

訂正

生物

(問題用紙 3)

問 3 (誤) 下線部②について

↓

(正) 下線部②について

英語

(問題用紙 4)

(38) の選択肢

(誤) (B) indicator

↓

(正) (B) integration

(問題用紙 5)

問 7 (誤) (A) You ... culinary art or art of cookery.

↓

(正) (A) You ... culinary art, or the art of cookery.

(一般前期)

近畿大学
医学部
平成24年度入学試験問題


英 語

注 意 事 項

1. 問題は、指示があるまで開かない。
2. マークシートへの記入は、HB鉛筆又はシャープペンシル (HB以上の芯) のみとする。
3. 監督者の指示に従ってマークシートに受験番号・氏名を記入し、受験番号をマークする。
4. 試験問題の数は50問で、解答時間は90分である。
5. 問題はすべて択一である。1問に2つ以上解答したときは誤りとする。
6. 各問題には最大6個の選択肢がある。それぞれの問題に応じて、解答をマークする。

解答例)

A B C D E F
☐ ☐ ☒ ☐ ☐ ☐ とマークする。

7. 解答を修正した場合は、消しゴムであとが残らないように完全に消す。
鉛筆の色が残ったり  のような消し方などをした場合は、修正したことにはならない。
8. マークシートは折り曲げたり汚したりしないよう注意する。

(一般前期)

平成24年度 入 学 試 験 問 題 英 語

- ◎ 英語の試験問題は6枚綴りになっています。
◎ 解答は必ず解答用紙に記入すること。

I. 次の英文の空所に入れるのに最も適切なものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。

- (1) Most of the drivers pulled () to the side of the highway to avoid the car chase.
(A) back (B) by (C) through (D) over
- (2) Have you heard the breaking news that an extremely strong typhoon () Japan?
(A) was approaching to (B) is approaching (C) was approaching for (D) is approaching forward
- (3) Thousands of tests were carried out to determine the () of the chemical in destroying the killer virus.
(A) formality (B) familiarity (C) efficacy (D) interactivity
- (4) We all prefer Atsuko's idea to Yuko's. Let's () it out with some data and our customers' opinions.
(A) flesh (B) sweat (C) hit (D) nail
- (5) It is so () of you to spare me some of your time when you are very busy.
(A) considered (B) considering (C) considerable (D) considerate
- (6) The sick smoker turned over () when he decided to quit smoking.
(A) a new petal (B) a new root (C) a new leaf (D) a new blossom
- (7) Takahiro was smiling from () to () during the entire wedding ceremony.
(A) eye (B) ear (C) tooth (D) wrinkle
- (8) Hey, look! There are a lot of () over there!
(A) cow (B) cattle (C) bull (D) ox
- (9) Nowadays when we use the word "book," we mean a () text, but in ancient times, books were too large to be carried.
(A) bound (B) bounding (C) binding (D) bounded
- (10) Space agencies are now developing telescopes () will search for signs of life on earth-size planets.
(A) so that (B) by using which (C) that (D) in order to

II. 次の各日本文の英訳として、文法や意味からみて最も適切なものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。

- (11) わたしの叔母は宝石を奪われた。
(A) My aunt's jewels were robbed.
(B) My aunt had some jewels rob.
(C) Some jewels were robbed of my aunt.
(D) My aunt was robbed of some jewels.
- (12) 学校を出たとたん、土砂降りの雨が降り出した。
(A) Hardly I left the school when did it begin to rain cats and dogs.
(B) Hardly had I left the school when it began to pour.
(C) Scarcely I had left the school before it began to rain heavily.
(D) Scarcely had I left the school before it began to rain downpour.

(問題用紙 2)

