

英 語

(問 題)

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注 意 事 項

1. 試験開始の指示があるまで、問題冊子および解答用紙には手を触れないこと。
2. 問題は2～11ページに記載されている。試験中に問題冊子の印刷不鮮明、ページの落丁・乱丁及び解答用紙の汚損等に気付いた場合は、手を挙げて監督員に知らせること。
3. 解答はすべて、HBの黒鉛筆またはHBのシャープペンシルで記入すること。
4. マーク解答用紙記入上の注意
 - (1) 印刷されている受験番号が、自分の受験番号と一致していることを確認したうえで、氏名欄に氏名を記入すること。
 - (2) マーク欄にははっきりとマークすること。また、訂正する場合は、消しゴムで丁寧に、消し残しがないようによく消すこと。

マークする時	<input checked="" type="radio"/> 良い <input type="radio"/> 悪い <input type="radio"/> 悪い
マークを消す時	<input type="radio"/> 良い <input type="radio"/> 悪い <input type="radio"/> 悪い

5. 解答はすべて所定の解答欄に記入すること。所定欄以外に何かを記入した解答用紙は採点の対象外となる場合がある。
6. 試験終了の指示が出たら、すぐに解答をやめ、筆記用具を置き解答用紙を裏返しにすること。
7. いかなる場合でも、解答用紙は必ず提出すること。

I. Read the following passage and answer the questions below.

- ① The benefits of exercise are widely known: it helps you live longer and lowers the risk of heart disease, stroke, and diabetes. A new study published Wednesday in *The Lancet Psychiatry* journal suggests that when done in moderation, it leads to better mental health as well.
- ② The researchers analyzed responses from 1.2 million adults in the United States taken from a US Centers for Disease Control and Prevention survey given in 2011, 2013, and 2015. The average number of days of poor mental health per person in the past month was around 3.4, according to the study. Those who reported exercising had about 1.5, or 43%, fewer days of “bad self-reported mental health” in the past month compared to those who did not exercise. Poor mental health was reported in the study as stress, depression, and trouble with emotions.
- ③ “I think in comparison to all other treatments, when a patient successfully exercises at the right dose, there is a sense of self-efficacy and confidence that the patient develops that is absolutely also a remarkably positive thing,” said Dr. Madhukar Trivedi at UT Southwestern Medical Center in Dallas. He was not involved with the study but recently published a paper in *Journal of American Medical Association Psychiatry* linking midlife fitness with lower risk of depression.
- ④ “I think it’s a huge deal,” said Adam Chekroud, an author of the study and Assistant Professor of Psychiatry at Yale University. “Even just walking three times a week seems to give people better mental health than not exercising at all. I think from a public health perspective, it’s pretty important because it shows that we can have the potential for having a pretty big impact on mental health for a lot of people.”
- ⑤ The sweet spot for exercising was found to be 45-minute sessions three to five times a week. There wasn’t a big difference in benefit for exercising beyond 90 minutes in a session — until one hit the three-hour mark. After that, there appeared to be worse mental health associated with those people compared to others who did not exercise at all. “I think it makes sense,” Chekroud said. “If you’re not exercising enough, maybe you’re not putting your body through the intensity and through the challenges that it needs to stimulate those biological changes in the brain. And on the high end, anecdotally we hear a lot about people who get addicted to exercise or maybe you’re kind of running yourself into the ground.”
- ⑥ Though all forms of exercise resulted in better mental health compared to doing nothing, the strongest association was found in people who played popular team sports (a 22% lower mental health burden), cycling (22%), and other aerobic and gym activities (20%). Even completing household chores led to about a 10% drop in days of poor mental health in a month, the researchers found. “Exercise in group settings could have a slightly higher benefit than exercise alone,” Trivedi said. “There’s not enough evidence to be very strong but that could be what happened.”
- ⑦ As for cycling, Chekroud, who is also chief scientist at Spring Health, a mental health company based in New York that provides mental health services to large employers and an avid cyclist himself, said, “There’s... the biological benefit of exercise. And you’ll have increases in your respiratory rate and your heart rate and that kind of thing. But also, it’s an opportunity where you’re not working for a relatively long period of time and you get to think things through, perhaps reevaluate situations that happen in your life.”
- ⑧ The authors adjusted for various physical and sociodemographic factors like age, race, gender, marital status, socioeconomic status, education, self-reported physical health, and previous diagnosis of depression. Still, the improvement seen from exercise was more than what could be seen from any other modifiable social or demographic factor such as education, body mass index or household income.

