

〔I〕 次の英文を読んで、問いに答えなさい。

The 500 Series *Shinkansen* is a very ⁽⁷⁾stylish train. There is a practical reason for the design of the (1). The train made a loud noise when it entered tunnels at high speed. However, the designers worked hard to find a solution for reducing this noise.

One of the solutions they found was to make the nose of the train very (2) like a kingfisher's beak. The kingfisher is a kind of bird that is very (3) at diving into the water and catching fish. The ⁽⁷⁾shape of its beak enables it to dive with very little resistance to water. Similarly, the nose of the train acts like a kingfisher's beak to ⁽⁷⁾reduce the air resistance that causes noise in tunnels.

There are many other products that have been created by studying living creatures. In Africa there is an air-conditioning system that uses very small amounts of energy. The buildings with this eco-friendly air-conditioning system have specially designed chimneys, and windows with hoods. When wind blows, these chimneys and windows let out hot air from inside the building. Also, the walls are made with different thicknesses to absorb heat during the daytime, which they let out in the evening. This system (4) the natural ventilation system of a mound made by white ants. In Africa, ^(A)the air temperature changes from about 10°C to 40°C, but the temperature inside the mounds always stays around 30°C.

(注) kingfisher カワセミ ventilation 換気 mound 塚, 小山

From *Reader's Ark Basic – Setting Out on a Voyage*

問 1 次の英文が本文の内容と一致すればTを、一致しなければFを記入しなさい。

- 1 The nose of the 500 Series *Shinkansen* produces no sound when it enters tunnels.
- 2 The kingfisher has a beak with no resistance to water.
- 3 The creation of many useful products has resulted from studies of living creatures.
- 4 There is an air-conditioning system in Africa which has chimneys designed to save energy.

問2 空欄 (1) ~ (4) に最も適するものをア~エの中から一つ選び、その記号を記入しなさい。

- (1) ア side イ back ウ front エ ceiling
 (2) ア wide イ long ウ deep エ shallow
 (3) ア good イ surprised ウ fond エ much
 (4) ア escapes イ winds ウ instructs エ imitates

問3 下線部(ア)~(ウ)とほぼ同じ意味の単語を選び、番号で答えなさい。

- (ア) stylish
 (イ) shape
 (ウ) reduce
 1 decrease 2 environment 3 result 4 fashionable 5 oppress
 6 form

問4 それぞれの指示に従って答えなさい。

1 下線部(A)の内容を簡潔に表しているものを選び、記号で答えなさい。

- ア 気温10度から40度への変動幅30度は滞在に適している。
 イ 気温10度から40度の間では30度が快適気温である。
 ウ 変動の激しい外気温でも内部温度を常時30度に保つことができる。
 エ 気温の変動が10度から40度と激しいものの、平均すると30度である。

2 本文のタイトルとして最もふさわしいものを選び、記号で答えなさい。

- ア Changes in Nature
 イ Products in America and Africa
 ウ The Wisdom of Eco-friendly Systems
 エ Learning from Nature

〔Ⅱ〕 次の問いに答えなさい。

問1 英文の空欄に最も適するものをア～エの中から一つ選び、その記号を記入しなさい。

1 Next month, my father will be fifty. He was born and () up in Kyoto.

ア grown イ raised ウ brought エ stood

2 Tom, who was invited to the party, is not () to the Japanese way of living yet.

ア familiar イ common ウ used エ dear

3 If you eat so much every day, you will () weight.

ア put on イ have on ウ get on エ depend on

4 I ordered the machine () a company in the United States.

ア to イ into ウ out of エ from

5 Yesterday, I happened to talk with my old friend's son. He takes () his father both in looks and disposition.

ア off イ after ウ in エ up

6 I think it natural for him to take pride () his strong will.

ア on イ of ウ over エ in

7 There are so many cars that I am at a () as to which one to choose.

ア loss イ less ウ least エ little

8 She missed the last train, so she had no () but to wait for a taxi to come.

ア possibility イ priority ウ choice エ chance

問2 会話の空欄に最も適するものをア～ウの中から一つ選び、その記号を記入しなさい。

1 A : What a nice suit you are wearing! Is it new?

B : ()

ア Yes, my father told me.

イ Yes, it was a birthday present.

ウ Yes, I will buy one.

- 2 A : I'm going to visit Greece next month. Have you ever traveled to Europe?
 B : ()
 ア No, but I'd like to.
 イ No, after you.
 ウ No, two years ago.
- 3 A : How about this white skirt?
 B : It looks nice. ()
 ア Can I rely it on?
 イ Can I try it on?
 ウ Can I carry it on?
- 4 A : ()
 B : Not at all. It's so hot in here.
 ア Would you mind opening the window?
 イ Will you open the window?
 ウ Are you so kind as to open the window?
- 5 A : Why don't we go and see a movie tonight?
 B : ()
 ア I didn't do it.
 イ That sounds nice.
 ウ Me, neither.

問3 日本文に合うように、それぞれ下のア～キの語を並べかえて空所を補い文を完成しなさい。ただし、不要語が2語含まれている。

- 1 私は野球よりテニスの方が興味があります。

I () more () () () () baseball.

ア in イ than ウ better エ between オ am
 カ tennis キ interested

- 2 男の子は父親にちなんで名前がつけられることが多いでしょう。

A boy () often () () () () father.

ア named イ be ウ after エ later オ birth
カ will キ his

- 3 彼女だけでなくあなたも規則に従わなければなりません。

Not () she () also () () () follow the rules.

ア you イ than ウ but エ to オ have
カ well キ only

- 4 陰で他の人の悪口を言ってはいけません。

Don't () () () () people () their backs.

ア ill イ any ウ behind エ give オ other
カ of キ speak

- 5 誰もその木の下で休憩することに反対しないでしょう。

No () will () to () () () under the tree.

ア object イ one ウ rest エ but オ show
カ a キ having

〔Ⅰ〕

問 1	1	2	3	4
問 2	1	2	3	4
問 3	ア	イ	ウ	
問 4	1	2		

〔Ⅱ〕

問 1	1	2	3	4	5	6	7	8
問 2	1	2	3	4	5			
問 3	1							
	2							
	3							
	4							
	5							