity for reason and analysis, to contribute to our happiness and satisfaction."

As a psychiatrist, I was struck by the parallels between analytic meditation and modern cognitive therapy. Analytic meditation may have potential application in reducing a broad range of destructive emotions. So in several of my discussions with the Dalai Lama, I asked him to illustrate how this particular method can be applied to overcome a harmful emotion like anger.
(1)

"One begins by learning about the destructive effects of anger," he explains. "One should systematically investigate and reflect upon the destructive effects of anger on one's physical health, one's family relationships and in society. One should analyze this and reflect upon it not just once or twice, but repeatedly until it becomes part of one's deeper understanding.

"Then, let's say that someone does you (1). Your immediate response might be to become angry, but then you reflect upon the destructive nature of anger, and (2) that immediately makes you more cautious of giving in to the anger and letting it escalate. Then you continue your analysis, investigating whether responding with anger is ultimately constructive or destructive, whether it will improve the situation or not, and so on.

"This process of reasoning and analysis can continue in other directions. For example, you might investigate to see if perhaps you have contributed in some way to the situation that made you angry. Also, when you are in the midst of anger, your tendency is to perceive the person who harmed you as 100% bad. But if you analyze further, you will realize that every human being is composed of both (2) and negative characteristics, and you can try to get a more realistic view of the person by attempting to find some positive aspects of the person.

"So, with practice, various lines of reasoning and investigation can be used to reduce the force of your anger. This doesn't mean you shouldn't respond, or try to do something if someone tries to harm you. On the contrary, one should take measures to prevent harm to oneself and others, even strong measures. But using analytic methods such as these can help reduce the intensity of your anger, which can have destructive effects, and instead allow you to respond to the situation without a feeling of hatred arising."

〔注〕 Buddhist monk: 仏教の僧侶　　analytic meditation: 分析的な瞑想
psychiatrist: 精神科医　　cognitive therapy: 認知療法

問 1 空所(1)～(2)に入るもっとも適当な一語を，本文中から抜き出して答えなさい。

問 2 (1)～(4)の設問の答えとしてもっとも適当なものを(ア)～(エ)から一つ選び，記号で答えなさい。

(1) The underlined phrase "For a man of 65" means:

(ア) because he is 65 years old.

(イ) considering that he is 65 years old.

(ウ) in favor of a 65-year-old man.

(エ) when he was 65 years old.

(2) Which of the following is the most important for analytic meditation?

(ア) anger

(イ) concentration

(ウ) prayer

(エ) reasoning

(3) According to this essay, which of the following statements is *not* true?

(ア) Analytic meditation allows us to reduce destructive emotions, but it cannot be used to create positive states of mind.

(イ) Even though he is well-known throughout the world, the Dalai Lama considers himself to be a simple Buddhist monk.

(ウ) If someone tries to harm you, you should act against it by taking measures to prevent harm to yourself.

(エ) The author has found similarities between modern cognitive therapy and analytic meditation.

(4) What would be the best title for this essay?

(ア) Current Trends in Psychology

(イ) The Dalai Lama Turns 65

(ウ) The Dalai Lama's Morning Routine

(エ) The Dalai Lama on Meditation

問 3 下線部(1)を日本語に訳しなさい。

問 4 下線部(2)を that が何を意味するか明示して日本語に訳しなさい。

2 次の英文を読んで，設問に答えなさい。

Fish have been swimming in the seas of our planet for hundreds of millions of years, so it's no surprise that they're really efficient at it. Engineers know that there's no point in re-inventing the wheel, so they've started copying the supremely efficient designs of nature. That's how come we have a 'tuna' called Charlie — the first robofish — swimming in a tank at the Massachusetts Institute of Technology.

There are many good reasons why scientists there are trying to copy fish. Your average fish can do a U-turn without slowing down, whereas a ship has to slow down by over 50 percent to reverse its direction.(1) And fish can do their complete U-turn in a very tight curve, with a radius only about one-fifth the length of their bodies, while ships need to have a curve ten times larger. A very maneuverable ship could avoid many accidents.

Like fish, dolphins are remarkable ocean-going creatures. They can produce about 4 horsepower and can travel at 80 kilometers per hour — but if we want a boat to travel at that speed, we have to give it a 70 horsepower engine! Each year, billions of tons of goods are moved across the oceans by large ships — if we could increase their efficiency, it would mean an enormous saving in fuel costs.

And of course, there are the military applications. Propellers are noisy, and the Navy would like quiet ships.

These reasons — maneuverability, efficiency and low noise — are just a few of the reasons why Charlie the Robofish was invented.