[Adapted from www.edition.cnn.com (8 August 2018)]

(1) Choose the best way to complete the sentences about Paragraphs ① to ⑧.

1. In paragraph ① the writer mainly
2. In paragraph ② the writer mainly
3. In paragraph ③ the writer mainly
4. In paragraph ④ the writer mainly
5. In paragraph ⑤ the writer mainly
6. In paragraph ⑥ the writer mainly
7. In paragraph ⑦ the writer mainly
8. In paragraph ⑧ the writer mainly

- A. addresses a newly discovered benefit of exercise along with other well-known benefits.
- B. analyzes the various benefits of exercise by citing the opinion of one author of the study.
- C. compares different types of activities and their impact on mental health.
- D. defines the key concept of the study, poor mental health, and explains what it involves.
- E. describes the impacts of other variables that could affect one's mood.
- F. emphasizes the significance of the study by explaining why the study is important.
- G. explains how much exercise generates the best outcome and why.
- H. explains how the study was conducted and what it discovered as a result.
- I. explores why some people who get addicted to exercise develop worse mental health.
- J. investigates why team sports are more beneficial than household chores for mental health.
- K. provides an overview of the study that Dr. Madhukar Trivedi had conducted.
- L. refers to the opinion of an expert in a similar field who did not participate in the present study.

(2) Choose the best answer for each question.

1. Which benefit of exercise is NOT mentioned in the passage?

- A. greater longevity
- B. higher respiratory rate
- C. increased confidence
- D. reduced weight

2. How long should one engage in exercise per session to gain the maximum benefit?

- A. an hour and a half
- B. more than three hours
- C. three hours
- D. three quarters of an hour

3. Which form of exercise most contributes to the improvement of mental health?

- A. group sports
- B. gymnastics
- C. household chores
- D. walking

(3) Choose the ONE way to complete each of these sentences, which relates to the underlined words in the passage.

1. Here "in moderation" means

- A. competitively.
- B. continually.
- C. excessively.
- D. reasonably.

2. Here "avid" means

- A. apathetic.
- B. joyful.
- C. keen.
- D. trivial.

II. Read the following passage and answer the questions below.

^(A)As our early ancestors began to walk on two legs, they would also have hung about in trees, using their feet to grasp branches. They walked differently on the ground, but were still able to move around quite efficiently. The rigid big toe that eventually evolved gives efficient push-off power during walking and running. These findings have been published in the journal *Proceedings of the National Academy of Sciences*.

In this new study, scientists made 3D scans of the toe bone joints from living and fossil human relatives, including primates such as apes and monkeys, and then compared them to modern day humans. They overlaid this information onto an evolutionary tree, revealing the timing and sequence of events that produced the human forefoot.

The main finding is that the current shape of the bones in the big toe, or “hallux” in anatomical language, must have evolved quite late in comparison with the rest of the bones that they investigated.

In an interview with the BBC, lead author of the study Dr Peter Fernandez, ^(B)from Marquette University in Milwaukee, said: “Our ability to efficiently walk and run on two feet, or be ‘bipedal,’ is a crucial feature that enabled humans to become what they are today. For everything ^(C)to work together, the foot bones first had to evolve to accommodate the unique biomechanical demands of bipedalism.”

He then said: “The big toe is mechanically very important for walking. In our study, we showed that it did not reach its modern form until considerably later than the other toes.”

When asked whether the rigid big toe evolved last because it is most or least important, Dr Fernandez commented: “It might have been last because it was the hardest to change. We also think there was a compromise. The big toe could still be used for grasping, ^(D)as our ancestors spent a fair amount of their time in the trees, before becoming fully committed to walking on the ground.”

He added: “Modern humans have increased the stability of the joint to put the toe in an orientation that is useful for walking, but the foot is no longer dextrous like an ape.”

The reason that our ancestors stood upright and then walked on two feet is still a mystery, but there are plenty of ideas. Scientists think that walking may have evolved, either because it freed our hands to carry tools, or because climate change led to a loss of forests, or that overhead arms can be used to support walking on two legs along thin branches.

Studies such as this new one show that early human ancestors must have been able to walk upright for millions of years, since the 4.4 million-year-old fossil *Ardipithecus ramidus*, but that they did not fully transition to a modern walk until much later, perhaps in closer relatives within our own group, *Homo*. This new study, alongside other work, now confirms that early walking humans, or “hominins,” still used their feet to grasp objects.

