

クラス		受験番号	
出席番号		氏 名	

2012年度 全統高2記述模試問題 英 語

2013年1月実施

(100分)

試験開始の合図があるまで、この問題冊子を開かず、下記の注意事項をよく読むこと。

注 意 事 項

1. 問題冊子は14ページである。
2. 解答用紙は別冊になっている。(「受験届・解答用紙」冊子表紙の注意事項を熟読すること。)
3. 本冊子に脱落や印刷不鮮明の箇所及び解答用紙の汚れ等があれば、試験監督者に申し出ること。
4. 解答すべき問題数は5題で、リスニングを必要とするか否かによって次のようになっている。指示に従って解答すること。

リスニング	問 題 番 号
必要とする	① ③ ④ ⑤ ⑥
必要としない	② ③ ④ ⑤ ⑥

5. 試験開始の合図で「受験届・解答用紙」冊子の英語の解答用紙(2枚)を切り離し、下段の所定欄に **氏名・在学高校名・クラス名・出席番号・受験番号** (受験票の発行を受けている場合のみ) を明確に記入すること。なお、氏名には必ずフリガナも記入のこと。
6. 解答には、必ず黒色鉛筆を使用し、解答用紙の所定欄に記入すること。
7. 指定の解答欄外へは記入しないこと。採点されない場合があります。
8. 試験終了の合図で上記5.の事項を再度確認し、試験監督者の指示に従って解答用紙を提出すること。

英語の問題は次のページから始まる。

1 【②との選択問題】

これから英文が読まれます。その英文の内容に合致するように、指示に従って、問1～問5に解答しなさい。なお、英文は2度繰り返されます。また、放送を聞きながらメモを取ってもかまいません。(配点 20点)

I 問1～問4は、与えられた選択肢①～④の中から最も適当なものを1つ選び、その番号を解答欄に記入せよ。

問1 Camels are a great help to desert peoples because _____.

- ① they can carry over 1,000 pounds
- ② they are useful to them in many ways
- ③ they provide people with food and water
- ④ they move slowly, only three miles an hour

問2 When the camel cannot find food, _____.

- ① it can survive on a diet of water
- ② its hump begins to change shape
- ③ its intuitive sense tells it where food is
- ④ it lowers the body temperature to save energy

問3 For camels, almost anything, including dry leaves and seeds, can be food, and they _____.

- ① have sharp teeth inside their mouths
- ② can eat cactus as long as it has no thorns
- ③ particularly like the meat of cows and sheep
- ④ might try to eat what their owners are wearing

問4 In summer, camels can manage without water for several days because

_____.

- ① they have some way of converting fat into water
- ② they can control their body temperature as they like
- ③ they can precisely control their body temperature in a variety of ways
- ④ they don't need to sweat as a way of keeping their temperature steady

II 問5は、読み上げられた英文の内容に基づいて、以下の英文を完成させるために、
下線部に入れるべき7語(7 words)を、読み上げられた英文の該当箇所からそのまま
抜き出して解答欄に記入せよ。

問5 The hair of the camel is thick and sturdy, and _____, it
can be woven into blankets and tents.

2 【①との選択問題】

以下の英文を読んで、設問に答えよ。(配点 20点)

Mothers have to communicate with children — not just to comfort them, but to warn them of danger. This protects the individual child and may, in an expanded picture, be essential to the overall survival of the species. Researchers regard such communication — nurturing, protective — as so necessary that they suggest it created women’s verbal advantage over men.

