

2011 年度 入学 試験 問題

英 語

(試験時間 10:30~11:50 80分)

1. 解答用紙は、記述解答用紙とマーク解答用紙の2種類がありますので注意してください。
2. 解答は、必ず解答欄に記入してください。なお、解答欄以外に書くと無効となりますので注意してください。
3. 解答は、HBの鉛筆またはシャープペンシルを使用し、訂正する場合は、プラスチック製の消しゴムを使用してください。特に、マーク解答用紙には鉛筆のあとや消しくずを残さないでください。また、折りまげたり、汚したりしないでください。記述解答用紙の下敷きにマーク解答用紙を使用することは絶対にさけてください。
4. 解答用紙には、受験番号と氏名を必ず記入してください。
5. マーク解答用紙の受験番号および受験番号のマーク記入は、電算処理上非常に重要なので、誤記のないよう特に注意してください。

I 次の英文を読み、設問に答えなさい（*印の語は〔注〕を参照しなさい）。（20点）

The most obvious factor that distinguishes humans from other animals is the variety of ways in which we communicate. Human interactions are a rich blend of language, facial and body movements, and symbols; we also evaluate the context of any message to obtain the maximum amount of information. Our style of communication is one of the clearest markers of identity. The language and gestures that we use show the community or nation to which we belong. In addition, each of us has a personal vocabulary of commonly used words and gestures reflecting our individual concerns.

Many animals have a set of sounds and physical signals that they use in particular contexts, such as attracting a mate or warning others of danger. Animals such as dogs and *primates, which interact extensively, may use sets of signals to express emotions such as pleasure or fear, or to show dominance or subordination. Even these animals, however, tend to use the same signal every time they encounter a specific situation. Human beings, on the other hand, can talk about the past and the future, discuss abstract ideas, and put entirely new concepts into words.

*〔注〕 primates 霊長類の動物

設 問

1. 下線部を和訳しなさい。答えは記述解答用紙に書きなさい。
2. 本文の内容と一致しないものをA～Dより1つ選び、その記号をマーク解答用紙にマークしなさい。
 - A. Humans can make themselves understood in various ways.
 - B. The style in which we communicate is one of the clearest indications of identity.

- C. Dogs and primates are inclined to send sets of signals whenever they encounter a specific situation.
- D. While humans can easily discuss the past and the future, they fail to put abstract ideas into words.

3. 次の日本語を英訳しなさい。答えは記述解答用紙に書きなさい。

言語は人類が互いに意思を伝えあう最も重要な手段の1つです。

II 次の英文を読み、設問に答えなさい（*印の語は〔注〕を参照しなさい）。(21点)

When I was little, I lived in the Bensonhurst section of Brooklyn in the City of New York. I knew my immediate neighborhood intimately, every apartment building, backyard, empty lot, elm tree, coal chute and wall for playing handball. I knew where many people lived: Bruno and Dino, Harvey, Sandy, Jackie and Myra. (あ) It was off-limits to my wanderings because the area was north of the noisy automobile traffic and elevated railway on 86th Street. It could have been Mars for all I knew.

Even with an early bedtime, in winter you could sometimes see the stars. I would look at them, twinkling and remote, and wonder what they were. I would ask older children and adults, who would only reply, "They're lights in the sky, kid." I could *see* they were lights in the sky. But what *were* they? Just small lamps hanging in the air? Whatever for? I felt a kind of sorrow for them: a commonplace whose strangeness remained somehow hidden from my incurious fellows. (い)

As soon as I was old enough, my parents gave me my first library card. I think the library was on 85th Street, an alien land. Immediately, I asked the librarian for something on stars. She returned with a picture book displaying portraits of men and women with names like *Clark Gable and *Jean Harlow. (う) It was the right kind of book. I opened it breathlessly and read until I found it. The book said something astonishing, a very big thought. It said that the stars were suns, only very far away. The Sun was a star, but close up.