Why is a fish much more efficient at moving through the water than a ship with a propeller? Well, a propeller creates a long spinning stream of water called a vortex that stretches behind the ship, robbing energy and slowing the ship down.

But the flapping tail of a fish is quite different. As it sweeps to one side, it creates (say) a clockwise spinning vortex in the water. But when the tail flips

back in the other direction, it creates an anticlockwise vortex. The next step is the key to the efficiency of the fish.

The anticlockwise vortex runs into the clockwise vortex and when they meet they force water away from the fish. Newton said, 'For every reaction there is an equal and opposite reaction', and so, if the water is forced backwards, there's a reaction that pushes the fish forwards.

Because of this marvelously simple mechanism, fish use hardly any energy to move through the water. Even an early artificial fish like Charlie the Robofish can achieve 86 percent efficiency, while the best that our ships can achieve is 40 percent. Of course, fish use extra tricks besides just flapping their tails. They also flex their bodies, so they can even extract energy out of the vortexes that roll down the sides of their bodies. However, (2) making an exact copy of a fish, with a smooth and flexible body, is way beyond what we can build into the robots of today.

〔注〕

radius: a straight line from the center to the edge of a circle (in other words, half the diameter of a circle)

maneuverable: able to turn easily

clockwise: in the same direction as the hands of a clock move

flex: bend

問 1 下線部(1)を日本語に訳しなさい。

問 2 下線部(2)を日本語に訳しなさい。

問 3 (1)～(4)の設問の答えとしてもっとも適当なものを(ア)～(エ)から一つ選び，記号で答えなさい。

(1) What does the underlined phrase "how come" mean?

(ア) because

(イ) how go

(ウ) what

(エ) why

(2) In what radius curve could a 20 cm fish complete a U-turn?

(ア) 2 cm

(イ) 4 cm

(ウ) 8 cm

(エ) 16 cm

(3) According to the text, what happens when a clockwise vortex runs into an anticlockwise vortex?

(ア) It pushes the fish forwards.

(イ) The fish flips its tail back in the other direction.

(ウ) The fish reacts to the water that is forced away from it.

(エ) The vortexes combine to make one large vortex.

(4) What is the main reason that scientists have created Charlie the Robofish?

(ア) They want to find a better way to move ships.

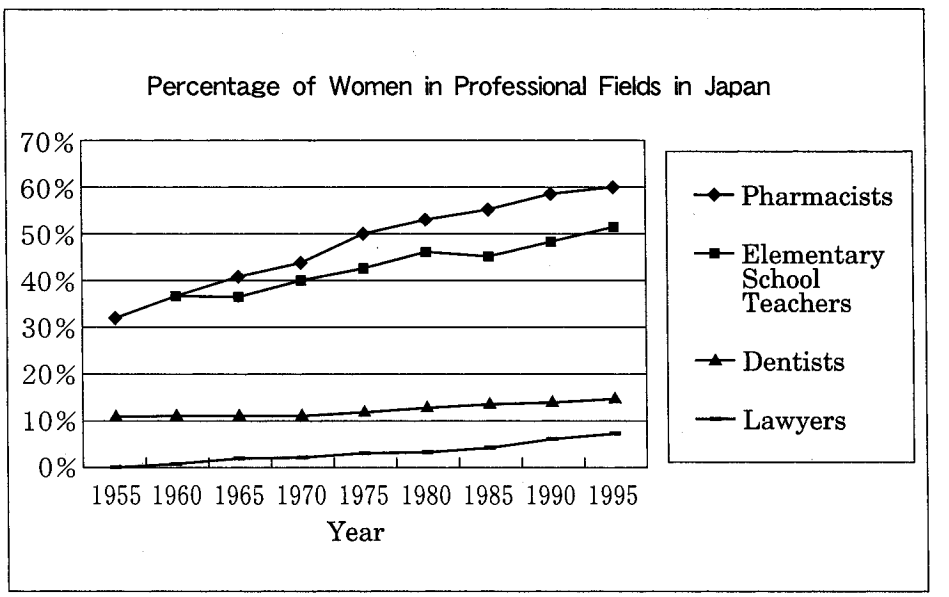
(イ) They want to make a perfect copy of a real fish.

(ウ) They want to study the effects of propellers in water.

(エ) They want to understand how tuna swim.

