クラス		受験番号	
出席番号		氏　名	

2014年度
第1回 全統記述模試問題
英　語

2014年5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18ページである。
2. 解答用紙は別冊になっている。(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問で，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・卒高校名**・**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。解答欄外に記入された解答部分は，採点対象外となる。
7. 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。

河合塾

1461210111110000

英語の問題は次のページから始まる。

1 【2との選択問題】 （配点 15点）

解説

これから英文とその内容に関する5つの質問文が読まれる。その質問文の答えとして最も適当なものを(A)～(D)の中からそれぞれ1つずつ選び，記号で答えよ。なお，英文と質問文は2度繰り返される。また，放送を聞きながらメモをとっても構わない。

1.

(A) He was a famous guitarist.

(B) He was a professional biker.

(C) He worked as a full-time caregiver.

(D) He worked for a grocery store.

2.

(A) $300,000

(B) $100,000

(C) $30,000

(D) $17,000

3.

(A) He found Brecon's website.

(B) His mother showed him the story about Brecon.

(C) He used to work for the St. Louis Children's Hospital.

(D) Brecon wrote a letter to Dan.

4.

(A) He thought Brecon was more in need of medical care.

(B) He thought it would make his own situation a lot easier.

(C) He thought nothing could ever enable him to walk anyway.

(D) He thought he had more than enough money to fulfill his dream.

5.

(A) The government offered the boy specialized medical help.

(B) Brecon's family started another charity fund.

(C) Money came pouring in to Brecon's fund.

(D) Dan took people's attention away from Brecon.

2 【1との選択問題】 (配点 15点)

解説

次の英文を読み，文中の空所(1)～(5)に入れるのに最も適当なものを，(ア)～(エ)の中からそれぞれ1つずつ選び，記号で答えよ。

A town in Norway has placed giant mirrors on top of the hills surrounding it, to beam light into the valley in the dark winter months. Rjukan, a town of 3,500 people (1) 100 miles west of Oslo, is encircled by steep forested hillsides and cut off from direct sunlight for six months of the year. The authorities, (2), decided to put three mirrors on top of the hills which were positioned to reflect a 6,500-square-foot patch of light onto the town square.

"We think it will mean more activities in town, especially in autumn and wintertime," said Karin Roe, head of the town's tourist office. "People will be out more."

The mirrors are controlled by a computer to (3) the path of the sun, adjusting to the best angle to catch the rays and reflect them onto the centre of the town.

The idea was first floated 100 years ago by Sam Eyde, an industrialist and the town's founder, but was only (4) possible with modern technology. In 1928 his successor built a cable car to the top of the nearby mountain so that residents could appreciate some sunlight. But it wasn't until this year (5) the scheme was completed, with helicopters hoisting the mirrors 1,500 feet above the town to launch the 5 million krone ($924,660) scheme.

(1) (ア) situate (イ) situating (ウ) situated (エ) to situate

(2) (ア) nevertheless (イ) therefore
(ウ) for example (エ) on the other hand

(3) (ア) block (イ) cross (ウ) make (エ) follow

(4) (ア) made (イ) took (ウ) become (エ) had

(5) (ア) which (イ) after (ウ) that (エ) so

3 次の設問A・Bに答えよ。(配点　20点)　　解説

A　次の1～8の英文の空所に入れるのに最も適当なものを，(ア)～(エ)の中からそれぞれ1つずつ選び，記号で答えよ。

1．He (　　) on the ground with his face twisted in pain.

(ア) lay　(イ) was laying　(ウ) laid　(エ) has laid

2．I didn't know what to say in that situation, so I kept my mouth (　　).

(ア) shut　(イ) to shut　(ウ) was shut　(エ) had shut

3．Barry was (　　) to give police a description of his attacker.

(ア) capable　(イ) impossible　(ウ) possible　(エ) unable

4．After my children (　　) school, I stripped the beds and vacuumed the carpets.

(ア) left for　(イ) left to　(ウ) leave to　(エ) have left for

5．The couple had a serious disagreement. They were not on speaking (　　).