Dr William Harcourt-Smith from City University of New York, who was not involved in this study, said: “They are suggesting that one of the earliest hominins, *Ardipithecus*, was already adapting in a direction away from the predicted morphology of the last common ancestor of chimps and modern humans, but not ‘towards’ modern humans. To me this implies that there were several lineages within hominins that were likely experimenting with bipedalism in different ways to each other.”

Professor Fred Spoor, an expert in human anatomy at the Natural History Museum, London, said: “It was a bit of a shock when hominins were found that have a grasping, or opposable, big toe, as this was thought to be incompatible with effective bipedalism. This work shows that different parts of the foot can have different functions. When a big toe is opposable, you can still function properly as a biped.”

The scientists involved say that this work shows that early hominin feet had a mixed and versatile set of functions. Becoming human was not a giant step, but a series of gradual changes, with some of the last and arguably most important changes being made to big toes. Peter Fernandez said that they would like to conduct similar analyses on the remaining bones of the forefoot, in order to fully characterise the changes involved in the evolution of bipedal walking.

[Adapted from www.bbc.com (14 August 2018)]

- (1) Choose the ONE way to complete each of these sentences that is NOT correct according to the passage.
1. Scientists have found that
 - A. our big toe was one of the last parts of the foot to evolve.
 - B. the evolution of the forefoot to walk didn't take place at one time but little by little.
 - C. the reason for bipedalism is that our big toe developed last in the forefoot.
 - D. the shape and inflexibility of our big toe enabled us to walk and run effectively.
 2. Early humans
 - A. could grasp branches because the function of their feet was not limited just to walking.
 - B. could have been capable of walking but in a different way from our direct ancestors.
 - C. had a big toe that could face and touch the other toes on the same foot.
 - D. had a forefoot that functioned similarly to modern humans and other primates like chimps.
 3. Characteristics of modern humans include the following:
 - A. we have almost the same shape of big toe as early humans in order to perform different functions.
 - B. we have developed the mechanism of our forefoot physiologically important for standing upright.
 - C. we have harder bones in our big toe in order to grip the ground to walk.
 - D. we have stiffer joints in our toes than our close relatives did to enable us to walk on two legs.
 4. A researcher
 - A. believed that the rigid big toe evolved last because it is the least important to walk on two legs.
 - B. expressed interest in investigating other bones to figure out the reasons for bipedalism in human beings.
 - C. pointed out that early humans walked in a different way from other primates.
 - D. was surprised that early humans had big toes not suitable for walking.
- (2) Choose the ONE way to complete each of these sentences, which relates to the underlined words and phrases.
1. Here "overlaid" means
 - A. added.
 - B. covered.
 - C. located.
 - D. provided.
 2. Here "orientation" means
 - A. accumulation.
 - B. angle.
 - C. evolution.
 - D. introduction.
 3. Here "morphology" means
 - A. function.
 - B. structure.
 - C. trend.
 - D. use.

4. Here "incompatible with" means

- A. at odds with.
- B. consistent with.
- C. no use to.
- D. similar to.

5. Here "versatile" means

- A. complex.
- B. fixed.
- C. subsidiary.
- D. variable.

(3) Choose the ONE item that is used in the grammatically closest way to the underlined words (A), (B), (C), and (D).

(A)

- 1. As Chris was professional, she was disqualified from taking part in the Olympics.
- 2. As we reached the top of Mt. Frazer, it was difficult to breathe.
- 3. One must advance in modesty as one advances in knowledge.
- 4. They are endeavoring to disguise this fact much as President Nilsson did in the early 1970s.

(B)

- 1. Even the wisest man cannot predict most of the things that will happen to him.
- 2. Jay solved in five minutes a problem that I had pondered for two days.
- 3. The fact that the murdered man had my address in his notebook does not prove anything.
- 4. There was such a big crowd that we couldn't even get to the box office.

(C)

- 1. The kidnappers are thought to have been hiding in this territory.
- 2. I would like you to sit down and listen to me carefully.
- 3. It might be hard to play baseball in such a mountainous country as this.
- 4. Sydney patted his breast pocket to make sure his wallet was in place.

(D)

- 1. Hidden as it was by a clump of trees, the tomb of the king was difficult to find.
- 2. Just as some people are born artists, so some are born sportsman.
- 3. Leave it as it is.
- 4. Much as we resemble one another, we are none of us exactly alike.