- (13) 我々はこのポジションに適切な人物を見つけたいと考えております。
- (A) It is eager for us to find the most appropriate person for this position.
 - (B) We believe that we want to discover the best person for this position.
 - (C) We are anxious to find the right person for this position.
 - (D) We want to select a person who should be in charge of this position the most suitably.
- (14) 奈美は一昨年健太から大きなテディベアをもらったが、去年は正広からもらった。
- (A) Kenta gave Nami a big teddy bear the year before last, and Masahiro gave it to her last year.
 - (B) Nami obtained a big teddy bear last year from Kenta, but she accepted that from Masahiro two years before.
 - (C) Two years ago Kenta presented a big teddy bear to Nami, but last year it was presented by Masahiro.
 - (D) Nami, who received a big teddy bear from Kenta the year before last, received another one from Masahiro last year.
- (15) この地図にあるように京都には街中に寺院が点在しています。
- (A) Just as the map shows you, Kyoto is dotted with many temples.
 - (B) If you look at the map, quite a few temples are scattered with Kyoto.
 - (C) Seeing this map, you will find many temples dot in Kyoto.
 - (D) According to this map, many temples scatter around in Kyoto.
- (16) どうにか英語を使って暮らすことはできます。しかし難しいのは相手から譲歩を引き出すことです。
- (A) Although I can scrape along using English, I still find it difficult to make concession to others.
 - (B) I think I can get by using English, but the challenge is to secure concessions from others.
 - (C) I can manage to make a living through English but the trouble is how I can let others give in to me.
 - (D) Though I can get along well with English, I am wondering how I can compromise with people.
- (17) 床があまりにピカピカだったので僕はすんでのところで転ぶところだった。
- (A) The floor was so shiny that I barely fell down.
 - (B) The floor was cleaned and polished so that I tumbled.
 - (C) I almost fell down since the floor was very smooth.
 - (D) I hardly tripped over because the floor was so slippery.
- (18) 蚊にかまれたところを掻いてはだめ。腫れてくるから。薬を塗っておきなさい。
- (A) Don't scratch the mosquito bite or it will get swollen. Apply some ointment.
 - (B) You should not scrabble the mosquito since it swells. Put on some ointment.
 - (C) Stop scrubbing the mosquito bite. It's going to be swelling. Plaster some medicine on it.
 - (D) I advise you not to pinch the mosquito bite, which easily swells. Spread the medicine instead.
- (19) 君は思っている以上に能力があるのだから自分をもっと積極的に売り込まないと。
- (A) You deserve a higher appreciation since your ability is so great as you think.
 - (B) You have much more ability than you think. Be satisfied with what you are now.
 - (C) You are more potential than you are. Therefore, you are qualified to climb much higher.
 - (D) You are more capable than you imagine. So you have to promote yourself more actively.
- (20) 私は毎朝、梅田行きの電車の前から三両目に乗る。
- (A) I get on the third car of the train bound for Umeda every morning.
 - (B) I ride the third car from the top of the train in Umeda every morning.
 - (C) I take the third car from the beginning of the train for Umeda every morning.
 - (D) I use the third car from the front of the train at the direction of Umeda every morning.

(問題用紙 3)

III. 次の語を並べかえて、適切な英文を完成させなさい。解答は指定された箇所に入るものだけをマークしなさい。

- A. Fortunately the () (21) () (22) ().
(A) him (B) getting (C) stopped
(D) hurt (E) airbag (F) from
- B. Have we () () (23) () (24) () the Roman Empire?
(A) what (B) fall (C) studied
(D) the (E) of (F) caused
- C. Okay, () (25) () () (26) () terms.
(A) explain (B) this (C) layman's
(D) me (E) let (F) in
- D. Why (27) () () () (28) () the coffee shop?
(A) think (B) you (C) went
(D) John (E) to (F) do
- E. A GPS is () () (29) () () (30) where you are.
(A) you (B) a (C) use
(D) device (E) locate (F) to

IV. 次の英文の空所に入れるのに最も適切な語句を、(A)～(D)の中から一つ選び、その記号をマークしなさい。

The outbreak of a deadly form of *E. coli* bacteria in Germany has medical experts racing to pinpoint its source — perhaps on a Spanish vegetable farm — as well as how this new strain could have (31).

Researchers now say the new bacteria is a hybrid of two existing ones that have combined to form a super-virulent strain.

The World Health Organization reports the bacteria has killed 18 people and sickened more than 1,500 people in six nations, with the highest number of patients from Germany. U.S. authorities report two travelers returning from Germany (32) the disease and remain seriously ill, but have not spread the (33) to others.

“You have an *E. coli* that’s quite nasty and then it got genes from another toxic *E. coli* and it’s become (34) nastier,” said Paul Wigley, professor of food-borne diseases at the University of Liverpool.

Wigley said that the new strain is a combination of entero-aggregative *E. coli* (EAEC), which is an emerging microbe associated with diarrhea in developing nations, and entero-hemorrhagic *E. coli* (EHEC), which is similar to the one that caused the deadly hamburger outbreak of *E. coli* O157.

“It can hang (35) for a long time in the gut, invade pretty well and produce a toxin that damages the kidneys and can lead to bloody diarrhea,” Wigley said.

