

## 豆腐机经 2015 年 1-4 月综合写作题库精选参考答案

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### **080105CNW1** 【08 年 1 月 5 日大陆托福机经写作第 1 题-综合写作】

The reading passage explains the negative effects of introducing foreign species into a local ecosystem. The lecture, on the other hand, offers counterarguments to prove that introduced species many not necessarily be harmful.

First, according to the reading, imported species may destroy the existing balance within an ecosystem. However, the lecturer argues that these species don't always do harm to the local ecosystem. Instead they may bring benefits to local agriculture.

Second, the reading states that imported species may destroy the useful aspects of local species. Yet the lecturer points out that this is not always the case. He points out that it depends on local circumstances. For example, the cane toads introduced into the state of Florida have helped to exterminate pests that have infested local harvest.

Finally, the reading contends that imported species may add to the local economic burden. Again, the lecturer refutes this point by saying that the impact on local economy varies from place to place. He/She uses the example of mesquite to illustrate this point. This plant imported into Africa has been used as food and firewood by the local people, a useful contribution to the local economy.

### **080427CNW1**

The reading passage provides three pieces of evidence to support author Gavin Menzies's claim that it was Chinese who first visited the Americas. However, the lecturer dismisses this claim as unfounded.

First, as to the markings resembling Chinese characters discovered on a rock on Bimini Road, the lecturer argues that these markings are natural formation rather than human engraving. It looks as if they were carved by humans but a closer examination by geologists would immediately reveal that they are formed by natural forces.

Second, regarding the donut-like anchor found off the Coast of Bimini, which seems to be made by Chinese, the speaker suggests that this does not necessarily mean Chinese had been there first, because similar anchors had long been used in navigation by many other countries.

Finally, the lecture refuses to view the stone towers on Bimini Island as evidence of the arrival of Chinese sailors earlier than others. He points out that although these towers look like a Chinese lighthouse from a distance, they are in fact built in an English architectural style. Furthermore, carbon dating technique has indicated that the construction by Chinese sailors took place much later than the 15th century.

### **090118CNW1**

The lecturer argues against the theory presented in the reading that the inhabitants of Easter Island originally came from South America.

The first point in the reading is that settlers from South America could have arrived at Easter Island by taking a raft and sailing with wind. However, the lecturer argues that there were no remains of rafts or boats on the island that had signs of a South American origin.

Secondly, the reading refers to the stone walls on Easter Island as evidence because they had a similar structure to the Inca stone walls in South America. However, the lecturer says that they only have superficial similarity. A closer study reveals that the stone walls on Easter Island were hollow inside, unlike those in South America.

Finally, the reading states that some plants on Easter Island clearly came from South America, but the lecturer throws doubts on that evidence. He explains that the seeds of native South American plants could have drifted across the ocean and reached Easter Island, and then germinated and propagated there. Studies show that even after several days of being immersed in sea water, the seeds can still grow.

### **090222CNW1**

Some dinosaur fossils were discovered in Ghost Ranch which, according to the reading passage, could explain the death of a herd of dinosaurs in that area. Three possible hypotheses were given as to why these dinosaurs died, but the lecturer challenges these explanations.

The first hypothesis is that the dinosaurs may have been stuck in the mud and eventually died there because they could not escape. This theory was supported by evidence that mud was found around the bones. Weixin:laoxikou. However, the lecturer argues that if the dinosaurs did indeed die stuck in the mud, their bones found at the site would have been found lying down instead of standing up.

The second hypothesis is that the dinosaurs died after drinking poisoned water since there were poisonous chemicals found in their bodies. However, the lecturer points to the remains of fish also found in the same site, arguing that these fish showed no signs of being poisoned, indicating that poisoned water may not have been the cause of death.

The last hypothesis is a sudden flood which had drowned the dinosaurs to death. This is supported by evidence that the skeleton of the dinosaurs remained complete. The opposing evidence, however, is that the dinosaurs appeared to have died with their necks curved inward. This posture indicates that their death occurred before the flood.

### **090613CNW1**

The reading passage provides three reasons to argue against paying admission charges to national parks. However, in the lecture, the professor states that admission charges are reasonable.

The first point in the reading is that most national parks are built and maintained by taxpayers' money, so they should provide free access to every taxpayer. The professor, on the other hand, points out that not every tax payer would pay a visit to the national park, so it would only be fair if those who do visit the park are charged with some admission fees, and those who never visit the park are not.

Second, the reading claims that the number of visitors to national parks will decline if they are not free. However, the lecturer does not agree with this. He argues that, on the contrary, parks that charge admission will receive even more visitors. This is because people will think of parks that charge high admission fees as more worth visiting than those parks that charge less or provide free entrance

Finally, according to the reading, work related with ticket sales and disposal may distract staff's attention from doing more important things such as providing safety measures and protecting park environment. Yet the lecturer regards such work as beneficial because it gives employees at the park opportunities to get close to visitors, learn about their needs, and listen to their suggestions on how to improve the park.