III. Read the following passage and answer the questions below.

When the World Cup opens in Moscow on June 14, soccer fans may notice something out of the ordinary. Alongside the slick ad campaigns for famous global brands—Visa, Adidas, Coca-Cola—there will be a proliferation of pitches from obscure companies with names like Mengniu, Vivo, and Wanda. These newly minted World Cup sponsors aren't selling much that is related to soccer; these three, for example, trade in dairy products, smartphones, and movie theaters. They all come from a country, moreover, whose national team has never scored a single World Cup goal and is not among the 32 qualifying teams this year, but which still sees itself as the future of soccer: China.

Beijing has made no secret of its soccer ambitions. Over the past few years, President Xi Jinping has vowed to turn China into a "soccer superpower" that will host, qualify (1) and, by 2050, hopefully win the World Cup. The last goal seems almost ludicrously unattainable: China's men's team languishes at No. 73 in the world rankings, behind juggernauts like Curaçao and Cape Verde. Yet the sudden appearance of Chinese companies as top corporate sponsors at this year's World Cup hints at the country's opportunistic rise in the world of soccer. Its incursion was precipitated by a crisis. Actually, two crises. The tournament host, Russia, and the sport's governing body, FIFA, are beset by scandals and controversies that have cast a shadow over the event—and made it a struggle to attract corporate sponsors.

FIFA is still reeling from a hydra-headed corruption case that forced the resignation of its longtime president Sepp Blatter in 2015 and led to the indictment of more than 30 soccer figures around the world. Russia, meanwhile, has been excoriated in the West for everything from poisoning a former spy and his daughter on foreign soil (2) stoking wars in Syria and Ukraine and meddling in Western elections. When a member of Parliament in Britain compared this year's World Cup to the Nazi Olympics in 1936, Boris Johnson, the foreign secretary, agreed, lamenting the "emetic prospect of Putin glorying in this sporting event." The friendly veneer of the world's most popular sporting event has been stripped away. "The Russians' earlier rhetoric about the World Cup—'We want to welcome the world'—is largely gone," says Sven Daniel Wolfe, an expert on Russian sporting politics at the University of Lausanne. "Russian elites are done trying to integrate with the West. They are very content now to tout their 'eastward pivot.'"

After television broadcasting rights, corporate sponsorships account for the largest portion of FIFA's revenue—some \$1.58 billion (out of \$4.8 billion in total revenue) at the 2014 World Cup in Brazil. Companies have vied for sponsorship slots, eager to promote their brands before an audience that can number more than three billion over the course of the month-long tournament. (The final game in Brazil alone attracted more than one billion viewers; the 2018 Super Bowl drew a little more than 100 million.) But scandals have changed the calculus. The fear of being associated with FIFA or Russia may have pushed away a few big partners (Sony, Johnson & Johnson, Castrol) and scared off other potential sponsors. "We used to have top companies queuing up," says Patrick Nally, a sports-marketing specialist who helped develop FIFA's tiered sponsorship system. "Now they can't attract any big names."

Even as the World Cup audience has grown, the last time FIFA signed a Western sponsor was in 2011, when the corruption investigation began coming to light. The struggle to find sponsors, (3) huge legal bills, led to a \$369 million loss for the organization in 2016, and the worst seemed still to come. In Brazil, FIFA said the sponsorship roster was "sold out" more than six months before the tournament began. This year, it has been unable to fill more than a dozen sponsorship positions, with the most glaring absences in the lower tier of "regional supporters," whose rights are limited to the Russian market. Russia and the next World Cup host, Qatar, each offered up a top sponsor. But FIFA's real lifeline came from a cluster of Chinese companies willing to pay hundreds of millions of dollars and save the day.

Leaping into the void left by the West gives Chinese companies a way to promote their brands globally—and to flaunt their patriotism. Wanda, one of China's largest entertainment and movie-theater

companies, signed a \$150 million global partnership with FIFA at the height of the corruption scandal two years ago—a deal that Wanda’s chief executive, Wang Jianlin, said hinged on FIFA’s woes. “Because some Western companies dropped out, we got the opportunity,” Wang told reporters at the time. “If more Chinese brother companies become FIFA sponsors like Wanda, we will join forces to advance the interests of China soccer.” Over the past 18 months, brothers like Hisense (electronics), Vivo (smartphones), Mengniu (dairy products), and Yadea (electric scooters) have answered the call.