The bacteria likely came from human or animal waste that came in (36) with food. A Beijing lab that sequenced the genome of the bacteria with the help of German health officials said Wednesday that it appears to be resistant to many antibiotics. In fact, using antibiotics, which break apart the bacteria’s cells, can release more toxins into the body, Wigley said.

“All you can do is supportive therapy, give patients fluid replacement, blood transfusions, and if kidney failure, then kidney dialysis.” Officials with the Centers for Disease Control in Atlanta caution against panic and are careful not to call it a “super-bug” that can jump borders (37) will.

“We are talking about a food-borne outbreak,” said Christopher Braden, director of CDC’s division of food-borne, water-borne and environmental diseases. “There’s a potential for this to be transmitted person to person, but no (38) that it’s happened.”

Braden noted that so far, the disease has not affected children (39) adults, and that women are suffering more than men.

“Maybe it’s coming from something kids don’t normally eat, or something about this organism that doesn’t affect kids as adults,” Braden said. “We still don’t know.”

European health officials initially said they believed the source of the outbreak was contaminated vegetables grown in Spain, but have

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since (40) off that claim. There are also reports that organically-grown vegetables like cucumbers were to blame since they rely on manure fertilizers.

In the meantime, several nations have banned food grown in Spain, while Russia has stopped all European produce imports.

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|------|------------------|------------------|-----------------|----------------|
| (31) | (A) evacuated | (B) evaporated | (C) evoked | (D) evolved |
| (32) | (A) installed | (B) contracted | (C) established | (D) stockpiled |
| (33) | (A) infection | (B) congestion | (C) smudge | (D) emission |
| (34) | (A) more | (B) even | (C) further | (D) no |
| (35) | (A) over | (B) back | (C) around | (D) onto |
| (36) | (A) contact | (B) accordance | (C) cooperation | (D) tune |
| (37) | (A) at | (B) for | (C) with | (D) by |
| (38) | (A) induction | (B) indicator | (C) intuition | (D) indication |
| (39) | (A) no less than | (B) no more than | (C) as much as | (D) as far as |
| (40) | (A) withdrew | (B) pulled | (C) declined | (D) backed |

V. 次の英文を読んで、下の問いに答えなさい。

Neandertals and ancient humans probably did not compete against each other in track and field events, though we may never know for certain. But it's tempting to consider, and a recent study gives us a way to bet on the winners of such a match-up.

Ancient members of our species, *Homo sapiens*, would probably have (42) long-distance races, while Neandertals might have (42) hilly courses and jumping events.

That's because of the shapes of their heel bones, say a team of scientists from the University of Arizona in Tucson and Harvard University. Ancient *Homo sapiens* lived during the Stone Age. Like modern humans, these early people had short bones in the backs of their heels. The researchers say that these short heels stretched the Achilles tendons tight.

Tendons connect muscles to bones, and the Achilles tendon links the heel to the muscles in the calf. It's the thickest and strongest tendon in the body, and it helps us walk, run and jump. It's also the tendon most likely to rupture, or break! When you run, the tendon acts like a spring that stores energy as it stretches, and releases energy as it relaxes.

A tight tendon, say the scientists behind the new study, boosted that spring action and helped early human runners save energy, (43) them to run far. (We modern humans have the same size heels as those early *Homo sapiens*, so next time you run a marathon, thank your heels.)

Not so with Neandertals. A separate species from *Homo sapiens*, Neandertals were also around during the Stone Age but are now extinct.

The scientists say members of that ancient species had taller heels than ancient *Homo sapiens* or modern people. So Neandertals probably (44) pooped out faster, since their tendons required more energy. But a tall heel might have helped in other ways. The researchers hypothesize that tall heels supported Neandertals' ankles, helping them walk uphill or jump.

(45) Scientists already had a hunch that Neandertals weren't good at long-distance running. Their bodies were shorter and stouter than those of modern people. Their inner-ear canals were smaller, too, which could have affected their balance.

The new study "provides a new line of evidence that Neandertals were not as adept at long-distance running as modern humans were," Herman Pontzer told *Science News*. Pontzer is an anthropologist at Hunter College in New York City and did not work on the study. Anthropologists like Pontzer and David Raichlen, one of the scientists who did work on the study, want to understand humankind and its history.

(46) Raichlen and his team first brought eight trained runners into the lab to run on treadmills. As the runners ran, the scientists measured how much oxygen they were using. Oxygen use can reveal how much energy the runners needed to keep up the pace, so the scientists ended up with a measurement of the energy use of the runners.

