

2012 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、コンピュータ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（*印を付した語句は〔注〕を参照しなさい）。

(24点)

Japan and China reacted very differently after Western powers began knocking on their gates in the 19th century. Japan pursued a course of domestic reform and imitation of the West; China pursued a course of resistance to the West. Where China's confidence in their own civilization made them less ready to imitate Western systems, the Japanese (イ) confidence (ロ) their industrial achievement.⁽¹⁾

It is strange that in 1843, a decade before *Perry's ships steamed into Edo Bay (now Tokyo Bay) and more than a century before the Japanese began to flood the world with modern mechanical products, *Hans Christian Andersen wrote a story that can be seen as almost describing the contrasting ways in which the two nations were to respond to the Western world. In this story, *The Nightingale*, a Chinese emperor replaces his wonderfully singing nightingale in preference for a jeweled mechanical imitation sent to him by the emperor of Japan. The fake bird sings almost as well as the real thing and is much more consistent. But it finally breaks and falls silent, causing the emperor almost to die of despair.⁽²⁾ Then, on his deathbed, the emperor once again hears the song of the real bird and is miraculously revived.

*〔注〕 Perry ペリー（日本に開国を求めたアメリカの提督）

Hans Christian Andersen アンデルセン（デンマークの童話作家）

設 問

1. 下線部(1)が「日本は自信がなかったので、産業において成功した」という意味になるように、空所（イ）と（ロ）に入る最も適切なものを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。
A. resulted in B. lacked in C. resulted from D. result in
E. lack of F. lacking by
2. 下線部(2)を和訳しなさい。答えは記述解答用紙に書きなさい。
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。

西洋においては、日本は機械的な模倣が得意な文化を発展させたと見られてきた。

II 次の英文を読み、設問に答えなさい (*印を付した語句は〔注〕を参照しなさい)。

(20点)

Like the Sun and the Moon, stars always rise in the east and set in the west, taking the whole night to cross the sky if they pass overhead. There are different constellations in different seasons. The same constellations always rise at the ⁽¹⁾beginning of autumn, say. It never happens that a new constellation suddenly rises out of the east. There is an order, a *predictability, a permanence about the stars.

Certain stars rise just before or set just after the Sun — and at times and positions (イ) (ロ) ⁽²⁾with the seasons. If you made careful observations of the stars and recorded them over many years, you could predict the seasons. You could also measure the time of year by noting where on the horizon the Sun rose each day. In the sky was a great calendar, (イ) to anyone with dedication and ability and the (ロ) to (ハ) records. ⁽³⁾

Our ancestors built devices to measure the passing of the seasons. In *Chaco Canyon, in New Mexico, there is a great roofless ceremonial *kiva or temple, dating from the eleventh century. On June 21, the longest day of the year, a shaft of sunlight enters a window at dawn and slowly moves so that it covers a special *niche. But this happens only around June 21. I imagine the proud *Anasazi people gathered in their seats in the kiva every June 21, dressed in feathers and rattles and *turquoise to celebrate the power of the Sun. They also monitored the apparent motion of the Moon: the twenty-eight higher niches in the kiva may represent the number of days for the Moon to return to the same position among the constellations. These people paid close attention to the Sun and the Moon and the stars. Other devices based on similar ideas are found at *Angkor Wat in Cambodia and *Stonehenge in England.

Why did people all over the world make such an effort to learn astronomy? We hunted *antelope and buffalo whose migrations ebbed and flowed with the

seasons. Fruits and nuts were ready to be picked in some times but not in others. When we invented agriculture, we had to take care to plant and harvest (あ). The ability to read the calendar in the sky was literally (い). The reappearance of the crescent moon after the new moon; the return of the Sun after a total eclipse; the rising of the Sun in the morning after (う) were noted by people around the world: these phenomena spoke to our ancestors of the possibility of surviving death.

*[注] predictability 予測可能性

Chaco Canyon チャコキャニオン (米国, ニューメキシコ州北西部の保護地域; 古代インディアンの遺跡がある)

kiva キーヴァ (ニューメキシコ, アリゾナ州などに住んでいたプエブロインディアンの地下あるいは半地下の大広間; 宗教儀式・会議・その他に用いられた)

niche 壁のくぼみ

Anasazi people アナサジ族 (プエブロインディアンの一部族)

turquoise トルコ石

Angkor Wat アンコールワット (カンボジアにある石造寺院の遺跡)

Stonehenge ストーンヘンジ (英国にある巨大な石柱群)

antelope レイヨウ (シカに似たウシ科の動物)

設問

1. 下線部(1)の語について, 次の英文がその説明となるように空所 (イ) (ロ) に入る最も適当なものをA~D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。

A constellation is a (イ) of stars in the sky which seems to form a particular (ロ) or shape and which has a name.

