

全国 2015 年 10 月高等教育自学考试

英语科技文选试题

课程代码:00836

请考生按规定用笔将所有试题的答案涂、写在答题纸上。

选择题部分

注意事项:

1. 答题前,考生务必将自己的考试课程名称、姓名、准考证号用黑色字迹的签字笔或钢笔填写在答题纸规定的位置上。
2. 每小题选出答案后,用 2B 铅笔把答题纸上对应题目的答案标号涂黑。如需改动,用橡皮擦干净后,再选涂其他答案标号。不能答在试题卷上。

I. Directions: Read through the following passages. Choose the best answer and blacken the corresponding letter A, B, C or D on the ANSWER SHEET. (20%)

(A)

When Steve Cole was a postdoc, he had an unusual hobby: matching art buyers with artists that they might like. The task made looking at art, something he had always loved, even more enjoyable. "There was an extra layer of purpose. I loved the ability to help artists I thought were great to find an appreciative audience," he says.

At the time, it was nothing more than a quirky sideline. But his latest findings have caused Cole — now a professor at the Cousins Center for Psychoneuroimmunology at the University of California, Los Angeles — to wonder whether the exhilaration and sense of purpose that he felt during that period might have done more than help him to find homes for unloved pieces of art. It might have benefited his immune system too.

At one time, most self-respecting molecular biologists would have scoffed at the idea. Today, evidence from many studies suggests that mental states such as stress can influence health. Still, it has proved difficult to explain how this happens at the molecular level — how subjective moods connect with the vastly complex physiology of the nervous and immune systems. The field that searches for these explanations, known as psychoneuroimmunology (PNI), is often criticized as lacking rigour. Cole's stated aim is to fix that, and his tool of choice is genome-wide transcriptional analysis: looking at broad patterns of gene expression in cells. "My job is to be a hard-core tracker," he says. "How do these mental states get out into the rest of the body?"

With his colleagues, Cole has published a string of studies suggesting that negative mental states such as stress and loneliness guide immune responses by driving broad programs of gene

expression, shaping our ability to fight disease. If he is right, the way people see the world could affect everything from their risk of chronic illnesses such as diabetes and heart disease to the progression of conditions such as HIV and cancer. Now Cole has switched tack, moving from negative moods into the even more murky territory of happiness. It is a risky strategy; his work has already been criticized as wishful thinking and moralizing. But the pay-off is nothing less than finding a healthier way to live.

“If you talk to any high-quality neurobiologist or immunologist about PNI, it will invariably generate a little snicker,” says Stephen Smale, an immunologist at the University of California, Los Angeles, who is not affiliated with the Cousins Center. “But this doesn't mean the topic should be ignored forever. Someday we need to confront it and try to understand how the immune system and nervous system interact.”

1. With which of the following subjects is the passage mainly concerned?
 - A. Defining PNI
 - B. Cole's studies in PNI
 - C. Cole's unusual hobby
 - D. How to find a healthier way to live
2. Why did Cole have an unusual hobby when he was on a post doctoral program?
 - A. To match art buyers with their favorite artists.
 - B. To make looking at art even more rewarding.
 - C. To benefit his immune system.
 - D. To find homes for unloved pieces of art.
3. According to the passage, which of the following statements about PNI is NOT true?
 - A. It is interdisciplinary.
 - B. It aims at genome-wide transcription.
 - C. It may be lacking in care and exactness.
 - D. It deals with how subjective moods connect with the physiology of the nervous and immune systems.
4. What can be inferred from the passage about Cole's studies?
 - A. They are focused on negative mental states.
 - B. They are focused on positive mental states.
 - C. They are acknowledged as interdisciplinary.
 - D. They are meant to find a healthier way to live.
5. According to the passage, what is the attitude of Stephen Smale toward PNI?
 - A. Emotional.
 - B. Objective.
 - C. Indifferent.
 - D. Supportive.

(B)

"The only thing we have to fear is fear itself," said Franklin D. Roosevelt. He might have been onto something: research suggests that people are happy to endure a bit more pain, if it means they spend less time waiting for it.