#### **090808CNW1 (=071028CNW1)**

The reading passage challenges a claim that a cave discovered in North America has a history of 20,000 years. However, the lecture supports this claim.

First, the reading argues that carbon dating does not necessarily produce convincing data about the true age of this cave, because the carbon samples used for dating might have originated from somewhere else. However, the professor questions this argument. He says that, if these carbon elements indeed came from other sources, there should have been signs of erosion, or indications in the ground water.(由于机经回忆不详，无法还原更多答案细节，考试时请注意听)

Second, the reading states that the last ice age was about 20,000 years ago. The plants and handicrafts excavated from this cave could not have dated so long ago because they require warm conditions for preservation. However, the professor argues that the cave could have supported a warm condition, because it was located at lower altitudes, and temperatures tended to increase at such altitudes.

Third, the reading points out that human or animal activities over the ages might have moved lower layers of archaeological objects to upper layers, making interpretation of the age of these objects less accurate. However, the lecturer refutes this theory by saying that human or animal activities could only have affected stratifications close to the surface of the soil. Excavation of the cave was deep beneath the soil, so destruction at that depth was less than possible.

#### **091018CNW1**

Many farms in the US suffer crop damage from hail. Cloud seeding is a common technique used to prevent such damage. Cloud seeding works by dispersing chemicals such as silver iodide into the cloud, turning hail into light snow. Three pieces of evidence in the reading passage prove that cloud seeding is very effective in preventing hail damage to crops. However, the lecture refutes each of them.

First, the lecturer argues that success in lab experiment is not sufficient to prove that cloud seeding is beneficial in reality. Silver iodide not only reduces hail, but also reduces natural phenomenon such as snow and rain, which may lead to drought. This is even worse for the crops.

Second, success in Asia cannot be repeated in other places. Asian cities have a high level of pollution so there are large amounts of particles in the air which react with silver iodide for cloud seeding to work. Weixin:laoxikou. However, in the US, the skies over farmlands are not polluted and do not have these particles. So cloud seeding is not likely to work well in these regions.

Finally, local study is not convincing either. Indeed local records show that in some places that use cloud seeding, occurrences of hail damage are reduced. But in other places where cloud seeding is not used, there is also a decrease in hail damage. So the improved situation may not be the result of cloud seeding. They may be due to other environmental factors.

### **091025CNW1**

Some high schools require students to participate in volunteer activities for at least 2 hours every week. The reading passage claims that such requirement is not meaningful, while the lecture argues that volunteer work is beneficial to high school students and therefore justified.

Firstly, the reading says that some high school students can easily fulfil this requirement by reporting that they have done some work in places like their grandparents' gardens. There is no way the school can monitor their work. However, the lecturer says that students' own report is only part of the evaluation. The school also checks with relevant local authorities at the students' place of work, asking for official document as proof of the student's record of volunteer service.

Secondly, the reading raises the concern that volunteer work mandated by the school may instill a concept in students' mind that volunteer work is actually tied with some forms of benefits. This may prevent students from participating in volunteer work in the future when there is no such benefit. Yet the lecturer explains that many students who have done some types of volunteer work such as working in the hospital regard such experience as very powerful and rewarding. They feel motivated to continue doing volunteer work in the future.

Finally, according to the reading passage, requiring students to do volunteer work is a violation of student' freedom and rights, which is illegal. The lecturer, however, draws an analogy between volunteer work and academic curricula. He argues that if there is nothing wrong with schools requiring students to take academic courses such as math, then they are not violating any student's right when they demand the student to do some volunteer work.

### **091121CNW1**

The reading passage states that it is impossible to establish permanent human presence on Venus, due to significant challenges caused by the planet's hostile surface environment. Yet the lecturer argues that there are ways to overcome these challenges.

The first challenge is pressure. The atmospheric pressure on the surface of Venus is far greater than on Earth, so any spacecraft that tries to land on Venus for more than one hour would inevitably crush.

[s-keygen-aswer-20110108]However, the lecturer argues that 50 meters above the surface of Venus, the atmospheric pressure is similar to that on Earth, so humans can probably establish floating stations above Venus like balloons.

Furthermore, water and oxygen, both essential for human survival, are almost absent from Venus. But the lecturer states that water and oxygen can be produced by chemical process. Venus provides plenty of raw materials to allow such process so there is no need to transport water and oxygen from Earth to Venus.