Evolutionary psychologists such as Ann Fernald at Stanford University have found that mothers talk to their infants in a particularly high, *crooning voice. A mother raises her voice by as much as two octaves, the equivalent of 16 ivory-colored piano keys, when (1) a baby. Fathers’ voices rise also, but less dramatically — perhaps half an octave, or four piano keys. Fernald finds the same maternal pattern across cultures. American, French, German, Italian, Chinese, African, Japanese — all mothers scale up for infants, and not just for their own. Babies respond to the tone more than the words. An American infant smiles as readily at the music of a voice speaking in Japanese ⁽²⁾[as / at / English / in / one / of / speaking / that]. It’s the “song” that counts. Recently, British scientists suggested that this maternal music fits beautifully with the idea that carrying babies on the left helps nurture them emotionally. The position means that a mother would be crooning into the infant’s left ear. Thus the sounds are processed by the right *hemisphere of the brain, (3) neuroscientists think emotions are mainly processed.

“I’m arguing that the *vocalizations of mothers are well matched to the sensitivities and needs of the infants,” Fernald says. At the same time, she points out, this style of communication would be distinctively out of place elsewhere. “Imagine turning to a coworker, or a fellow subway passenger, and (4) as we do to a baby: up close, in the face, suddenly high in the fluting notes of the *treble range. They’d think you’d gone crazy.”

Fernald has found, playing tape-recorded voices to them, that infants turn

more readily toward a woman's high-note sounds than toward the tones the same woman might use to an adult. And the heart of the infant slows, calms, and steadies, beating more gently as it hears that particular music of a mother's voice. Comfort, in this sense, is anything (5) a luxury; the comfort that a mother gives her child appears basic, biological, and continuous with (perhaps part of) the same developmental process that goes on in the *womb. In this *intertwining of mother and child—a tale of two hearts—the evolutionary argument for emotional differences between men and women begins.

(注) croon: 優しくささやく hemisphere: 半球 vocalization: 発せられた声 treble: かん高い
womb: 子宮 intertwining: からみ合い

問1 空所(1)に入れるのに最も適当なものを、次の(ア)～(エ)の中から1つ選び、その記号を解答欄に記入せよ。

(ア) address (イ) addresses (ウ) addressing (エ) addressed

問2 下線部(2)の語を並べかえて、適切な英文にせよ。

問3 空所(3)に入れるのに最も適当なものを、次の(ア)～(エ)の中から1つ選び、その記号を解答欄に記入せよ。

(ア) how (イ) which (ウ) when (エ) where

問4 空所(4)に入れるのに最も適当なものを、以下の語群から1つ選び、適切な形にして解答欄に記入せよ。

[語群] feel listen look talk

問5 空所(5)に入れるのに最も適当な英単語1語を解答欄に記入せよ。

3 次の1～10の英文の空所に入れるのに最も適当なものを、それぞれ(ア)～(エ)の中から1つずつ選び、記号で答えよ。(配点 30点)

1. You need to have a better understanding of what it is () to work outside the home.

(ア) alike (イ) like (ウ) liked (エ) likely

2. By the time I come back, the programmer () the bugs found in the software and the computer will be running properly again.

(ア) fix (イ) will be fixing (ウ) will fix (エ) will have fixed

3. His shirts (), he could pick them up any time he liked.

(ア) had been cleaned (イ) having been cleaned
(ウ) having cleaned (エ) were cleaned

4. A series of problems led () serious stress in school.

(ア) the students experience (イ) the students have experienced
(ウ) to experience the students (エ) to the students experiencing

5. We had no idea () to start looking for the child, because no sound could be heard.

(ア) of what (イ) why (ウ) as to which (エ) where

6. A prize will be awarded to () writes the best essay.

(ア) anybody (イ) those who (ウ) whoever (エ) whomever

7. I like having too many things to do much better than () nothing to do.

(ア) having (イ) I have (ウ) there having (エ) there is

8. What she was proud () was her husband's promotion. She thought he would get home much later than ever.

(ア) but sorry (イ) of sorry about
(ウ) of but sorry (エ) of but sorry about

9. Nowhere else in the world () many unique animals live as in the Galapagos Islands.

(ㄱ) are there so (ㄴ) do so (ㄷ) have as (ㄹ) there are as

10. The way tabloid newspapers can print what they like about some celebrities () evil and wicked.

(ㄱ) are (ㄴ) do (ㄷ) does (ㄹ) is

4 次の英文の下線部(1)～(3)を和訳せよ。(配点 45点)