Imagine that you took the Sun and moved it so far away that it was just a tiny twinkling point of light. How far away would you have to move it? I was innocent of the notion of angular size. I was ignorant of the law of *light propagation. I had no chance of calculating the distance to the stars. But I could tell that if the stars were suns, they had to be very far away — farther away than 85th Street, farther away than Manhattan, farther away, probably, than New

Jersey. (え)

Later I read another astonishing fact. The Earth, which includes Brooklyn, is a planet, and it goes around the Sun. There are other planets. They also go around the Sun; some are closer to it and some are farther away. But the planets do not shine by their own light, as the Sun does. (お) If you were a great distance away, you would not see the Earth and the other planets at all; they would be only faint shining points, lost in the glare of the Sun. Well, then, I thought, it stood to reason that the other stars must have planets too, ones we have (イ) detected, and some of those other (ロ) should have life, a kind of life probably different from (ハ) as we know it, life in Brooklyn. So I decided I would be an astronomer, learn about the stars and planets and, if I could, go and visit them.

*[注] Clark Gable クラーク・ゲートル (米国の映画俳優)

Jean Harlow ジーン・ハーロー (米国の映画俳優)

light propagation 光の伝播

設 問

1. 英文の空所 (あ) ~ (お) に入る最も適切な文をA~Fよりそれぞれ1つ選び、その記号をマーク解答用紙にマークしなさい。ただし、選択肢には使用しないものが1つ含まれている。
 - A. The Cosmos was much bigger than I had guessed.
 - B. They merely reflect light from the Sun.
 - C. But more than a few blocks away was a strange unknown territory.
 - D. If I had been born in a much earlier age, I would not have known that there were other stars and other worlds.
 - E. There had to be some deeper answer.
 - F. I complained, and for some reason then obscure to me, she smiled and found another book.

2. 下線部の英文の文意が通るように、空所（イ）～（ハ）に最も適当なものをA～Fからそれぞれ1つ選び、その記号をマーク解答用紙にマークしなさい。ただし、選択肢には使用しないものが3つ含まれている。

- A. not yet B. light C. planets D. not to be E. life
F. points

III 次の英文を読み、設問に答えなさい（*印の語は〔注〕を参照しなさい）。(25点)

In 1583, Galileo Galilei, a youth of nineteen attending prayers in the *baptistery of the Cathedral of Pisa, was, according to tradition, distracted by the swinging of the *altar lamp. No matter how wide the swing of the lamp, it seemed that the time it took the lamp to move from one end to the (あ) was the same. Of course Galileo had no watch, but he checked the intervals of the swing by his own pulse. This curious (い), he said, took him away from the study of medicine, to which his father had committed him, to the study of mathematics and physics. In the baptistery he had discovered what physicists would call the *isochronism, or equal time of the *pendulum — that the time of a pendulum's swing varies not with the width of the swing (う) with the length of the pendulum.

This simple discovery symbolized the new age. Astronomy and physics at the University of Pisa, (え) Galileo was enrolled, had consisted of lectures on the texts of Aristotle. But Galileo's own way of learning, from observing and measuring what he saw, expressed the science of the future. His discovery, although never fully exploited by Galileo himself, opened a (お) in *timekeeping. Within three decades after Galileo's death the (か) of the best clocks was reduced from fifteen minutes to only ten seconds per day.

A clock that kept perfect step with countless other clocks elsewhere made time a measure *transcending space. Citizens of Pisa could know what time it was in Florence or in Rome at that very moment. Once such clocks were synchronized they would stay synchronized. No longer a mere local convenience for measuring the craftsman's hours or fixing the time for worship or the town council's meeting, henceforth the clock was a (い) for timekeeping. Just as the equal hour standardized the units of day and night, summer and winter, in any particular town, so now the precision clock standardized the units of time all over the planet.

Certain peculiarities of our planet made this magic possible. Because the earth turns on its *axis, every place on earth experiences a (□) with each full 360-degree turn. As the earth turns, it brings noon successively to different places. When it is noon in Istanbul, it is still only (△) westward at London. In (ニ) the earth turns 15 degrees. Therefore we can say that London is 30 degrees *longitude, or two hours, west of Istanbul, which makes those degrees of longitude measures of both space and time. If you have an accurate clock set to the time at London and carry it to Istanbul, by comparing the time on the clock you have carried with the (ホ) in Istanbul, you will also know precisely how far you have traveled eastward, or how far east Istanbul is from London.