The final challenge is the dense layer of clouds over Venus, which blocks sunlight, making navigation based on solar power unlikely over Venus. However, the lecturer explains that solar cells can be used effectively because there is plenty of sunlight above the clouds and these clouds also reflect sunlight down below, providing abundant sources of electricity

### **091205CNW1 (=070721CNW1)**

The dodo bird is an extinct species native to the island of Mauritius. The reading passage attributes the extinction of the dodo to the Dutch settlement on the island. However, the lecture rejects this view.

First, the reading states that the dodo is a flightless and so defenseless bird, but they were unafraid of humans, making it easy prey for the Dutch settlers on the island. However, the lecturer argues that the Dutch settlers found that the dodo meat was unpleasant to eat. Actually, the Dutch called the dodo, in their native language, the disgusting bird.

Second, the reading claims that when the Dutch settled on the island, they had destroyed the forest, which severely reduced the territory in which dodos could live and reproduce. The lecturer admits that there was deforestation on the island, but he argues that deforestation did not cover the entire island. He also points to the fact that many other bird species did not become extinct because of deforestation.

Finally, in contrast to the reading's argument that a disease brought by the Dutch may have killed the dodos, the professor says the dodo population may already have been declining. He then blames the extinction of the dodo on natural disasters such as massive cyclones that destroyed their nests and eggs.

### **100221CNW1**

The lecture rejects views presented in the reading passage regarding the effectiveness of iron fertilization. Contrary to what the reading says, the lecturer argues that iron fertilization is a promising solution to global warming.

First, the reading criticizes that iron fertilization is an ineffective solution because experiments show that only a small amount of carbon dioxide can be absorbed. Yet the lecturer rejects this criticism, arguing that experiments last too short (only a month) for the effect of iron fertilization to be visible. Increased CO<sub>2</sub> absorption would only be significant in the 2nd or 3rd month.

Second, the reading warns us that toxic chemicals released in the process of iron fertilization will harm local fishery as well as humans who eat contaminated fish. However, the lecturer argues that contamination is limited within certain areas only. By practicing iron fertilization in isolated areas away from the fish population would help to reduce such risk.

Finally, regarding the reading's worry that iron fertilization may cause unpredictable damage to a region's marine eco-system, the lecturer argues that such risk is worth taking because iron fertilization address a more important issue – global warming, which causes a much higher level of risk to the ocean environment across the entire globe. So iron fertilization is completely justifiable.

### **100626CNW1 (=080816NAW1)**

The reading passage presents three pieces of evidence for microscopic life in a meteorite from Mars. However, the lecturer challenges this view, claiming that the evidence is flawed.

First, microscopic image of meteorite fragments show fossils of tube-like organisms which suggests that a primitive form of life may have existed on Mars. However, the lecturer argues that these fossils may have appeared as a result of changes in the meteorite sample's shape and characteristic feature as it was prepared for microscopic scanning.

Second, a chemical compound found on the meteorite is very similar to a chemical compound on Earth called boron (硼), a necessary ingredient for life. Weixin:laoxikou. Yet this view is contested by the lecturer, who states that this chemical substance does not necessarily originate from Mars. The meteorite could have contained this chemical due to its impact with Earth during period of volcanic activity.

Finally, grains of magnetite were found on the meteorite, resembling those produced by bacteria on Earth (类细菌生命体所产生的磁铁矿颗粒), which can be taken as signs of biological activity on Mars. However, the lecturer says that compared with Earth, the magnetic field on Mars is too weak, so it's unlikely that these grains of magnetite were used by microbes on Mars to follow its magnetic fields.

### **101009CN**

The reading passage criticizes fish farms for causing a number of problems to the local environment. However, in the lecture, the professor argues that solutions have already been found to address each problem.

The first problem fish that grow in fish farms may produce large quantities of by-products and wastes that may contaminate the surrounding water. In the lecture, the professor points out that a kind of bacteria (也可能是 marine animal) has been introduced in fish farms to effectively break down (或 eat) the waste.

The second problem is that when the fish escape from the farms and breed with their wild relatives, they could produce offspring with genetic weakness and low viability. However, according to the lecture, domestication has made fish in the farms genetically different, and their reproductive ability much lower than that of the wild fish, so successful breeding for the escaped fish in the wild is highly unlikely.

The third problem concerns the overconsumption of freshwater resources in fish farms. To address this problem, the lecture says, scientists have invented a water recycling system, in which water is continuously filtered and recycled so the amount of water needed to run a large-scale fish farm is minimized. Furthermore, a type of plant called () can be grown in salt water to help with the cleaning process.

### **101017CNW1 【10年10月17日中国大陆托福机经写作第1题-综合写作】原创高分答案**

Microcredit is a form of financial service which provides small loans to help the poor start their business. The reading passage points to three inherent problems with microcredit. The lecture, however, addresses each of these questions.