Eminent scientists from the seventeenth and eighteenth centuries defended the *phlogiston explanation of heat and chemical change. One of the best thinkers of his time, Georg Ernst Stahl, popularized the idea while a professor at the University of Halle from 1694 to 1716. ⁽¹⁾Phlogiston was an “element” said to be contained in all substances that could be burned and it was used to explain and predict all things relating to heat and fire. It was thought to be a material that did not just contain heat but was itself the heat. Phlogiston was without color, smell or taste. When you burned something, you were driving all of the phlogiston out of the material. Often this left behind only ash.

Here is how phlogiston seemed to work: Such chemicals as *charcoal and *sulfur were thought to be made almost completely of phlogiston. ⁽²⁾This was because when you burned them there was nothing left except a little ash, which was explained as the impurities in the phlogiston.

Take another example: If one room was warm and the other cool and you opened a door between them, then the phlogiston, like any gas or liquid, would seek to balance itself between the two rooms. Phlogiston would flow into the cool room and out of the warm, phlogiston-filled room; and since it's the essence of heat, it would raise the temperature of the cooler room and lower that in the warmer room. Eventually the amount of phlogiston would level out between the two rooms, and they would be the same temperature.

The remarkable thing about this amazing theory was that it seemed to work and was used by eminent and respected scientists for an entire century before it was finally proven wrong. ⁽³⁾It was not until science progressed to the point where researchers understood the *fluid dynamics of the second example and *Lavoisier explained the chemical changes that occurred in burning charcoal that the idea of phlogiston died out.

(注) phlogiston: フロギストン charcoal: (木)炭 sulfur: 硫黄

fluid dynamics: 流体力学 Lavoisier: ラヴォアジエ (18世紀フランスの化学者)

英語の問題は次のページに続く。

5 次の英文を読んで、設問に答えよ。(配点 70点)

Language is one of the defining features of humans. (1) other species communicate with simple, nonverbal cues, and some (birds and whales, for example) may even convey relatively simple ideas using calls, we are the only species that has ever evolved the ability to communicate complex ideas using long strings of words.

Verbal communication is one of the most difficult things we do. Think about a typical conversation, which requires not only mastery of the grammatical rules that underlie the structure of the language, knowledge of a wide variety of vocabulary terms, and short- and long-term memories to provide a context, but also a complex set of *motor skills involving roughly a hundred muscles in the face, mouth, and throat. ⁽²⁾The latter is important, as young children typically understand far more words than they can pronounce correctly. The real excitement of our language ability, though, lies within our brains.

Chimpanzees, which lack the finely tuned motor *apparatus necessary to produce speech, can be taught *sign language as a means of communication. They can construct a wide variety of two-word sentences that express simple ideas, like “eat banana” or “go outside,” but they (3) the *syntax necessary to produce a complex sentence such as the one you are reading now. Because of this great gap between us and other species, even intelligent ones like chimps, anthropologists believe that language developed relatively late in *hominid evolution.

According to genetic data, the lines leading to chimpanzees and humans split around six million years ago. Assuming that our first ancestor on the line leading to humans had language abilities no better than all other *apes do today, this means that our language abilities must have developed in the past six million years. But when along the evolutionary path did that occur?

One way of answering ⁽⁴⁾this question is to examine the changing patterns of *anatomy on the line leading to modern humans. ⁽⁵⁾Although we are uncertain of

exactly what our earliest ancestors looked like, they were more ape-like than we are. The first marked transition was the emergence of bipedalism, or walking upright on two legs. This happened long before the second major step forward — an enlarged brain — and could have arisen as early as 4.5 million years ago in the hominid *Ardipithecus*. Why hominids became bipedal is greatly debated. ⁽⁶⁾Since brain size had not increased significantly, and tools are not in evidence from these early hominid sites, Darwin's idea that bipedalism freed the hand for tool use doesn't hold as a theory to explain what caused them to walk upright.