A. glimpse B. group C. pattern D. stream

2. 下線部(2)が「季節とともに変わる時間と位置で」という意味になるように空所 (イ) (ロ) に入る最も適当なものをA~D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。
- A. that B. vary C. various D. on
3. 下線部(3)が「専心と能力、また記録をつける手段を持つ人なら誰にでも利用できる」という意味になるように空所 (イ) ~ (ハ) 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。
- A. approach B. means C. keep D. release E. available
F. occasions
4. 本文第3節の内容と一致するものを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. Anasazi people's ceremonial kiva in Chaco Canyon is about a thousand years old.
- B. Anasazi people are thought to have performed a ceremony every June 21 to worship the motion of the Moon.
- C. A special niche in the wall of Anasazi people's kiva is positioned so that a shaft of sunlight may cover it all year around.
- D. Anasazi people were probably ignorant of the number of days the Moon takes for its return to the same position among the constellations.
5. 空所 (あ) ~ (う) に入る最も適当なものをA~D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。
- A. its troublesome absence at night
- B. a very bright star with a tail
- C. a matter of life and death
- D. our crops in the right season

III 次の英文の空所 (イ) ~ (ト) に入る最も適当なものを下の A ~ H 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 (*印を付した語句は [注] を参照しなさい)。(14 点)

The word *geography* is derived from Greek, and signifies the writing about or description of the earth.

In form, the earth is a sphere; astronomically, it is one of the planets which revolve in eternal motion around the sun. The earth itself is (イ) the following: the rocky solid substance, called the *lithosphere; the liquid substance which fills the hollows, called the *hydrosphere; and the gaseous substance which surrounds the entire earth, called the atmosphere.

(ロ) the conditions of the earth, varied animal and plant life has multiplied over the earth's surface. Today, with the benefits of modern science, differences in geography matter less to civilized man, who has, in some respects, conquered the globe by discovery and research. The interrelationships of man, in commerce, give rise to the distribution of man's activities, as those have been adapted to local conditions in various parts of the world. The activities of groups of men are further controlled by (ハ) called government, which varies, too, in different localities.

The earth revolves around the sun and at the same time the earth revolves around its own axis. The change of the seasons and the daily change from day to night and from night to day depend on (ニ). The relative position of the earth as it receives the sun's rays of light and warmth causes (ホ) into the torrid, temperate, and frigid zones of climate, which vary to some extent with the seasons. The torrid zone, in the region of the equator, is the hottest; the frigid zones, in the region of each of (ヘ), are the coldest: North (Arctic region) and South (Antarctic region). The temperate zones are both hot and cold, in a manner of speaking, having marked changes of winter and summer, and they are

(ト) the torrid and frigid regions.

*〔注〕 lithosphere 岩石圏 (地球表面上の固体部分)

hydrosphere 水圏 (地球表面上で水の占める部分)

- A. this compound motion
- B. a manmade system
- C. made up of
- D. the two poles
- E. located between
- F. the division of the surface
- G. the low latitudes
- H. depending on

IV 次の英文を読み、設問に答えなさい（*印を付した語句は〔注〕を参照しなさい）。

(23点)

Naomi, a Japanese student who is studying English privately with her tutor Mary, reads the following essay as homework.

Astronomers who search for life on other planets have recently been excited by two findings: first, evidence that liquid water is present under the ice-covered surface of Jupiter's moon *Europa; and second, the discovery of cells (あ) below Earth's surface,

(い) in the solar system is exciting because life is probably impossible in the absence of liquid water. Finding evidence for liquid water on Europa narrows the search for *extraterrestrial life — it gives scientists a promising place to look.

(う) of Earth suggested that life could also be found under the surface of Mars, the Moon, or other bodies. Cells have recently been found in Earth rocks located up to 860 meters below the surface. These discoveries have extended a general realization — that organisms are found in a wide variety of extreme environments on Earth. Species of the single-celled organisms called bacteria and *archaea, and sometimes even multicellular (many-celled) animals, can thrive within glaciers, in extremely high pressure water near superheated steam *vents deep in the ocean floor, in hot springs, and in ponds that have a lot of salt. The presence of life in extreme environments on Earth has encouraged astronomers to suggest that life may also exist in extreme environments in space. Planets and moons that appear to be lifeless could actually be (え) just below the surface.

As biologists gain a better understanding of *chemical evolution and the diversity of life on ancient Earth, the search for extraterrestrial life has become more focused. Few astronomers expect to find the sophisticated types of life-forms favored by science fiction writers. Instead, astronomers are (お)

and traces of single-celled life-forms similar to Earth's bacteria and archaea.

(か) would instantly qualify as a tremendous scientific advance. It would reject the hypothesis that chemical evolution occurred just once and that life is unique to Earth. It would also open up the possibility of (き) the universe — perhaps in the recently discovered planetary systems that are currently forming around young stars.