The first problem is that receivers of microcredit usually do not possess the knowledge and skills necessary to run a business, so their business is likely to fail. However, according to the lecture, microcredit service is more than just providing loans. Borrowers are also taught many useful skills such as how to budget the balance and how to lower their cost. These, together with the credit they are given, will help receivers successfully run their business.

The second problem is that microcredit will increase the administrative cost of the bank, and therefore it is an inefficient practice. The lecture argues that this is not necessarily the case, since the bank often lends microcredit to a small group of 4 to 5 people at a time, rather than just to one individual, so the administrative cost involved is significantly reduced, which means more loans can be provided to a larger number of people.

Finally, another problem with microcredit is that it takes away the valuable funds which the government could have invested in more important areas like education and infrastructure. The lecture, however, contends otherwise. It explains that microcredit is often financed by nongovernment institutions. So it does not decrease government fund. On the contrary, with small businesses being financed by microcredit, the government could focus its limited budget on financing larger projects, such as the construction of bridges and roads.

### **10326CN**

The reading passage presents three pieces of evidence to support the theory that the Permian–Triassic mass extinction was triggered by a meteorite impacting Earth. However, the lecturer rejects this theory by pointing out its weaknesses.

The first evidence is the recent discovery of meteorite fragments containing mineral grains which dated to 250 million years ago, the same time when the extinction occurred. However, the lecturer rejects this theory as unconvincing, arguing that any substance would be transformed completely after 250 million years of gradual chemical process, so the minerals now preserved in the fragments must have been formed quite recently.

The second evidence is the scattered meteorite fragments in China, India and [], indicating the magnitude of a disastrous meteorite impact that could wipe out almost the entire species on Earth. Yet according to the lecture, the fact that the fragments were only found in three countries, and not in the rest of the world such as Europe, was actually proof that the meteorite collision was not strong enough to cause such a massive extinction.

The third evidence is a large crater found off the coast of Australia. Its size matches that of a meteorite, indicating that it was an impact site for a meteorite collision. Nevertheless, the lecturer proposes a different theory. He explains that this crater may have been caused by Earth's internal forces such as volcanic activities.

### **110423CNW1 (=090227NAW1)**

Gopher tortoises are listed as an endangered species in the United States. The reading passage introduces three measures that are expected to help restore the gopher tortoise population. However, the lecture rejects each of the measures as unlikely to succeed.

The first measure mentioned in the reading is the conservation of longleaf forest, a vital habitat for gopher tortoises. However, the lecturer argues that the abundance of longleaf pine trees may actually have a negative impact on the ecosystem, because they block the sunlight that is necessary for the growth of a type of grass that gopher tortoises depend on.

The second measure is to bring young gopher tortoises to research laboratories where they are fed and their disease is cured, before releasing them to the wild. However, the lecturer considers this as a risky practice because gopher tortoises brought up in laboratory environment is more susceptible to diseases when they are released into the wild, and these diseases may spread very quickly among the tortoise population.

The third method is to translocate gopher tortoises to other carefully selected places. The lecture rejects this measure as even more dangerous. Gopher tortoise, the professor argues, have a strong homing instinct and will try to return to their original habitat no matter where they are taken. On their way back, they may run into a series of risks, like being run over by a car while they try to cross a busy road.

### **110514CNW1 (=110514NAW1)**

The reading passage present three theories as likely explanations for the first mass extinction of species on Earth, while the lecture rejects these theories as unfounded.

The first theory is that declining sea levels caused the extinction of coastal living and eventually mass extinction of all species. However, the lecturer suggests that the sea level fluctuation was a gradual process, so coastal lives should be able to adapt to such change. This theory, therefore, is not valid because it does not explain why the mass extinction was so rapid.

The second theory attributes the mass extinction to volcanic activities which produce excessive amount of sulfur dioxide (SO<sub>2</sub>) in Earth's atmosphere and subsequently initiated a drop in global temperature. Yet the lecturer argues that the increase in SO<sub>2</sub> levels was not so significant, and that any increased amount would eventually fall back to the ground in the form of acid rain.

The third theory links the mass extinction to an asteroid impact. A giant crater was formed and the dust and debris from such impact blocked the sunlight, causing plants and animals to die out. However, the lecturer points out that a possible asteroid impact was recorded around 12 million years ago, which came too early to have been the cause of extinction.



### **110529CNW1**

The reading passage supports deep-sea mining for minerals near volcanic vents while the lecture raises doubts about such practice. The speaker argues that the benefits mentioned in the reading overlook several important concerns.

First, the reading passage states that there are abundant mineral resources that could be exploited near volcanic vents. However, the lecturer says that these minerals may not be easily available because currently the technology needed for separating and transporting the minerals is not sufficiently developed.

