

全国 2018 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)

Board games are growing as a popular hobby in mainstream culture and academic circles, thanks, in part, to the rise of "Eurogames," which emphasize strategy and individual development over luck and conflict. Given their wide appeal, board games also represent a media form ripe with potential for science education. This review presents two board games with environmentally themed expansions that can help kick-start discussions on the effects of climate change.

*Evolution: Climate* is the newest stand-alone expansion by North Star Games, released on 1 November 2016. In the titular base game (*Evolution*), players create new animal species by combining trait cards designed to maximize survival. The result is a frenzied evolutionary arms race, as players add and discard traits in response to starvation risk and predation by other species.

The game even comes with a sheet of proposed scientific names that tip their hat to traditional Latin nomenclature while borrowing from modern vernacular. A climbing carnivore, for instance, may have the cheeky name of *Ascendo non-nom*.

In the new expansion, climate oscillates between an "Ice Age" and "Scorching"

temperatures, driving evolution by selectively reducing populations of maladapted species that are too large or small in body size. One-time events, such as volcanic eruptions and glacial thaws, reduce food availability or select for certain body sizes. New trait cards bring with them new trade-offs and decisions: Should one invest in heavy fur for freezing temperatures or horns to discourage an opponent's carnivore?

The species created in this game may raise questions during and after play. Just how adaptive is a long neck on a burrower? How can an ambush carnivore realistically cooperate with a hibernating climber. Another gem is when players discover the Red Queen hypothesis on their own. "I'm just trying to keep up!" is a common refrain, as players struggle to keep their species alive amidst ever-evolving predators and prey.

The addition of climate not only adds another layer of complexity to players' strategies but also emphasizes its role as a vehicle for evolution. Players witness firsthand how species with small populations suffer greater extinction risks when climate changes, especially with major shifts.

*Evolution: Climate* positions players to discuss current challenges to conservation efforts. Biotic and abiotic factors regularly place pressure on populations, and environmental stochasticity can be the proverbial nail in the coffin for maladapted species. Extinctions can spell further changes in community assemblage, a reminder of the interlinked nature of living systems.

*Catan Scenarios: Oil Springs*, by Mayfair Games, is an expansion of the critically acclaimed game *The Settlers of Catan*. The base game centers on a race to colonize the fictional island of Catan. Placement of a player's initial settlements determines his or her access to resources, which in turn fuel further development of roads, settlements, and, eventually, cities. The first player to cinch 10 victory points wins.

*Oil Springs* introduces a new resource (oil) to the mix. One unit of oil can be converted to two of the original resources or spent to upgrade cities to metropolises, allowing for faster development. The flip side is that its overuse wreaks disasters, either by flooding coastal settlements or corrupting resource tiles into unproductive wastelands. Too many disasters will prematurely end the game with an island-wide deluge, encouraging players to stem their collective usage.

1. What does the passage mainly discuss?

A. Eurogames.

B. Evolutions in climate.

C. Board games.

D. Board games with climate-focused expansions.

2. Which of the following statements is **NOT** true about *Evolution: Climate*?
- A. Climate plays a very important role in evolution.
  - B. Too large or small species may not survive extremely high or low temperatures.
  - C. People greatly esteem the Latin language.
  - D. Species with small populations are threatened with extinction even if climate does not oscillate.
3. The word "vernacular" in line 2, para.3, is closest in meaning to \_\_\_\_.
- A. standard language
  - B. internet language
  - C. native language
  - D. nonnative language
4. The phrase "flip side" in line 3, para. 9, is closest in meaning to \_\_\_\_.
- A. side effect
  - B. weakness
  - C. opposite
  - D. aftermath
5. Which of the following is true, according to the passage?
- A. *Oil Springs* is based on the story of the settlement of an island.
  - B. The base game of *Oil Springs* is well received.
  - C. *The Settlers of Catan* has been publicly criticized.
  - D. *Oil Springs* suggests that the use of oil can bring disasters.

**( B )**

At a time when a bomb smuggled by terrorists is as big a concern as one from a foreign power, delivered by missile or airplane, an attack at a port is definitely a more likely scenario," says Thomas Cartledge, a nuclear engineer with the U.S. Defense Threat Reduction Agency (DTRA) in Fort Belvoir, Virginia. But forensic experts, who rely largely on nuclear test data collected years ago in Western deserts, lack a clear picture of how energy from a detonation would propagate in the highly saturated geology of many U.S. port cities. To remedy that, DTRA last October quietly staged Humming Terrapin: a 2-week test series at the Aberdeen Proving Ground in Maryland that detonated nearly 2 metric tons of conventional explosives to simulate nuclear blast effects in shallow water.

Since the 9/11 attacks, the U.S. government has mounted a major effort to prevent a nuclear bomb from being smuggled into a port. It has outfitted points of entry with radiation detectors, and it is working with foreign ports toward a goal of having all U.S.-bound cargo scanned for nuclear materials before departure. But it's well nigh impossible to track the myriad small craft flitting in and out of the 361 U.S. ports and 153,000 kilometers of open shoreline. "There are a zillion fishing boats that leave U.S. ports and nobody inspects them when they come home," says Matthew Bunn, a specialist on nuclear terrorism at Harvard

University's Belfer Center for Science and International Affairs. "If there is highly enriched uranium metal that's shielded and below the water line, it's going to be really tough to detect at long range."

In case the unthinkable happens, a sensor array called Discreet Oculus that is being installed in major U.S. cities would capture key forensic information. The array, which DTRA is still developing, would record radiation and seismic waves emanating from the blast. "Discreet Oculus is up and running in several U.S. cities now," Cartledge says. A sister system--- a portable array that runs on battery or solar power called Minikin Echo---will be deployed at major events such as the Olympics or the Super Bowl. Data from Cold War-era nuclear testing and simulations are being used to calibrate the sensors.