Classical theories of decision-making suppose that people bring rewards forward and postpone punishments, because we give far-off events less weight. This is called "temporal discounting". But this theory seems to go out the window when it comes to pain.

One explanation for this is that the anticipation of pain is itself unpleasant, a phenomenon that researchers have appropriately termed "dread".

To investigate how dread varies with time, Giles Story at University College London, and his colleagues, hooked up 33 volunteers to a device that gave them mild electric shocks. The researchers also presented people with a series of choices between more or less mildly painful shocks, sooner or later.

During every "episode" there was a minimum of two shocks, which could rise to a maximum of 14, but before they were given them, people had to make a choice such as nine extra shocks now or six extra shocks five episodes from now. The number of shocks they received each time was determined by these past choices.

No pain, no gain.

Although a few people always chose to experience the minimum pain, 70 per cent of the time, on average, participants chose to receive the extra shocks sooner rather than a smaller number later. By varying the number of shocks and when they occurred, the team was able to figure out that the dread of pain increased exponentially as pain approached in time. Similar results occurred in a test using hypothetical dental appointments.

"This study demonstrates that the fear of anticipation is so strong it can reverse the usual pattern of time discounting," says George Loewenstein, a professor of economics and psychology at Carnegie-Mellon University in Pittsburgh, Pennsylvania. "It's probably not an exaggeration to say that as much, or more, of the pains of life come from anticipation and memory than from actual experience."

The study could well have implications for medicine and health policy, because an understanding of how people judge pain is important for presenting them with options about potentially painful treatments.

"You should avoid emphasizing waiting times," says Story. "And if you can make something seem unavoidable, people may be more likely to confront it to minimise dread."

Story hopes that this kind of psychological study will aid the development of diagnostic tools. "Looking at these kinds of preferences might help predict whether people will make healthy or unhealthy choices," he says.

6. Which of the following statements best expresses the main idea of the passage?
- A. No pain, no gain.
 - B. The only thing we have to fear is fear itself.
 - C. Waiting for pain can cause more dread than pain itself.
 - D. Dread varies with time.
7. What can be said about temporal discounting ?
- A. It is often used in lottery.
 - B. It is a marketing strategy.
 - C. It becomes useless when people judge pain.
 - D. It is a kind of decision-making.
8. The phrase “in time” in line 4, para. 7, is closest in meaning to _____.
- A. very soon
 - B. early enough
 - C. in the end
 - D. after a fairly long period of time
9. Which of the following is NOT true about the study made by Story and his colleagues?
- A. It helped to develop diagnostic tools.
 - B. It showed that the dread of pain increased rapidly as pain approached in time.
 - C. It changed round the usual pattern of temporal discounting.
 - D. It involved giving mild electric shocks to a number of subjects.
10. What can be inferred from the passage when people have to receive painful treatments?
- A. They are more likely to take them.
 - B. They will try to postpone them.
 - C. They will consider whether the treatments are worth confronting.
 - D. They will abandon such treatments.

非选择题部分

注意事项：

用黑色字迹的签字笔或钢笔将答案写在答题纸上，不能答在试题卷上。

II. Directions: Add the affix to each word according to the given Chinese, making changes when necessary. (8%)

- | | |
|---------------|------|
| 11. conscious | 意识 |
| 12. variant | 不变量 |
| 13. coincide | 巧合 |
| 14. play | 相互作用 |

15. sphere 半球
16. plant 移植
17. contaminate 污染 (名词)
18. rhythm 有节奏地

III. Directions: Fill in the blanks, each using one of the given words or phrases below in its proper form.(12%)

- | | | | |
|----------------|---------------------|--------------|--------------------|
| embark on | proportional to | under way | response to |
| deficient in | come into one's own | contend with | in memory of |
| be packed with | no wonder | allow for | be associated with |

19. It's _____ that you cannot sleep when you eat so much.
20. The milk is _____ fat.
21. Promotional activities are _____ to sell the products.
22. They lacked the funds to _____ this new research project.
23. Many diseases _____ old age.
24. John will _____ if the firm needs an interpreter because he can speak many languages.
25. Happiness is not always _____ the amount of money.
26. We must _____ the possibility that he is not here because of illness.
27. In the past, women had to _____ social prejudice against them.
28. The shuttle bus _____ commuters at rush hour.
29. I got five _____ my ad about the car for sale.
30. The government decided to set up a monument _____ the soldiers who died in the war.

