

英語

1. 監督者の指示があるまで開かないでください。
2. 試験開始後、解答用紙に受験番号・氏名を忘れないで記入してください。
3. 試験開始後、問題冊子に落丁や乱丁がないか確認し、落丁・乱丁があった場合は挙手してください。
4. 解答は解答用紙に記入してください。
5. 解答用紙は科目の試験終了後回収します。
6. 問題冊子は科目の試験終了後、持ち帰って結構です。

I. 次の(A)～(D)において、語法、文脈から判断して、()内に入る最も適当なものを、1～4の中から一つ選び、その番号を書きなさい。

(A) From this (), we are all going to rely on AI systems to interpret and summarize information for us.

- 1. now onward
- 2. time and so force
- 3. current generates
- 4. generation forward

(B) Our ability to summarize, understand, and () from information is being tested.

- 1. comprehension clue
- 2. gain benefit
- 3. extract value out of
- 4. translates off

(C) Large language models can () a specific worldview or belief system when reading information.

- 1. be taught to mirror
- 2. train to reflection
- 3. never keeps up with
- 4. not help us whether

(D) Educating students about the potential biases in AI systems is crucial to understand the limitations and risks () these systems..

- 1. problems and
- 2. associated with
- 3. that having in
- 4. involving of

Ⅱ. 次の(A)～(D)の各組の英文のうち、最も適当なものを、1～4の中から一つ選び、その番号を書きなさい。

(A) 1. True strength is found in imperfection, but invaluable to ask for assistance.
2. Real strength is not in flawlessness, but in the willingness to be open to help.
3. True strength is not found in perfection, but in vulnerability ask for help.
4. Real strength is not in flawlessness, but is willing to help others with need.

(B) 1. The essence things are not to have all figured it out, but not to take off the next step.
2. What matters are to have the answers to all and just focusing on moving one next step.
3. What matters is having all the answers and focusing onto moving by the next step.
4. The important thing is not to have it all figured out, but rather to take the next step.

(C) 1. He loves and supports me through thick and thin, despite my flaws and mistakes.
2. Despite any in perfection or error I may make, he continues to love and support me.
3. He loves and supports me when sick and sin despite my flaws and mistakes I made.
4. Despite imperfection or error I may be making, he continues to love and support me.

(D) 1. A strong sense of identity can be a help to your connection with others.
2. A sense of selfless can be able to establish meaningful bonds with those around.
3. A strong sense of identity can help you form deeper connections with others.
4. A sense of self can enable to establish significant bonds with those around you.

III. 次の文章を読み、設問に答えなさい。

Do you tend to look on the sunny side, _____? A growing body of research suggests that having a positive outlook can benefit your physical health. NIH-funded scientists are working to better understand the links between your attitude and your body. They're finding some evidence that emotional wellness can be improved by developing certain skills.

Having a positive outlook doesn't mean you never feel negative emotions, such as sadness or anger, says Dr. Barbara L. Fredrickson, a psychologist and expert on emotional wellness at the University of North Carolina, Chapel Hill. "All emotions—whether positive or negative—(A). The key seems to be finding a balance between the two," she says.

"Positive emotions expand our awareness and open us up to new ideas, so we can grow and add to our toolkit for survival," Fredrickson explains. "But people need negative emotions to move through difficult situations and respond to them appropriately in the short term. Negative emotions can get us into trouble, though, if they're based on too much rumination (B), and they're not really related to what's happening in the here and now."

People who are emotionally well, experts say, have fewer negative emotions and are able to bounce back from difficulties faster. This quality is called resilience. Another sign of emotional wellness is being able to hold onto positive emotions longer and appreciate the good times. Developing a sense of meaning and purpose in life—(C)—also contributes to emotional wellness.

Research has found a link between an upbeat mental state and improved health, including lower blood pressure, reduced risk for heart disease, healthier weight, better blood sugar levels, and longer life. But many studies can't determine (D), if being healthy causes positive emotions, or if other factors are involved.

"While earlier research suggests an association between positive emotions and health, it doesn't reveal the underlying mechanisms," says Dr. Richard J. Davidson, a neuroscientist at the University of Wisconsin-Madison. "To understand the mechanisms, I think it will be (E)."

By using brain imaging, Davidson and others have found that positive emotions can trigger "reward" pathways located deep within the brain, including in an area known as the ventral striatum.