Yet past U.S. testing is a poor proxy for detonations at a port, says Tamara VanHoose, a U.S. Army major and nuclear engineer at DTRA. A closer analog is a little-known campaign in 1963-64 in which the U.S. Air Force conducted a series of detonations of as much as 10 tons of chemical explosives at the bottom of Lake Superior. The tests offered a wealth of data on how seismic waves traverse the land-water interface, but they "were not instrumented to meet our needs," VanHoose says.

Humming Terrapin aims to fill that gap. VanHoose and colleagues set up Discreet Oculus and two Minikin Echo arrays at Aberdeen, adding hydrophones, which are not currently included in either array. Another set of sensors probed how seismic signals ripple through East Coast rock layers. "These are wet-type geologies versus the granite geologies that we see out at the typical desert sites where we've done historic testing," VanHoose says.

6. All of the following are true **EXCEPT** \_\_\_\_.
- A. Discreet Oculus has yet to be improved
  - B. nuclear tests are often conducted in deserts
  - C. all the goods are examined in the foreign countries before they are shipped to the States
  - D. forensic experts do not have a clear idea of how a blast spreads energy in wet-type geologies
7. The word "myriad" in line 5, para.2, is closest in meaning to \_\_\_\_.
- A. unscreened
  - B. untold
  - C. unregistered
  - D. unguided



22. In fact these assumptions are not \_\_\_ by the events that subsequently unfolded.
23. Actually, the doctor said that his headaches \_\_\_ his vision problems.
24. It is the freedom of a property owner to make a contract \_\_\_ his own property.
25. The purpose of the program is to \_\_\_ the needs of the local people.
26. I need to find something of interest that involves me being \_\_\_, as I'm not actually that active.
27. His great name \_\_\_ in our history.
28. To find out the truth, I think we must \_\_\_ the past for some link with what is happening here today.
29. The government official made a speech \_\_\_ his actions.
30. The investment appraisal published by the Southern board was \_\_\_ many aspects.

**IV. Directions: Fill in each blank with a suitable word given below and write your answer on the ANSWER SHEET. (10%)**

up little shipping with staggering other without killing as alone

Every once in a while the government here passes out an order banning shop keepers from providing plastic bags to customers for carrying their purchases, with \_31\_ lasting effect. Plastic bags are very popular \_32\_ both retailers as well as consumers because they are cheap, strong, lightweight, functional, \_33\_ well as a hygienic means of carrying food as well as \_34\_ goods. Even though they are one of the modern conveniences that we seem to be unable to do \_35\_, they are responsible for causing pollution, \_36\_ wildlife, and using \_37\_ the precious resources of the earth. About a hundred billion plastic bags are used each year in the US \_38\_. And then, when one considers the huge economies and populations of India, China, Europe, and other parts of the world, the numbers can be \_39\_. The problem is further exacerbated by the developed countries \_40\_ off their plastic waste to developing countries like India.

**V. Directions: Translate the following sentences into English, each using one of the given phrases below. Write your answer on the ANSWER SHEET. (10%)**

in accordance with account for fond of bump into be concerned with

41. 近期工作上的压力或许导致他行为怪异。
42. 我祖父热衷于向我的朋友提供忠告。
43. 该故事涉及十九世纪的一个俄国家庭。

44. 根据其遗愿，他安葬于故里。
45. 上周我在一次会议上跟她邂逅。

**VI. Directions: Translate the following paragraph into Chinese. Write your answer on the ANSWER SHEET. (15%)**

46. Pure mathematics consists entirely of such asseverations as that, if such and such a proposition is true of anything, then such and such another proposition is true of that thing. It is essential not to discuss whether the first proposition is really true, and not to mention what the anything is of which it is supposed to be true. If our hypothesis is about anything and not about some one or more particular things, then our deductions constitute mathematics.

**VII. Directions: Read the following passage, and then fill in the table with the information based on the passage. Write your answer on the ANSWER SHEET. (10%)**

Humans, unlike many other animals, are omnivores. We require both vegetable matter and meat to be fully healthy (although some humans manage to live reasonably healthily whilst consuming no animal products at all, finding their protein mainly in nuts and seeds). To carry out its many complicated functions, the human body requires different chemicals and substances. All of the nutrition we take in can be put in one of seven categories. These are: carbohydrates, proteins, fibre, minerals, vitamins, fats and water.

Carbohydrates provide the body with energy.

Proteins allow the body to repair itself and grow.

Fibre aids the digestive system.

Minerals and vitamins are required for many reasons. Deficiencies in any vitamin or mineral can lead to illnesses. Vitamins are essential for normal growth and development.

Fats are often unnecessary, and many are bad for you. The body does not need to take in most fats, but the fatty acids omega-3 and omega-6 are necessary.

The body is around 70% of water. If water is not consumed, the body will dehydrate. The body loses water in excretion, sweating and breathing.

It is advised that you should have a balanced diet, taking in food from each of the food groups, in proportion.

### Categories of Nutrition

Human beings must obtain <u>47</u> to survive.	Vegetarians may gain their protein from <u>48</u> .	Patients are usually advised to take in <u>49</u> .	Human beings need the fatty acids <u>50</u> .	The secret of longevity is <u>51</u> .
--	---	---	---	--

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

52. Bicycle-sharing in Shanghai

- (1) 共享单车符合低碳出行理念，受到人们欢迎，但也引发一些问题。
- (2) 你所知道的利与弊。
- (3) 怎样改进。