IV. Directions: Fill in each blank with a suitable word given below. (10%)

limits colder beneath fatter with lower inside generates while against

At the yearly Rottneest Channel Swim in Western Australia, participants often smear their bodies with animal fat for insulation _31_ the 70-degree water. But their own body fat also helps to keep them warm, like an extra layer of clothing _32_ the skin. When scientists studied aspects of the event in 2006, they found that swimmers _33_ a greater body mass index (BMI) appear to be at much _34_ risk of getting hypothermia. Under certain conditions, though, overweight people might feel _35_ than people of average weight. That's because the brain combines two signals—the temperature _36_ the body and the temperature on the surface of the skin—to determine when it's time to constrict blood vessels (which _37_ heat loss through the skin) and trigger shivering (which _38_ heat). And since subcutaneous fat traps heat, an obese person's core will tend to remain warm _39_ his or her skin cools down. According to Catherine O'Brien, a research physiologist with the U.S. Army Research Institute of Environmental Medicine, it's possible that the lower skin temperature would give _40_ people the sense of being colder overall.

V. Directions: Translate the following sentences into English, each using one of the given words or phrases below. (10%)

doom expose reinforce after all draw on

41. 毕竟，我们总有许多不说实话的理由。
42. 政府不得不动用储备并向国外借款。
43. 这种液体不可暴露在空气中，因为它会很快蒸发掉。
44. 由于粗心大意，他的实验注定要失败。
45. 她用皮补丁加固了茄克衫的肘部。

VI. Directions: Translate the following paragraph into Chinese. (15%)

46. Although measured air pollution ranged below current WHO guidelines, a considerable proportion of the adults surveyed rated themselves as annoyed by car fumes (39.7%) or visible dust/soot exposure (26.9%). Of the mothers (children's study), 12.2% reported car fumes perceptible most of the time in the exposed area, 5.3% in the unexposed area.

In the adult study, a series of factors were significantly associated with the perception of car fumes or dust/soot.

VII. Directions: Read the following passage, and then fulfill the task with the information based on the passage. (10%)

It wasn't until the mid 20th century that doctors realised asthma attacks were caused by the swelling and contraction of the airways. Consequently, in the last 40 years there have been many developments in the treatment of asthma. There are presently two main types of medicine:

preventers and relievers. A preventer is used every day and reduces the swelling of the airways, cutting the risk of an attack. A reliever, such as Ventolin, is taken when breathing has become difficult; this actually relaxes the muscles of the airways, reducing constriction and improving the airflow. The medicine is usually taken using a device for medical purpose. Prevention is also good treatment, so if you have asthma, remember to keep generally healthy, take regular exercise and lots of vitamin C to avoid colds and flu – which can be dangerous for asthma sufferers. A healthy diet is also important, and do watch what you eat, as certain foods or food with certain substances to change the flavor can start asthma. By taking the right medication and making the right lifestyle choices, there is no reason why most asthma sufferers shouldn't be able to lead perfectly healthy and active lives.

Asthma

Cause of asthma attacks	Number of types of medicine to treat asthma	Frequency of using a preventer	When to use a reliever	Dangers to asthma sufferers
47	48	49	50	51

VIII. Directions: Write a passage (150-200 words) in English on the following title. Develop the ideas according to the Chinese outline given below. (15%)

52. About E-learning

- (1) 随着网络技术的发展, 越来越多的人选择网上在线学习;
- (2) 但是不同的人对网络在线学习有不同的见解;
- (3) 我的看法。