Next, the scientists measured the size of the volunteers' heel bones using MRI, (47) or magnetic resonance imaging. (An MRI uses magnetic fields to peek inside the human body.) The researchers used those images to connect energy use to heel size.

Then Raichlen and his team turned to the ancients. They reasoned that the Neandertals' bodies probably worked the same way as the ancient humans', so there should be a similar relationship between heel size and energy use. The researchers studied measurements from the fossilized heel bones of 13 ancient *Homo sapiens* and six Neandertals that lived between 30,000 and 100,000 years ago. Using those measurements — and using the work that matched energy use to heel size — the scientists calculate that Neandertals used more energy than the ancient people, when they ran at a constant speed.

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Pontzer told *Science News* that why ancient people developed to run farther than Neandertals remains a mystery. Many scientists suspect that ancient people in hot climates who could run for long stretches could chase prey to exhaustion—in which case ⁽⁴⁸⁾ long-distance running could have made it less likely that these people would starve.

- 問 1 第一段落の内容と合致するものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。この設問は(41)にマークすること。
- (A) Neandertals and human's ancestors were always good competitors.
 - (B) Neandertals and ancient humans might have taken part in big track and field events.
 - (C) We may want to imagine how the two species might compete against each other.
 - (D) Research reveals the best way to be a winner in a race.
- 問 2 二つの空所(42)に、この順で入る語の組み合わせとして適切なものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。
- (A) won, lost
 - (B) lost, surrendered
 - (C) lost, won
 - (D) won, dominated
- 問 3 空所(43)に入れるのに最も適切なものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。
- (A) to allow
 - (B) allowing
 - (C) allows
 - (D) allowed
- 問 4 下線部(44)の意味に最も近いものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。
- (A) crouched
 - (B) recovered
 - (C) tired
 - (D) ran
- 問 5 下線部(45)の意味に最も近いものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。
- (A) Scientists thought that Neandertals were not fit for marathon running.
 - (B) The researchers' finding is that Neandertals cannot run as fast as humans.
 - (C) It may fairly be presumed that Neandertals are good at catching their prey in a swift manner.
 - (D) The extinction of the Neandertals was caused by the lack of an ability to continue to chase for a long time.
- 問 6 下線部(46)の理由として最も適切なものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。
- (A) It is because the length of heel bones between trained runners and amateur runners is different due to the training experiences.
 - (B) It is because they wanted to clarify the correlation between oxygen use and energy consumption.
 - (C) It is because they tried to compare the skeletal development between two species.
 - (D) It is because they wanted to argue against the physiological relationship between heel bones and energy consumption.
- 問 7 下線部(47)の or の用法に最も近いものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。
- (A) You should learn the culinary art or art of cookery.
 - (B) Takeshi is not careful or bold.
 - (C) Stand back, or I'll punch you in the face!
 - (D) The English equivalent of that Japanese word is "inn" or "hotel."
- 問 8 下線部(48)の内容と合致するものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。
- (A) It can be assumed that ancient humans are apt to chase their prey over a long distance so that the prey exhausts energy.
 - (B) It is probable that ancient humans and Neandertals might have been able to survive the Stone Age.
 - (C) Ancient people are presumed to be adept at running for a long distance, and therefore there would be no fear of lack of food.
 - (D) Thanks to their long-distance running ability, those different species won't suffer from starvation.

(問題用紙 6)

- 問 9 本文の内容に合致しないものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。この設問は(49)にマークすること。
- (A) A new technique for producing images of bodily organs reveals that modern people have shorter heel bones than those of Neandertals.
 - (B) Ancient humans are classified as a different species from Neandertals.
 - (C) The Achilles tendon is a tough but breakable tendon connecting muscles at the back of the lower part of the leg to the heel.
 - (D) A team led by Raichlen successfully measured how much oxygen competent runners use in order to calculate the length of their heels.
- 問 10 本文の内容に合致するものを、(A)～(D)の中から一つ選び、その記号をマークしなさい。この設問は(50)にマークすること。
- (A) Research shows that ancient humans consumed less energy than Neandertals when running at a constant pace.
 - (B) Neandertals and modern people have a totally different function of their heels.
 - (C) There isn't any relationship between heel size and energy consumption.
 - (D) Whether a species survives or becomes extinct is solely dependent on bodily functions.