Second, according to the reading passage, deep-sea mining is environmentally safe because the mining site is considerably far away from the shore. Yet the lecturer argues that contamination could spread over a large area of the ocean because contaminating minerals could drift a long way. Some of the contaminants may even move back to the volcanic vent, endangering the animal species that inhabit there.

Finally, the reading passage mentions that international laws and agencies can help to ensure the safe running of mining facilities and prevent accidents, to which the lecturer expressed his doubts. He points out that many deep-sea mining facilities are operated off the coast that belongs to a particular country, in which case international laws and agencies are not applicable because they only govern international sea waters.

### **110619CNW1 (=100227NAW1)**

The lecture and the reading passage both address the question why humans need sleep. The reading proposes three theories to explain the purpose of sleep, but the lecture throws doubts on each of them.

The first theory is that people need sleep in order to organize and consolidate information that has been acquired during the day. The reading cites REM as evidence of this theory because people's brains are so active during REM sleep. However, the speaker argues that sleep may not be essential for memory, because some people don't think about their daytime memories during sleep. They don't show REM either.

The second theory suggests that sleep is needed for revitalizing energy, as is illustrated by some nocturnal animals which prey during the night and sleep during the day. Yet the lecturer states that to restore energy, one simply needs to rest awake. So restoration may not be an essential function of sleep.

Thirdly, some experiments have shown that sleep helps to remove toxins that have been accumulated in the body so damaged brain cells can be repaired. However, the lecturer points out that these experiment results may not be valid, because they are based on extreme cases, in which subjects are kept awake for several days before being allowed to sleep.

### **110625CNW1 (=091017NAW1)**

The lecture throws doubts over the claim made in the reading passage that T.rex was not able to run. It challenges the three pieces of evidence presented in the reading passage.

The first point in the reading is that T. rex had such a huge body that if it could run, then when it fell, the danger could be fatal. However, the lecturer argues that such risk was much less than the benefit that T. rex could gain from the ability to run, because it would enable T. rex to chase its prey, a skill needed for survival. This applies to many other animals, for example the monkey, which would swing from tree to tree at the risk of getting fatally hurt if it drops to the ground.

The second point in the reading is that T. rex had long and thin legs, which were not strong enough to sustain the force imposed on them when T. rex was running. The lecturer refutes this argument, using the example of modern day animals such as horses, which had thin legs but are still fast runners. The horse is able to adjust its running postures to minimize impact on its bones. It does so by making small steps and repeating them fast in order to move forward. Weixin:laoxikou.

The third point is that it is calculated that in order to run, a T. rex would have 86% of its body weight spread among its legs, which was not possible. But the lecture points out that this calculation is based on a hypothetical model of T. rex. Under this model, many parameters could be wrong. We could draw a totally opposite conclusion if some of the parameters were changed, such as the size of T. rex's internal organs, or the posture of its body when it was running.

### **110709CNW1 (=100410NAW1)**

The reading passage introduces to the readers the benefits of genetically modified crops, while the lecture tries to convince us that these benefits are over exaggerated.

The first benefit is that GM crops are good for the environment because they possess pest-resistant genes which can reduce the need to use pesticide. However, the lecturer argues that if these resistance genes spread to wild crops, they will grow out of control which may bring more damage to the environment.

The second benefit is that GM crops can increase farmers' profits because GM crops can produce good yields even in dry seasons. However, the lecturer points to the fact that farmers of GM crops have to pay a heavy sum of money to GM seed companies, and they have to do it annually. This brings up the cost of growing GM crops significantly.

The third benefit is that GM plant can add important nutrients like vitamin A to the diet of people who lack those nutrients. However, according to the lecture, the nutrients introduced through GM crops are far from enough. The correct and more effective way to deal with nutrient deficiency is to encourage people to eat more vegetables like sweet potatoes.

### **110918CNW1 (=110121NAW1)**

The reading passage discusses why a whale sometimes strands itself on the beach. It attributes whales' beaching behavior to three possible causes, but the lecturer does not believe any of these causes to be true.

First, the lecturer says that disorientation caused by sickness could not have been the cause of whales' beaching behavior, because when beached whales were discovered and their bodies were examined, people found that their bodies did not show any signs of disease or illness, indicating that the whales must have been healthy before they were stranded.

Second, the lecturer argues that although military ships do emit powerful sonar signals, they are unlikely to disrupt whales' navigation system. This is because the ship's sonar uses mid-frequency sound while whales use low-frequency sound for navigation, so military sonar could not have been the cause of whale stranding.

Last, the earth's magnetic field change, from the lecturer's point of view, is unlikely to be the real cause either. Many whales are stranded at a time when there's no earthquake. Even if there are cases when stranding follows an earthquake, the lecturer argues that this may only be a coincidence.