*〔注〕 baptistery 洗礼堂 altar 祭壇 isochronism 等時性
 pendulum 振り子 timekeeping 時間の計測
 transcending (～を) 超越する axis 軸 longitude 経度

設 問

1. 英文の空所 (あ) ~ (か) に入る最も適当なものをA~Hより1つ選び、その記号をマーク解答用紙にマークしなさい。ただし、選択肢には使用しないものが2つ含まれている。

- A. where B. average error C. planet D. other
 E. everyday puzzle F. prayers G. new era H. but

2. 下線部の英文の意味として最も適当なものをA~Dより1つ選び、その記号をマーク解答用紙にマークしなさい。

- A. A clock could not be a measure transcending space because there was no accurate clock which kept perfect step with countless other clocks elsewhere.
 B. Once time was made a measure transcending space, there soon appeared a clock which kept perfect step with countless other clocks elsewhere.

- C. Time became a measure transcending space thanks to the appearance of a clock which kept perfect step with countless other clocks elsewhere.
- D. Because of the difficulty in making a perfect clock which kept step with countless other clocks elsewhere, there was no unified standard to measure time and space.

3. 英文の空所 (イ) ~ (ホ) に入る最も適当なものをA~Gより1つ選び、その記号をマーク解答用紙にマークしなさい。ただし、選択肢には使用しないものが2つ含まれている。

- A. Istanbul B. local time C. universal device D. one hour
E. 10 A.M. F. minute per year G. 24-hour day

IV 次の英文を読み、設問に答えなさい（*印の語は〔注〕を参照しなさい）。（16点）

John, who is flying with his friend Greg to Japan, listens to a lecture on volcanoes that he has downloaded and saved on his computer.

I think everybody is interested in volcanoes, at least I am. It's sort of a fun topic. Before we really get into it, there are three words that I want to define for you because they are used by people without really knowing what they mean. Those words are *active*, *extinct*, and **dormant*. Let's take the word "active" first. Active means that it's active. Now the point is however, that (あ). Obviously an erupting volcano is an active volcano, but to be active doesn't require active *molten rock coming out. Any indication that the fire is lit down below — that's all you really need. So if you have steam — for example, if you went to Mount Saint Helens today, what you would see today is no evolution of *lava anymore, but what you would see (い): That's an indication of activity. Perhaps just the fact that (う) the crater — maybe that's all you really need to have. So the point is for it to be an active volcano simply has to indicate the fire's lit: It could come back at any moment. So that's active.

Now the second word "extinct" means it's dead. The fire's out. (え): It's all *solidified. It's not coming back anymore, so you can forget about it. That's extinct.

The problem is the third word "dormant." Now dormant means different things, I think, to different people. But in talking to volcanologists and asking them, "What does dormant mean to you?" I get the idea, in general, that what dormant means is that you've got a volcano that perhaps (お), that hasn't erupted in perhaps a very long time, and yet there's a feeling that the fire's not out, that this thing could come back again. So they don't want to take it off the list yet. So that, basically, is what dormant is all about.

Now the real () (い) that historically () (ロ) ()

of () of “extinct” (ハ) that () really just asleep. Now the best example I can think of is Mount Vesuvius in Italy.

Nodding his head, John falls asleep.

*〔注〕 dormant (火山が) 休止状態にある molten 熱で溶けた
lava 溶岩 solidified 固まった

設 問

1. 英文の空所 (あ) ~ (お) に入る最も適当なものをA~Fよりそれぞれ1つ選び、その記号をマーク解答用紙にマークしなさい。ただし、選択肢には使用しないものが1つ含まれている。また、文頭の文字もすべて小文字で表示してある。

- A. doesn't show any sign of activity
- B. would be steam coming out of the crater
- C. the molten rock no longer exists down there
- D. the rocks within the crater are warmer than the rocks outside
- E. there must be movement that is easily seen
- F. it doesn't necessarily have to be in eruption

2. 下線部が「ここで本当に問題になるのは、死火山が実際は眠っただけという例が歴史的に見ても数多くあることだ」という意味になるように、空所に入る最も適当なものをA~Iよりそれぞれ1つ選び、文を完成させなさい。答えは空所 (イ) (ロ) (ハ) に入るものの記号のみをマーク解答用紙にマークしなさい。ただし、選択肢には使用しないものが1つ含まれている。

- A. examples B. problem C. there've D. in E. lots
- F. were G. been H. volcanoes I. is

V 次の英文は、IVの英文の続きである。それを読んで設問に答えなさい。(18点)

John, still fast asleep on the flight to Japan, gets a light nudge from Greg to wake him up.