*[注] Europa 木星の第二衛星エウロパ

extraterrestrial life 地球外生命体

archaea 古細菌 (高濃度の塩水や高酸性・高温の温水の中など、他の生物が生存しえない特殊な環境でしか生育できない細菌)

vents 火道 (マグマが地殻内部から地表へ上昇する通路)

chemical evolution 化学進化 (地球上の生命発生の第1段階で、単純な炭素化合物が自発的反応により次第に複雑な化合物、高度な化学反応システムへと推移し、ついには原始細胞の出現に至る過程)

設 問

1. 英文の空所 (あ) ~ (き) に入る最も適当なものをA~H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. looking for evidence of water
- B. living in rocks hundreds of meters
- C. confirming that liquid water exists elsewhere
- D. traveling to the moon
- E. finding organisms under the deep surface
- F. finding organisms in many locations throughout
- G. finding life elsewhere in the solar system
- H. swarming with organisms

2. 上記英文のタイトルとしてふさわしいものを、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. World Without Water B. The Search for Extraterrestrial Life
C. Life in Deep Earth D. Earth and Its Secrets

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。(19点)

Mary, a recent university graduate from the USA, has decided to live in Japan for one year to study Japanese before returning to the USA to study in graduate school. She meets with her private student Naomi to discuss Naomi's homework assignment.

Mary: Have you (あ) reading the essay I gave you for homework?

Naomi: Yes, a few minutes ago. It was a little difficult but very interesting.

Mary: Do you have any questions?

Naomi: Yes, in the second paragraph of the essay it says: "Finding evidence for liquid water on Europa narrows the search for extraterrestrial life."
What does "narrow the search" mean?

Mary: Well, that sentence can be paraphrased like this: Finding evidence for liquid water on Europa reduces (イ) (⁽¹⁾) possible locations (ロ) (ハ) () ().

Naomi: Oh, I see. So it means there is a chance that Europa might (い) life if it actually has liquid water, right?

Mary: Very good, Naomi.

Naomi: Another question: The next to the last sentence in the third paragraph says: "The presence of life in extreme environments on Earth has encouraged astronomers to suggest that life may also exist in extreme environments in space." Is the following sentence another way to say the same thing? (イ) () evidence (ロ) life () (ハ) in extreme environments on Earth, astronomers have suggested ⁽²⁾ that life may also exist in extreme environments in space. Is that right?

Mary: Yes. Well done.

Naomi: Sensei, may I ask you a personal question?

Mary: Sure.

Naomi: How long have you been in Japan?

Mary: Since May, right after I graduated from university. I came here and met with my friends John and Greg. They returned home, but I'll stay here for a year because I want to (う) my Japanese language skills.

Naomi: What will you do when you return home?

Mary: I will enter graduate school and continue studying biology.

Naomi: What is graduate school?

Mary: It's called *daigakuin* in Japanese.

Naomi: When did you realize that you liked science?

Mary: Actually, I was encouraged to study science by my mother who is a pharmacist and my father who is an engineer. I was home schooled, so they made sure I had (え) math and science.

Naomi: Oh, I have two questions: what is a pharmacist and what is home school?

Mary: Well, a pharmacist is a person who makes drugs and medicine. Home schooling means that a person stays at home and studies rather than going to a traditional school.

Naomi: Oh, I see. Were you lonely (お) home schooling? I mean you can have many friends in school.

Mary: Not really because I belonged to several clubs and always had fun with other children in my neighborhood. Ok, enough about me. Here is a sentence in Japanese. I want you to complete the English translation.

Mary hands Naomi the Japanese sentence and the English translation for Naomi to complete:

「ある科学者は、観察していた数種類の隕石（いんせき）に、明らかに地球のものではないバクテリアの化石を発見したと主張している。」

A scientist (イ) he has discovered evidence of fossilized bacteria that are not

(3)

() () (ロ) in the several meteorites he () ()
(ハ).

設 問

1. 英文の空所 (あ) ~ (お) 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. done B. quit C. finished D. ended

い. A. support B. destroy C. find D. deny

う. A. succeed B. get C. brush D. improve

え. A. a great distrust for B. no chance for

 C. a strong background in D. difficulty with

お. A. by way of B. because of C. without D. instead of

2. 下線部(1)の空所に入る最も適当なものをA~G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. for B. of C. to D. extraterrestrial life

E. search F. leave G. the number

3. 下線部(2)の空所に入る最も適当なものをA~F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。また、文頭の文字もすべて小文字で表示してある。

A. encouraged B. present C. that D. by E. of F. is

4. 下線部(3)がメアリー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~H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. studying B. been C. predicts D. claims E. earthly
F. origin G. of H. has