### **110928CNW1 (=100306CNW1=080301NAW1)**

The Reading lists three reasons for the collapse of Mayan culture. However, the professor in the lecture thinks that none of these explanations is adequate.

First of all, the reading suggests that the collapse was caused by extreme drought. However, the professor in the lecture claims that the fact that shells were found scattered over large stretches of land indicates that the Mayan region suffered drought every 200 years, since Maya survived previous droughts, it should not have had any problem coming out of this drought unaffected.

Secondly, the reading indicates that the writing system was disrupted and the cities were abandoned because many people moved elsewhere because of severe drought. However, the professor in the lecture refutes by saying that the Maya was at war with its neighboring regions at that time and victors always took away educated people who were able to write, causing a breakage in the writing system.

Thirdly, the reading contends that many ancient American civilizations disappeared because of drought. However, the professor in the lecture says that the Mayan people had an excellent water system which can store up water that could sustain the Mayan people for up to 15 years, so water couldn't have been a problem for them.

### **111126CNW1 (=120218NAW1)**

The reading passage proposes three theories as to what caused the red rain phenomenon witnessed in the southern Indian state of Kerala. The lecturer, however, rejects each theory as invalid.

First, the lecturer discredits the comet theory as a possible explanation for the colored rain. He explains that three occurrences of red rain were reported in Kerala during the past 100 years. If each time it was caused by a comet hitting the earth, there would have been three meteor explosions in or near Kerala. The chances of this happening are extremely rare.

Second, the lecturer argues that sand dusts from the deserts of Arabia could not have been the cause of the red rain either. He explains that the dust clouds from that region contained great quantities of elements such as iron and phosphorus. However, chemical analysis of the rainwater showed only small amounts of these elements.

Finally, the possibility of spore proliferation causing the red rain is also ruled out by the lecturer. The widespread growth of lichens could spread red spores into the atmosphere. However, for these

lichen to release their spores in large quantities and simultaneously, it is necessary for them to enter their reproductive phase at about the same time, which is quite improbable, because the life cycle of lichen is very short.

### **111210CNW1=101029NAW1 )**

The reading passage opposes a law in the U.S. that prohibits the importation and sales of nonnative species, while the lecture defends such law as justified.

First, the reading states that many pet owners fear that, under this law, the exotic animals they keep in their home will be taken away by authorities. However, the lecturer reassures that the law only prohibits the trading of non-native species, it does not govern the current possession of exotic pets by private citizens. For example, if a person owns an exotic tropical fish now, it will not be taken away. The pet owner is only prohibited from buying any new exotic fish in the future.

Second, the reading points out that it is extremely costly to implement the law because the government has to invest huge amounts of fund on the study of non-native animals. However, the lecturer argues that compared with this cost, the damage that non-native animals may bring to the local ecosystem is far more severe and also irreversible. For example, the declines in several native species in Florida have been linked to the presence of invasive Burmese pythons.

Finally, according to the reading, non-native species may not pose a significant threat because it's difficult for new species to establish themselves in a new ecosystem. Yet the lecturer cites the Belgian rabbits as a highly invasive species that has caused great damage, because they carry Myxoma virus, which almost caused the extinction of native rabbits.

### **120217CN**

The reading passage introduces three methods to prevent the Asian carp from entering the Great Lakes area. However, the lecture points to the problems associated with each method.

The first method is to construct walls in the Great Lakes to block the passage of the Asian carp. However, the lecture points out that this would negatively influence the shipping industry in the area because cargo ships would also be blocked and have to unload the cargo at one side of the wall and reload the cargo at the other side, significantly increasing cost of transportation.

The second method is to use electrical devices to eliminate the Asian carp. However, according to the lecture, this method would not work successfully because small fish could still swim through the device, and continue to grow and reproduce in the other side of the lake.

The third method is a two-step approach involving the poisoning of the Asian carp first and then the introduction of new species. Yet the professor argues that this measure is too drastic and could have unpredictable results. The toxic chemicals released would lead to changes in the whole ecosystem that are dangerous to the fish population in the area.

### **120224CNW1 (=100213NAW1)**

There has been some controversy over whether or not T. rex could run fast. The reading passage provides three pieces of evidence to prove that T. rex was a fast runner. However, the lecturer argues that none of the evidence is convincing.

First, the reading suggests that T. rex must have been a capable runner because it fed on herbivorous animal which could run very fast. However, the lecturer argues that this may not serve as valid proof, because T. rex had very acute sense of smell so they could detect and scavenge on the dead bodies of small animals instead of having to chase them.