(ア) friendship　(イ) relationship　(ウ) words　(エ) terms

6．(　　), being fired or laid off means you are out of a job.

(ア) Simply put　(イ) To simply put

(ウ) To put simply　(エ) Put it simply

7．Some psychologists say women tend to (　　) their success to external causes such as luck.

(ア) achieve　(イ) attribute　(ウ) celebrate　(エ) promote

8．(　　) they came to that conclusion?

(ア) What do you think　(イ) How do you think

(ウ) Whether do you know　(エ) When do you know

B　次の１，２の各組の英文ａ，ｂ，ｃの空所に共通して入れるのに最も適当な語を，それぞれ１語の英語で書け。

1.

a. No one could play the trumpet (　　) he did.

b. What I really (　　) about her is her sense of humor.

c. I haven't met Alan.　What's he (　　)?

2.

a. Japan should play a leading (　　) in the international community.

b. Because of a misunderstanding on my (　　), he had to do the job again.

c. I'm planning to move out, so I have to (　　) with my favorite books.

4 次の英文を読み，以下の設問に答えよ。（配点　60点）　解説

The wheel is the most crucial element of the bicycle: it allows the rider to roll over the ground with great speed and efficiency. Historians believe the wheel originated in Mesopotamia sometime around 3,500 BC. While the *Sumerians did not pedal their way through ancient Mesopotamia, animal-powered wheeled *chariots and carts helped transport goods and people for thousands of years. (1)During the industrial revolution in the 19th century, advances in materials and engineering made it possible to use the wheel effectively in human-powered machines. The modern bicycle, complete with a steel frame, a chain drive, steel wheels and spokes, and *pneumatic tires, would emerge in the late 1800s.

While the use of the wheel was widespread in ancient times, (2)it did have limitations. The resistance to the motion of a wheel can vary tremendously depending on the surface on which it is traveling. A rough road is much harder to roll over than a smooth one. The Romans were aware (　A　) this and developed a massive network of paved roads. While this may have been the first time in history that roads were improved to facilitate the wheel, it certainly wasn't the last. In the United States in the 1890s, cyclists successfully lobbied for improvements in roads nationwide, and with cycling the nation's most popular sport at the time, *legislators listened.

When most people think about early bicycles, the *high-wheelers of the late 1800s come to mind. These early models had names such as the "Ordinary" or "Xtraordinary." In England, these bicycles were also known (　B　) "penny farthings" because the large and small wheels reminded people of the large one-penny coin and the smaller farthing coin.

The pedals were attached directly to the front wheel of the high-wheelers. (3)The larger the front wheel on a bicycle of this type, the farther the cyclist would travel with each turn of the pedals. Harvard scientist Paul Doherty explained, "Every time the pedals went around once, that whole giant front wheel would go around once. So, (　C　) one cycle of the bicyclist's legs he might go 140 inches

(3.556 meters), a tremendous distance forward." This made pedaling up hills quite difficult, but allowed for great speed on the flat.

While the high-wheelers were quite efficient, they were also dangerous: the cyclist was very high off the ground and perched precariously over the front wheel. So, while the high-wheelers broke speed and distance records, they quickly gained notoriety for the dangers involved in riding them. The slightest obstacle in the road could result in a nasty head-first fall. "Headers" or "taking a header" were common terms used to describe (4)this all-too-frequent problem. With a high center of gravity and narrow tires made of solid rubber (which occasionally could roll off their rims), high-wheeled bicycles were designed for (5-a), not for (5-b).

The safety bicycle that was developed in the 1880s closely resembles the bicycles of today. The rider is suspended on a metal frame between two wheels of equal size. A chain drive mechanism connects the pedals to the rear wheel. The stability and comfort of the design was superior (D) that of the high-wheelers, and so earned the "safety" its name.