“Individuals who are able to savor positive emotions have lasting activation in the ventral striatum,” Davidson says. “The longer the activation lasts, the greater his or her feelings of well-being.” (F).

Negative emotions, in contrast, can activate a brain region known as the amygdala, which plays a role in fear and anxiety. “We’ve shown that there are big differences among people in how rapidly or slowly the amygdala recovers following a threat,” Davidson says. “(G).”

Among those who appear more resilient and better able to hold on to positive emotions are people who’ve practiced various forms of meditation. In fact, growing evidence suggests that several techniques—including meditation, cognitive therapy (a type of psychotherapy), and self-reflection (thinking about the things you find important)—can help people develop the skills needed to make positive, healthful changes.

“Research points to the importance of certain kinds of training that can alter brain circuits in a way that will promote positive responses,” Davidson says. “(H). If you practice, you can actually get better at it.”

In one study, Davidson and his colleagues found changes in reward-related brain circuits after people had 2 weeks of training in a simple form of meditation that focuses on compassion and kindness. (I).

Fredrickson and her colleagues are also studying meditation. They found that after 6 weeks of training in compassion and kindness meditation, people reported increased positive emotions and social connectedness compared to an untrained group. The meditation group also had improved functioning in a nerve that helps to control heart rate. “(J),” Fredrickson says.

- (K) This brain activity can change how people respond to health advice.
- (L) they value before the health message, the brain’s reward pathways are activated.
- (M) about half of the participants were asked to think about things that they value most.
- (N) we can open the brain to positive change and help people achieve their goals,” Falk says.
- (O) having a positive mindset might help to improve your physical health as well.

[Adapted from: “Positive Emotions and Your Health: Developing a Brighter Outlook”

NIH News in Health, August 2015.

URL: <https://newsinhealth.nih.gov/2015/08/positive-emotions-your-health>]

問 1. 本文中の一行目の下線部に入る疑問文を英語で書きなさい。

問 2. 本文中の(A)～(E)それぞれに入る最も適切なものを、選択肢 1～5 の中から一つ選び、その番号を書きなさい。但し、選択肢 1～5 は一回しか使えません。

1. about the past or excessive worry about the future
2. crucial to understand the underlying brain circuits
3. whether positive emotions lead to better health
4. and focusing on what's important to you
5. are adaptive in the right circumstances

問 3. 本文中の(F)～(J)それぞれに入る最も適切なものを、選択肢 1～5 の中から一つ選び、その番号を書きなさい。但し、選択肢 1～5 は一回しか使えません。

1. The results suggest that taking time to learn the skills to self-generate positive emotions can help us become healthier, more social, more resilient versions of ourselves
2. Continued activation of this part of the brain has been linked to healthful changes in the body, including lower levels of a stress hormone
3. Those who recover more slowly may be more at risk for a variety of health conditions compared to those who recover more quickly
4. These changes, in turn, were linked to an increase in positive social behaviors, such as increased generosity
5. It's led us to conclude that well-being can be considered as a life skill

問 4. 本文中の(K)～(O)それぞれに入る最も適切なものを、選択肢 1～5 の中から一つ選び、その番号を書きなさい。但し、選択肢 1～5 は一回しか使えません。

1. Being open to positive change is a key to emotional wellness. “Sometimes people think that emotions just happen, kind of like the weather,” Fredrickson says. “But research suggests that we can have some control over which emotions we experience.” As mounting research suggests,
2. This type of self-affirmation, Falk’s research shows, can help physically inactive “couch potatoes” get more active. In a recent study, inactive adults received typical health advice about the importance of moving more and sitting less. But before the advice,
3. “In general, if you tell people that they sit too much and they need to change their behavior, they can become defensive. They’ll come up with reasons why the message doesn’t apply to them,” Falk says. But if people reflect on the things
4. The “self-affirmation” group became more physically active during the month-long study period that followed compared to the group that hadn’t engaged in self-affirmation. “The study shows one way that
5. Dr. Emily Falk, a neuroscientist at the University of Pennsylvania, is taking a different approach. Falk is exploring how self-affirmation—that is, thinking about what’s most important to you—can affect your brain and lead to positive, healthful behaviors. Her team found that when people are asked to think about things that they find meaningful, a brain region that recognizes personally relevant information becomes activated.