Secondly, the reading draws comparison between the leg bones of T. rex and a fast running tiger. Yet the lecturer rejects such comparison. He argues that in spite of the similarity, the bones of T. rex were too fragile to sustain the high pressure caused by high-speed running.

Finally, fossil evidence shows that T. rex had two powerful legs and large toes. Relatives of the T. rex that shared these features, like the [M-], were fast runners. Again this is disproved by the professor, who argues that in order to run, a T. rex would have needed to carry 86% of its huge body mass as supportive muscles in its legs, which could not have been possible.

### **120414CNW1 (=120414NAW1)**

Hill forts in Scotland are stone structures built on higher grounds. Many of these hillforts are vitrified forts, whose stone walls seem to have been subjected to intense heat. The reading passage proposes three theories to explain the causes of vitrification, while the lecturer refutes each of these theories.

First, the reading suggests that vitrification might have been part of a religious or ceremonial ritual. Fort builders might have believed that vitrification could bring them magical powers. However, the lecturer argues that the forts were mostly built during a time when christianity was the dominant religion. It did not believe in the power of vitrification. Other religions that might have had this belief had already been wiped out. (此处各种版本机经回忆均不够明确，考试时请注意听)

Second, the reading considers that vitrified forts may have been the product of battles in which enemies used fire weapons. These weapons set fire to the wooden beams on top of the forts, vitrifying the stones beneath them. Yet the lecturer explains that in order for vitrification to take place, sustained burning at a temperature of over 1000 degrees is required. Burning wood can never reach that temperature. Nor does the fire last long enough.

Finally, according to the reading, fort builders might have purposefully vitrified the forts in order to strengthen the walls. From the lecturer's point of view, however, this is not likely because vitrified stones are very brittle, so vitrification actually weakens the structure.

### **120428CNW1**

The reading passage tries to explain why some stones in desert areas show signs of moving slowly across the surface. However, all the three theories proposed in the reading are refuted by the lecturer.

The first theory is that the stones are moved by the forces of winds. This is made possible by powerful windstorms in the valley and muddy and slippery surfaces on rainy days. However, the professor argues that winds strong enough to move a rock have never been recorded on Earth. Furthermore, there's evidence showing that part of the stones is beneath the muddy surface, indicating that the stones are not sliding on the surface.

The second theory is that the rocks move because of the floating ice sheets that surround the rocks. However, this theory is also not possible because, as the speaker says, the desert area is extremely dry, so it lacks the amount of water to form large ice sheets. Even though ice could possibly form during the night when the temperature drops, during the day the ice would melt. Therefore, ice sheets could not have been the forces at play.

Finally, there is the possibility that human or animal intervention rather than natural forces made this happen. However, if this were true, the professor says, then there would have been traces left of humans or animals moving the rocks, and these traces would not have been easily removed in such muddy places. Yet the fact is that neither the traces of humans nor those of horses exist near the moving rocks. So the human intervention theory is highly unlikely.

### **120512CNW1 (=110420NAW1)**

The lecture challenges ideas presented in the reading passage regarding the functions of deer antlers.

The first function of antlers, according to the reading passage, is to assist deer to lose heat. However, the lecturer argues that the antlers of deer continue to grow even after summer is gone, indicating that they may not be used for heat loss. Besides, in places where temperature is higher, the antlers of deer seem to be smaller, further disproving this "heat loss" theory.

Secondly, the reading states that antlers may be used for self-defense against predators. This theory is also refuted by the lecture. The speaker argues that if antlers were used for self-protection, then we would have seen female deer also growing antlers because they are the ones protecting their young. Furthermore, we often see deer kicking with their front legs, rather than fighting with their antlers, when they are attacked by wolves.

Finally, antlers may be used to battle other males for dominance. A deer that has larger antlers in a combat will be seen as a superior one. Yet the speaker argues that often when two male deer confront each other, they use other tactics such as grunting, or walking around each other, to determine who is stronger. In some cases, it is the deer with larger antlers that go away.

### **120609CNW1**

Transient lunar phenomenon, or TLP, is the change in color and light on the surface of the Moon, a phenomena that is often reported in astronomical observations of the moon, particularly of the Aristarchus plateau region on the Moon. The reading passage suggests three plausible hypotheses to explain the occurrence of TLP, each of which is refuted in the lecture.

First, the reading suggests that TLP might have been caused by random flaws in observational equipment such as the telescope. However, the professor argues that if TLP were indeed caused by flaws in measurement, then such phenomenon would have been observed everywhere on the

Earth. But the fact is that TLP can only be observed from two special locations on the Earth. The second hypothesis is meteor impact, which occurs on the Moon's surface as frequently as it does on the Earth. This theory is also refuted by the professor, who argues that the impact of a meteor strike only lasts about 1 second, but TLP can be observed for as long as 20 minutes. Clearly, meteor strike could not have been the cause.