3 英文の指示に従い，設問〔A〕と設問〔B〕に答えなさい。設問〔A〕は(a)～(j)の記号で答えなさい。ただし，(a)～(j)の選択肢の語は，文頭にくる場合も小文字で表示してある。

〔A〕 Look at the graph and read the paragraph below it about women in Japan. Fill in the blank spaces (1)～(5) with the best expression using one of the words or phrases in the box below. Each expression should be used only once.



Based on information from *White Paper on the National Lifestyle: Working Women—The Need for New Social Systems* (1998)

Recently the number of women entering professional fields has steadily been increasing. (1), in 1995 there were more women working as pharmacists and elementary school teachers than men. (2), less than 50 years ago there were almost no women lawyers, (3) in 1995 they made up about 7% of all the lawyers in Japan. I think there are two main reasons for these changes. (4), Japanese women now have access to better education than in the past. Secondly, society's view on

the role of women in the workplace has been changing. (5), even though up until now the number of women in professional positions has been limited, I believe that the situation will continue to improve in the future.

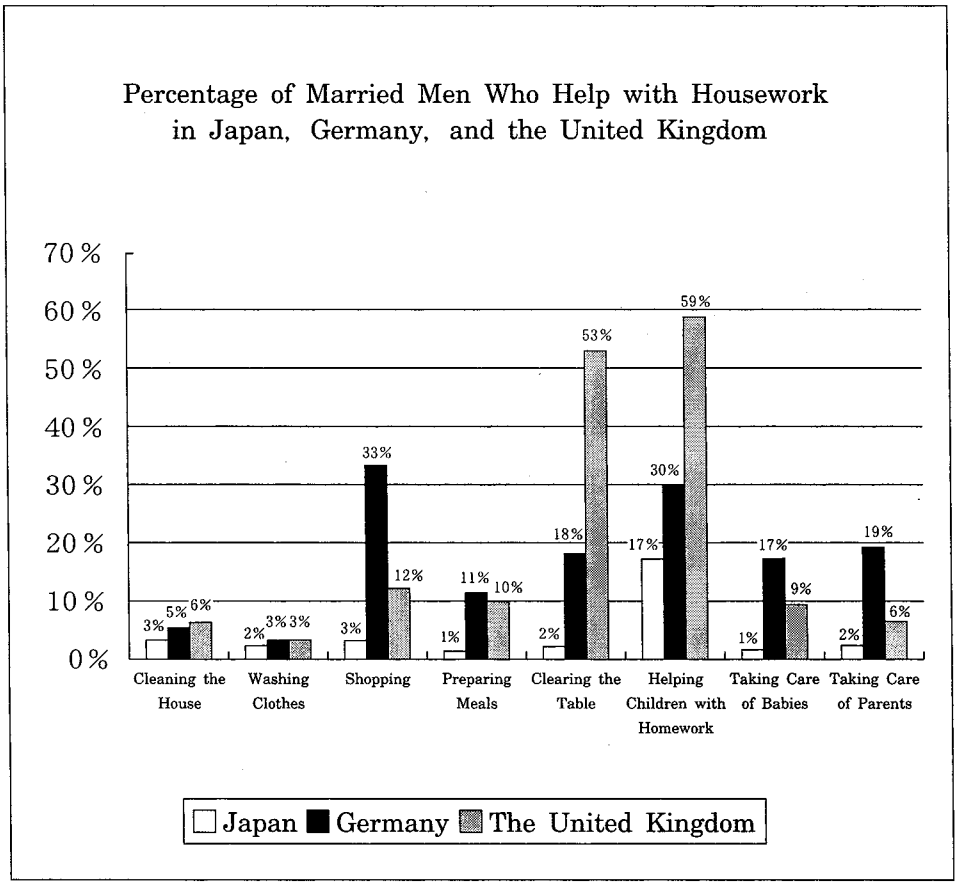
(a) absolutely	(f) in short
(b) but	(g) nonetheless
(c) first of all	(h) on the contrary
(d) for example	(i) on the other hand
(e) in addition	(j) regardless

〔B〕 Now look at the graph on the next page and write your own paragraph about the amount of housework Japanese men do. Your paragraph should be 100-130 words long (about the same length as the paragraph in 〔A〕). Use the following pattern as a guide:

- **First sentence** — To introduce the topic, write a sentence describing the amount of housework that Japanese men do. In this sentence it is not necessary to give detailed information.

- **Middle sentences** — Support your first sentence by a) using information from the graph to compare Japanese men with men from the other two countries, and b) giving two reasons why you think these differences might exist.

- **Last sentence** — Summarize the main idea of your paragraph. Include your opinion if you want to.



