英 語 (45分)

1 この問題は、放送を用いて行います。図書委員会の広報班が、グラフ(Graph) 1,2 を用いて話し合いをしています。内容を聞いて、設問に答えなさい。<u>設問には内容に関してあなたの考えを表現する問題も含まれます。</u>英文は二回読まれます。

	Graph 1	_	Graph 2
	(略)		(略)
1	読み上げられた Graph 1 の	(略)	
	ア(3語) *********** イ(4語) *	****	******
2	Graph1において、	・・ (戦	<u>3)</u> ·····
	$\mathcal T$ *****	r	**************************************
3	Graph 2において、		(晒)
	1 ******	3 *	****
	4 *****	6 *	*****
4	A組の貸し出し数が多かった理由を、日本語で答えた		
5	あなたがこの話し合いに参加した		
		・・ (昭	ξ) ·····
		・・ (昭	ş) ·····
	(略)は語数には入れません。また,		… (略)も語数に含みます。

英 (2)

- Lisa : It is, really. This is a $\cdots \cdots \cdots$ (\mathfrak{K}) $\cdots \cdots \cdots \cdots$

(略)



英 (3)

英 (4)

\bigcirc	会話之	ての内容と一致するものを, (略)
	ア	***************************************
	イ	***************************************
	ゥ	***************************************
	I	***************************************
	オ	***************************************

3 英文を読んで①~⑤に答えなさい。

What is sleep? A lot of people are interested in sleep and want to know more about it. Scientists study sleep to answer the people's questions.

Do animals need to sleep? (A) Migrant birds, maybe. You may believe that they can fly for many days without sleeping. But some scientists say that half of the brain sleeps, while the other half of the brain is awake. Dolphins sleep (1)<u>like this</u>. So, animals need to sleep.

What happens when animals don't sleep? A scientist did an experiment. He stopped a rat from sleeping. When the rat looked sleepy, he woke it. After about a week, the scientist found the animal was angry and its body temperature dropped. It ate more than usual but lost weight. After about 17 days, it died. Because a rat lives for about 16 days without eating anything, (2) $(\underline{is/say/eating/sleeping/as/as/we/important/can/that})$. Animals need to sleep to live.

Then, why do animals sleep? Let's think about humans. (B) Some people in Africa don't have artificial lights, and after sunset it becomes dark around them. But they sleep for about seven hours like Japanese people. Japanese people have artificial lights at home, and it doesn't get dark even after sunset. So we can't say we sleep because it is dark.

(C) Our brain is working hard when we are sleeping, some scientists say. We have REM sleep and Non-REM sleep, and REM sleep helps the development of our brain. Our brain gets a lot of information while we are awake. Some scientists believe that during REM sleep our brain keeps important information and throws away information that is not important. They say sleep helps our memories. In fact, (\mathfrak{B}) have longer REM sleep than (\mathfrak{U}). This is because they have something new to learn every day and they have more to memorize than adults. Also, people who do not get enough sleep made 40 to 50% more mistakes the next day. This is a link between sleep and the brain. We can see that we sleep for our brain.

Now, here is another question. (D) There is research on this topic. On weekends many people get up later and sleep longer than on weekdays. A group of researchers asked some questions to the students who get up more than two hours later than usual on Sundays. More than 70% of them answered that they felt sleepy or tired on the next morning, on Monday. Sleeping too long may make people tired.

Do you sleep longer on weekends? (3)<u>先週の土曜日は何時に寝ましたか。</u> Have you thought about your sleep? Sleep is very important for your daily life. Have a "good" sleep tonight.

注) migrant bird 渡り鳥 may~ ~かもしれない brain 脳 awake 起きている dolphin イルカ experiment 実験 rat ネズミ woke~ ~を起こした body temperature 体温 drop 低下する than usual いつもより lose weight 体重を落とす humans 人間

(略)

\bigcirc	下線部 (1) に最も当てはまる文を (略)				
	$\overline{\mathcal{V}}$ ***********************************				
	ウ ********************				
2	下線部 (2) はどのような				
	()()()()()()()()()()()()()()()()()()()				
3	下線部 (3) の				
4	あ に当てはまらないものを,				
	$\mathcal T$ *********				
	1 ****				
	ウ ************************************				
	工 ************************************				
5	下線部 (4) が指す				
6	い に内容上最も当てはまるものを				
	 ア **************************				

英 (5)

- ① 下線部(1)はどのような状態ですか。具体的に日本語で答えなさい。
- ② 下線部(2)の【 】内の語を適切な意味になるように並べ替えなさい。解答欄には【 】内の英語のみ記入すること。
- ③ (あ),(い)に入る組み合わせとして最も適切なものを,次の1~4から一つ選び,番号で答えなさい。
 - 1 (\mathfrak{b}) animals (ι) humans 2 (\mathfrak{b}) babies (ι) dolphins
 - 3 (\mathfrak{H}) children (ι) adults 4 (\mathfrak{H}) adults (ι) children
- ④ 下線部 (3) の日本語を英語に直しなさい。
- ⑤ (A) ~ (D) に最も当てはまる文を, 次のア~カからそれぞれ一つ選び, 記号で答えなさい。ただし, 同じ

記号は繰り返し使ってはいけません。

- \mathcal{P} Can you think of an animal that doesn't sleep?
- ✓ Do people sleep because it is dark?
- $\dot{\nu}$ Is a longer sleep always better for people?
- \mathbf{I} What is the animal that sleeps the longest?
- オ So, why do people sleep?