(注) Sumerian: シュメール人　　chariot: チャリオット（古代ローマなどの二輪戦車）
pneumatic tire: 空気タイヤ　　legislator: 立法府の議員
high-wheeler: 前輪が非常に大きいタイプの自転車

問1　下線部(1)を和訳せよ。

問2　下線部(2)は具体的にはどういうことか。最も適当なものを，次の(ア)～(エ)の中から1つ選び，記号で答えよ。

(ア)　走行中に車輪が簡単に脱落したこと。

(イ)　車輪の動力を人力に頼らねばならなかったこと。

(ウ)　路面が悪いと車輪の動きも悪くなったこと。

(エ)　車輪の素材が木材に限られていたこと。

問3　下線部(3)を和訳せよ。

問4　下線部(4)は，具体的にはどのような問題なのか。本文に即して，句読点を含めて30字以内の日本語で説明せよ。

問5　空所(5-a)，(5-b)に入れる組み合わせとして，最も適当なものを，次の(ア)～(エ)の中から1つ選び，記号で答えよ。

	(5-a)		(5-b)
(ア)	speed	——	safety
(イ)	speed	——	efficiency
(ウ)	safety	——	efficiency
(エ)	safety	——	speed

問6　空所(A)～(D)に入れるのに最も適当なものを，以下の選択肢(ア)～(エ)の中からそれぞれ1つずつ選び，記号で答えよ。

(A)	(ア)	over	(イ)	in	(ウ)	to	(エ) of
(B)	(ア)	as	(イ)	to	(ウ)	by	(エ) for
(C)	(ア)	for	(イ)	toward	(ウ)	of	(エ) from
(D)	(ア)	than	(イ)	to	(ウ)	of	(エ) with

問7　本文の内容に一致するものを，次の(ア)～(カ)の中から2つ選び，記号で答えよ。

(ア) In ancient times not only wheels but also pedals and animal-powered chariots were invented.

(イ) It was probably the ancient Romans that first paved roads for wheels.

(ウ) In the U.S. in the 1890s, cyclists asked politicians to improve the roads, but in vain.

(エ) People were able to buy a high-wheeler for one penny coin and one farthing coin.

(オ) The “Ordinary” models were equipped with two wheels of equal size.

(カ) In the late nineteenth century, bicycles similar to the modern bicycles appeared.

英語の問題は次のページに続く。

5 次の英文を読み，以下の設問に答えよ。(配点　60点)　解説

One of the most popular demonstrations I've done through the years involves risking my life by putting my head directly in the path of a *wrecking ball — a mini version of a wrecking ball, it must be said, but one that could easily kill me, I assure you. Whereas the wrecking balls used by demolition crews might be made from a bob, or spherical weight, of about a thousand kilos, I construct mine with a 15-kilo bob — about 33 pounds. Standing at one side of the lecture hall, with my head backed up against the wall, I hold the bob in my hands, snug up to my chin. (1)When releasing it I must be extremely careful not to give it any kind of a push, even the slightest one. Any push at all and it will surely injure me — or, as I say, possibly even kill me. I ask my students not to distract me, to make no noise, and even to stop breathing for a while — if not, I say, this could be my (　2　) lecture.

I have to confess that every time I perform this demonstration, I feel an *adrenaline rush as the ball comes swinging back my way; as sure as I am that (3)the physics will save me, it is always a bit alarming to stand there while it comes flying up to within a whisker of my chin. Instinctively I clench my teeth. And the truth is, I always close my eyes too! What, you may ask, possesses me to perform this demonstration? My utter confidence in one of the most important concepts in all of physics — the law of the conservation of energy.

One of the most remarkable features of our world is that one form of energy can be converted into another form, and then into another and another, and even converted back to the original. Energy can be transformed, but is never lost and never gained. In fact, this transformation happens all the time. All civilizations, not only ours but even the least technologically sophisticated, depend on (4)this process, in many variations. This is, most obviously, what eating does for us; converting the chemical energy of food into a compound called *adenosine triphosphate (ATP), which stores the energy our cells can use to do different kinds of work. It's what happens when we light a campfire, converting the chemical energy stored in wood or charcoal (the carbon in each combines with oxygen) into

heat and carbon dioxide.