The next major leap occurred when brains became bigger. Brain size leapt from an ape-like few hundred cubic centimeters in the *australopithecines to 600 to 700 cubic centimeters in *Homo habilis*, the first member of our *genus, and 800 to 1,200 cubic centimeters for *Homo erectus*. Hominids began to use tools during the time of *Homo habilis*, around 2.3 million years ago, and the increasing complexity of thought that accompanied this likely drove the increase in brain size.

Brain size continued to grow for the next 1.5 million years, until by 500,000 years ago it measured 1,300 cubic centimeters, comparable to that of modern humans. These big-brained hominids would have been the ancestors of Neanderthals as well, and we now know that the Neanderthals had on average 10 percent larger brains than modern humans. (7), though, as the results indicate: We drove the Neanderthals to extinction within a few thousand years of entering their habitat in western Europe, even though our brains were not as massive.

So why did we win out against the Neanderthals? We were smarter, and our improved brains probably grew along with the development of fully modern, syntactic language, like that we use today; this linguistic advance represents the final stage in the development of modern humans.

(注) motor skill: 運動能力 apparatus: 器官 sign language: 手話 syntax: 統語法, 文法
hominid: ヒト科の動物(の) ape: 類人猿, サル anatomy: 解剖学的構造
australopithecine: アウストラロピテクス (*Australopithecus* 属の猿人)
genus: 属 (生物学上の分類)

問 1 空所(1)に入れるのに最も適当なものを, 次の(ア)~(エ)の中から 1 つ選び, その記号を解答欄に記入せよ。

(ア) Until (イ) If (ウ) Unless (エ) While

問 2 下線部(2)の具体的な内容を日本語で書け。

問 3 空所(3)に入れるべき 1 語を第 3 段落から抜き出し, その語を解答欄に記入せよ。

問 4 下線部(4)の具体的な内容を日本語で書け。

問 5 下線部(5)を和訳せよ。

問 6 下線部(6)を和訳せよ。

問 7 空所(7)に入れるのに最も適当なものを, 次の(ア)~(エ)の中から 1 つ選び, その記号を解答欄に記入せよ。

(ア) Brain isn't anything (イ) Brain isn't everything
(ウ) Size isn't anything (エ) Size isn't everything

問 8 本文の内容に一致するものを, 次の(ア)~(エ)の中から 1 つ選び, その記号を解答欄に記入せよ。

(ア) 文法規則を習得し, 広範な語いの知識と記憶力さえ持っていれば, 日常会話は行える。
(イ) チンパンジーは, 「バナナを食べる」や「外に出る」といった簡単なことは鳴き声で伝えることができる。
(ウ) 直立歩行と脳の増大は, 現生人類が生まれる上で大きな出来事であった。
(エ) 私たちは, 脳がネアンデルタール人ほど大きくないので, 彼らを絶滅に追いやることができた。

問9 本文のテーマとして最も適当なものを，次の(ア)～(エ)の中から1つ選び，その記号を解答欄に記入せよ。

- (ア) How did we begin to walk upright and use tools?
- (イ) What is the difference between us and chimpanzees?
- (ウ) How did our brain and language develop?
- (エ) Why did the Neanderthals have larger brains than we?

6 次の日本文(A), (B)を英訳せよ。ただし, (B)は下線部のみを英訳せよ。(配点 35点)

(A) 先日, 買い物をしているとき, たまたま小学校の友達と数年ぶりに出会ったが, 髪型がすっかり変わっていて, 最初は誰だかわからなかった。

(B) サッカーの練習中に足を骨折して, 1ヶ月間入院した。多くのクラスメートが見舞いに来てくれたり, 励ましの電子メールをくれたりしたが, 一番うれしかったのは手書きの手紙だった。そうした手紙を読むと, まるで彼らの声が聞こえているような気がした。