It’s hard to say whether these Chinese companies will become household names outside their home country. Sponsorship, for them, is a clear bid to acquire what many corporations covet: a global audience and the legitimacy that comes from sharing airtime with Western giants like McDonald’s. Yet the most salient effect may lie in the realm of soft power, helping to solidify China’s growing bond with Russia and signal a global economic shift from West to East. “There is a big geopolitical context to all of this,” says Simon Chadwick, professor of sports enterprise at the University of Salford, Manchester, in Britain. “China is not trying to rescue FIFA but to influence its decisions over the next 10 years. And the top priority, arguably, is to help China win a bid to host the World Cup.”

[Adapted from www.nytimes.com (30 May 2018)]

- (1) On the basis of the passage, fill in T for the true statements and F for the false ones.
- A. About a third of the Soccer World Cup revenues come from corporate sponsorships.
 - B. China’s prospect of winning a bid to host a Soccer World Cup is considered weak.
 - C. FIFA is blamed for giving China preferential treatment in the selection of sponsors.
 - D. The World Cup was endangered by mismanagement on the part of the host.
 - E. A number of big companies withdrew from Soccer World Cup sponsorship for fear of their corporate image being damaged.
 - F. Chinese companies signed sponsorship contracts to save the Soccer World Cup from financial difficulties.
- (2) Choose the ONE way to complete each of these sentences, which relates to the underlined words in the passage.
1. Here “proliferation” means
- A. dominance.
 - B. increase.
 - C. qualification.
 - D. selection.
2. Here “precipitated” means
- A. brought on.
 - B. held back.
 - C. set up.
 - D. taken in.
3. Here “veneer” means
- A. disguise.
 - B. match.
 - C. relationship.
 - D. welcome.

4. Here "queuing up" means
- A. pulling out of sponsorship.
 - B. serving as sponsors.
 - C. signing up for sponsorship.
 - D. wanting to become sponsors.

5. Here "covet" means
- A. acknowledge.
 - B. attract.
 - C. reach.
 - D. want.

(3) Choose the best items to fill in the blanks.

(1)

- | | | | |
|-------|--------|-------|---------|
| A. as | B. for | C. in | D. with |
|-------|--------|-------|---------|

(2)

- | | | | |
|--------|--------|------------|-------|
| A. and | B. for | C. through | D. to |
|--------|--------|------------|-------|

(3)

- | | | | |
|------------------|--------------|------------------------|---------------|
| A. combined with | B. combining | C. to be combined with | D. to combine |
|------------------|--------------|------------------------|---------------|

IV. Choose the ONE word or phrase that best completes the sentence.

1. _____ other reptiles, such as lizards and turtles, snakes do not have legs, so they move by undulating their body.
A. Alike
B. Dislike
C. Like
D. Unlike
2. With the publication of *The Old Man and the Sea* _____ of Hemingway's simplistic style of prose.
A. came a new appreciation
B. did readers appreciate
C. was a new appreciation
D. readers newly appreciated
3. Today, "carpet" refers to floor coverings that reach from wall to wall, _____ "rug" refers to a piece of material that covers only one part of the floor, especially as a decoration.
A. because
B. in as much as
C. therefore
D. whereas
4. Not until Edward Jenner developed the first anti-smallpox serum in 1796 _____ against the terrible disease.
A. it was protected
B. only protection was given
C. protection was given
D. was there protection
5. _____ living in Goodnestone Park in Kent, England, that the English writer Jane Austen wrote *Pride and Prejudice*, originally titled *First Impressions*.
A. It was
B. It was while
C. There she was
D. While she was

V. Choose the ONE underlined word or phrase in each sentence below that is grammatically INCORRECT.

1. Floppy disks came into widespread use during the 1970s as a form of data storage and it remained popular for nearly 40 years.
(A) (B) (C) (D)
2. After one and a half month of investigation, police found the missing boys alive in caves on an island.
(A) (B) (C) (D)
3. Scurvy, caused by the lack of vitamin C, could kill the most of a ship's crew on a long voyage.
(A) (B) (C) (D)
4. Natural predators, disturbing from tourists, and pollution have all contributed to the decline of the California condor.
(A) (B) (C) (D)
5. Included in this series are "The Enchanted Horse," among other famous children's stories.
(A) (B) (C) (D)

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