It's (5)[an arrow / drives / the air / through / what] once it's been shot from a bow, converting the *potential energy, built up when you pull the bow-string back, into *kinetic energy, propelling the arrow forward. In a gun, it's the conversion of chemical energy from the gunpowder into the kinetic energy of rapidly expanding gas that propels bullets out of the barrel. When you ride a bicycle, the energy that pushes the pedals began as the chemical energy of your breakfast or lunch, which your body converted into a different form of chemical energy (ATP). (6)Your muscle cells then use that chemical energy, converting some of it into mechanical energy in order to contract and relax your muscles, which enables you to push the pedals. The chemical energy stored in your car battery is converted to electrical energy when you turn the ignition key. Some electrical energy goes to the cylinders, where it ignites the gasoline mixture, causing the gasoline to release chemical energy as it burns. That energy is then converted into heat, which increases the pressure of the gas in the cylinder, which in (7-a) pushes the pistons. These (7-b) the crankshaft, and the transmission sends the energy to the wheels, making them (7-c). Through this remarkable process the chemical energy of the gasoline is harnessed to allow us to drive.

(注) wrecking ball: 建物解体用の鉄球　　adrenaline rush: アドレナリンの突然の増加
adenosine triphosphate (ATP): アデノシン三リン酸（細胞内でエネルギーを蓄える働きをする物質）
potential energy: 位置エネルギー　　kinetic energy: 運動エネルギー

問1　下線部(1)を和訳せよ。

問2　空所(2)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，記号で答えよ。

(ア) best　　(イ) first　　(ウ) last　　(エ) recent

問3　下線部(3)で，筆者はどういうことを言っているのか。最も適当なものを，次の(ア)～(エ)の中から1つ選び，記号で答えよ。

(ア)　鉄球が自分には絶対当たらないということ。

(イ)　物理学で自分が将来生計を立てていくこと。

(ウ)　体を鍛えているのでケガしないということ。

(エ)　医者が自分の命を救ってくれるということ。

問4　下線部(4)の内容を，本文に即して，句読点を含めて40字以内の日本語で説明せよ。

問5　下線部(5)の[　　]内の語句を並べ換えて，文脈に合った英文を完成せよ。解答は，解答用紙の所定欄に下線部分のみを記入すること。

問6　下線部(6)を和訳せよ。

問7　空所(7-a)，(7-b)，(7-c)に共通して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，記号で答えよ。

(ア)　exchange　　(イ)　form　　(ウ)　place　　(エ)　turn

英語の問題は次のページに続く。

6 **次の設問A～Cに答えよ。**（配点　45点）　解説

A　次の1～4の日本文の意味になるように，それぞれ(　　)内の語(句)を並べ換えて英文を完成せよ。解答は，解答用紙の所定欄に(　　)内の並べ換えた語句のみを記入すること。ただし，文頭に来るものも小文字で示してある。

1．彼は当然自分が代表で話をするものだと思っていたようだった。

He（granted / it / have / that / seemed / taken / for / to）he should speak as a representative.

2．どんなにありそうにないと思えても，その可能性を否定することはできませんよ。

（may / matter / no / sound / how / it / improbable）to you, you cannot deny the possibility.

3．私の意見がどの程度伝わっているかははっきりしなかった。

It was not（were / what / clear / to / my views / shared / extent）.

4．ケネス・ヒルマンは数多くの銀行から借り入れることで，自分が企てていることの全体像をどこにも悟られずに済んだ。

By borrowing from dozens of banks, Kenneth Hillman managed to avoid（what / an overall picture / any of them / he was / of / up to / giving）.

B　次の１，２の日本文の意味になるように，下線部を補い英文を完成させよ。解答は，解答用紙の所定欄に下線部分のみを記入すること。

１．できるだけ早くこの手紙にお返事いただければ幸いです。

I would appreciate it _____.

２．視野を広げるために，一人旅に出ることをおすすめします。

I _____.

C　次の日本文の下線部を英訳せよ。

先日，人に勧められて高品質なイヤホンを一組買いました。高価なものなので最初は買うのをためらっていたのですが，先週の水曜日にインターネットで注文してしまいました。今ではもっと早く買えばよかったと思っています。これまでとは違う音楽の世界が頭の中に広がるのです。