Greg: Hey, did you have a nice (あ)?

John: Hey, I must have dozed off while listening to that lecture on volcanoes.
How long was I out?

Greg: Not long, maybe half an hour. They just announced that we'll be landing at Narita in about half an hour or so.

John: Wow! I'll be able to see Mount Fuji, soon.

John and Greg have gone through immigration procedures, met with Kenji in Narita terminal and now the three of them are on the train for Tokyo.

Kenji: You guys must be exhausted after that long flight. We'll be in Tokyo in an hour and go straight to the hotel to check in for two nights.

Greg: Great! I am tired. John got a little sleep during the flight, but the excitement of visiting Japan kept me awake. As this is my first long flight, I wonder how jet lag is going to affect me.

Kenji: Jet lag?

John: Yeah, you must have experienced it at least a couple of times, Kenji, on your trips (い) the US. It's when your body rhythms are disrupted from high-speed travel across several time zones in an airplane.

Greg: It's like your biological clock is all messed up.

Kenji: Oh, I got it. We call it *jisaboke* in Japanese. Yeah, it is tough, especially on long flights from the US or Europe. How long was your flight?

John: I think about 14 hours. What time is it?

Kenji: It's 5:30 P.M.

Greg: Well we left Chicago at 12:30 P.M. Wow! So, it's only five hours difference?

Kenji: No, it is late Tuesday afternoon here and you left Chicago Monday afternoon. There is a 14-hour time (う) between Chicago and Japan. You missed your sleep for Monday night, and it is the following morning in Chicago now.

John: Oh, so I must set my watch (え) by fourteen hours, right?

Kenji: That's right.

Greg: So, does that mean we just experienced time travel?

Kenji: Greg, you're so funny. Look guys, we have two weeks together, so I think it is best for you to just relax at the hotel tonight and recover from your long flight. We can discuss tomorrow's plans of seeing some sites in Tokyo at the hotel. We will leave Tokyo the following day and go to a hot spring and see Mount Fuji and so on. Mary is visiting her friend in Shizuoka and will meet us there and we'll climb Mount Fuji together.

Greg: Kenji, that reminds me. Can you look at this and tell us what it means? Mary said it is a quote from the Japanese man who found a whale fossil in Gunma, Japan. I also found an English version on the Internet, but Mary said this quote was not in the English version and it was too difficult for her to translate. We would like to go to Gunma to see this fossil if it isn't too far out of the way.

Greg gives the following Japanese sentence to Kenji.

「新種のクジラの化石を自分の手で掘り起こしたなんて、とても信じられない。この一生に一度の経験で、非常に興奮している。」

Kenji reads it and translates it for Greg.

"I cannot believe I () a (イ) of a new whale () with my own hands. This (ロ)-in a () experience (ハ) ()."

設 問

1. 英文の空所 (あ) ~ (え) に入る最も適当なものをそれぞれA~Dより1つ選び、その記号をマーク解答用紙にマークしなさい。

- あ. A. sleeping B. slept C. sleep D. asleep
い. A. in and out B. here and there C. back and forth D. to and from
う. A. difference B. clock C. lost D. sequence
え. A. ahead B. behind C. front D. back

2. 下線部がグレッグが手渡した日本文の英訳となるように、空所に入る最も適当なものをA~Iよりそれぞれ1つ選び、文を完成させなさい。答えは空所 (イ) (ロ) (ハ) に入るものの記号のみをマーク解答用紙にマークしなさい。ただし、選択肢には使用しないものが2つ含まれている。

- A. me B. discovery C. lifetime D. dug E. excites
F. fossil G. times H. species I. once

3. 英文の内容と一致しないものをA~Dより1つ選び、その記号をマーク解答用紙にマークしなさい。

- A. John fell asleep about an hour before they arrived in Tokyo.
B. Greg is excited about seeing Japan.
C. It is Monday night in Chicago when John and Greg arrive in Tokyo.
D. John, Greg and Kenji will leave Tokyo on Thursday to go to a hot spring and see Mount Fuji and so on.