Based on information from *White Paper on the National Lifestyle: Working Women — The Need for New Social Systems* (1998)

4 放送を聞き，指示に従って設問に答えなさい。

注意事項

1. 聞き取り試験の問題は，〔A〕，〔B〕，〔C〕の3種類がある。放送の回数と解答上の留意点について，問題ごとに放送で指示がある。
2. 放送を聞きながら，メモをとってもよい。また放送が終わったあとも，この問題の解答を続けてよい。
3. 解答は解答用紙の所定欄に記入すること。

〔A〕 留学生と日本語の先生の対話が放送される。その内容に関する以下の(1)～(5)の設問に対する答えを，(ア)～(エ)の中から選び，記号で答えなさい。対話は二度続けて放送される。

(1) What was the student's main purpose for talking to the teacher?

(ア) to tell her he can't attend her class anymore

(イ) to ask for directions to Mr. Hayashi's office

(ウ) to confirm which day her class is on

(エ) to tell her he will attend her class next week

(2) Why can't the student come to Ms. Kato's class?

(ア) He has to do experiments.

(イ) He wants to take a reading class from another teacher.

(ウ) He must attend Ms. Takeda's chemistry class.

(エ) He has a class on Tuesdays at the same time.

(3) Which day will the student change his class to?

(ア) Tuesday

(イ) Wednesday

(ウ) Thursday

(エ) Friday

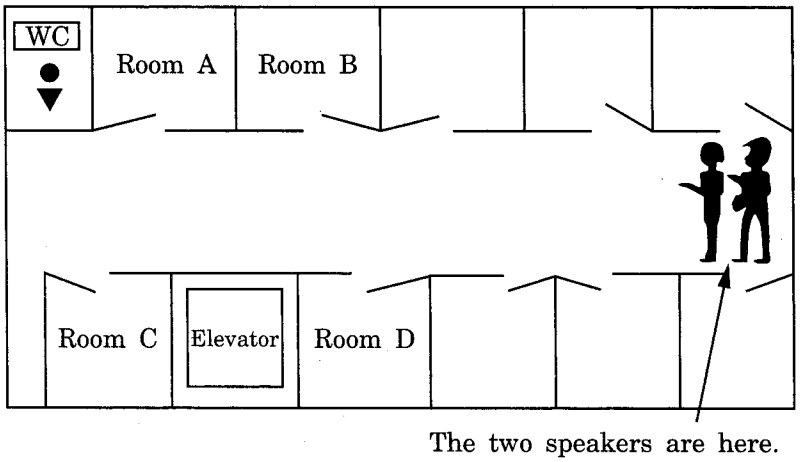
(4) Which room is Mr. Hayashi's office?

(ア) Room A

(イ) Room B

(ウ) Room C

(エ) Room D



(5) What will the student do next?

(ア) go to the men's room

(イ) wait for the elevator

(ウ) try to find a new teacher

(エ) go to class

〔B〕 英語のラジオコマーシャルが放送される。その内容に関する以下の(1)～(4)の設問に対する答えを，(ア)～(エ)の中から選び，記号で答えなさい。コマーシャルは二度続けて放送される。

(1) Why is Sports Center having a sale?

(ア) They are relocating to Old Main Road.

(イ) They are going out of business.

(ウ) They are opening their first store.

(エ) They are opening another store.

(2) How much will running shoes be reduced?

(ア) 10％

(イ) 15％

(ウ) 25％

(エ) 50％

(3) What will all children receive at the sale?

(ア) popcorn

(イ) a toy

(ウ) shoes

(エ) a free prize

(4) When does the sale end?

(ア) three days from Sunday

(イ) Sunday afternoon when the doors close

(ウ) Sunday at 9:00 am

(エ) sometime on Sunday evening

〔C〕 設問は，(1)～(5)まで5題ある。各設問は，男性二人の短い対話とその対話に関する英語の質問文から構成されている。質問文は問題用紙に書かれていない。質問文に対する答えを，(ア)～(エ)の中から選び，記号で答えなさい。設問は二度続けて放送される。

(1)

(ア) at a train station

(イ) at an airport

(ウ) in a restaurant

(エ) in an office

(2)

(ア) It's too expensive.

(イ) It's too crowded.

(ウ) It doesn't go to the station.

(エ) It may take too long.

(3)

(ア) jeans

(イ) some fruit

(ウ) a set of teacups

(エ) a stereo

(4)

(ア) next to his glasses

(イ) in his pocket

(ウ) on the table

(エ) on the bookshelf

(5)

(ア) ten dollars

(イ) fifteen dollars

(ウ) twenty dollars

(エ) eighty-five dollars