Finally, according to the reading, the stones on the moon may have absorbed and reflected light from the Sun. It is such reflection that may have caused TLP. Yet the lecturer is skeptical about this hypothesis. He/she says that even though rocks can reflect light from the Sun, such reflection is much weaker compared with the light observed in a TLP event.

### **120715CNW1**

答案：The population of the menhaden in the Chesapeake Bay has been declining due to overfishing, so the government has called for a ban on menhaden fishing in the area. The author of the passage is concerned that such a ban may not be the right solution, while the lecturer gives the opposite opinion, arguing that the ban is necessary and justified.

First, the reading points to the fact that the real cause of the decline in the menhaden population is not fishing, but the striped bass, a major predator of the menhaden, so rather than limiting menhaden fishing, we should reduce the population of the striped bass. However, the lecture argues that the striped bass serve as an important link in the eco-system, keeping the population of many fish species under control. We should avoid disturbing the natural balance of the ecosystem, so the best solution is still a ban on menhaden fishing.

Second, the reading suggests that the menhaden are an important source of protein for livestock and poultry. Placing a ban on menhaden fishing would negatively affect nearby farms. The lecturer, however, states that the menhaden can be replaced by soybean, which is also a very effective source of protein for livestock and poultry. Therefore, banning fishing in the Chesapeake Bay would not create any shortage of proteins necessary for farms in the nearby areas.

Finally, the author of the passage is worried that limiting menhaden fishing would lead to the loss of job opportunities for fishermen, dealers and in the processing industries, which would hamper the local economy. From the lecture, however, we learn that the ban on menhaden fishing is only a temporary policy. Once the population of the menhaden returns to normal, the ban will be lifted and fishing and other related industries will grow healthily again. On the other hand, if overfishing is not stopped, it would result in a total collapse of the local economy sooner or later.

### **120825CN(A)W1 (=120121NAW1)**

The lecture and the reading passage both talk about a life-size marble bust, found during an archaeological excavation and retrieved from the bed of the river Rhone. While the author of the passage attributes this bust to Julius Caesar, the lecturer refutes each of the arguments presented in the reading.

First, the style of the portrait could not be used as evidence to show that this bust was that of Julius Caesar. Although the bust was made in a style very popular during Caesar's time, this style continued to be popular many years after Caesar died. Weixin:laoxikou. Therefore, this bust could very well have been made in a much later time for someone other than Caesar.

Second, the similarities between the bust and the portrait of Caesar on silver coins were rather limited to the hair only. In other features such as the neck and the nose, there are many obvious

differences. If the bust was Caesar's, then it should have looked the same in all features to other portraits of Caesar.

Finally, the location where the bust was found could not prove anything. Archaeological study also excavated other items from the same place including a sculpture for the God of Neptune. This indicates that people could have thrown things into the river because they have become useless rather than because of political reasons, as what the reading suggests.

### **120916CNW1 (=110820NAW1)**

The reading passage explains the purpose of prehistoric paintings found in Lascaux Cave in France. According to the reading, these paintings were created by the painters with the hope of finding good luck to ensure successful hunting. However, the lecturer disagrees with this explanation.

First, the reading states that there are large animals in some paintings depicted as being wounded by spears and arrows, suggesting that these animals were hunted by the painters. However, the lecturer points out that there are other paintings that depict small animals such as cats and reindeers, which prehistoric people did not hunt. Moreover, some animals in the paintings do not appear to have been wounded. So these paintings may not be related with hunting.

Second, human figures with animal heads may not be proof that the paintings were related with hunting. According to the lecturer, some human figures do not appear in the painting to be standing; some are even sleeping. They were clearly not hunting in such a horizontal position, so it is probably not true that the humans in the paintings are wearing animal heads as a camouflage while hunting.

The third theory in the reading proposes that the painters created these paintings because they believed that these paintings might have magical powers. But the lecturer argues that this magical power might have nothing to do with hunting. The painters might have believed that they could communicate with their ancestors' spirits through these painted animals.

### **121027CNW1**

Modern scientific examination shows that none of the traditional theories in the reading about the purpose of the Great Zimbabwe are viable. The lecture gives the following arguments.

First, the great tower looks like a grain storage bin, but only viewed from the outside. There is too little open space inside for the tower to serve as a grain storage facility. Besides, if it had been used for grain storage, we would expect to find small pieces of grain on the floors or walls, but no traces of grains were found anywhere in the tower.

Next, although there is a great gold deposit in the Great Zimbabwe region, radio carbon dating indicates that the mines were not built until after Great Zimbabwe was founded. So the people who built the Great Zimbabwe probably did not know that gold was located in the area until they had already settled there.

Finally, ancient astronomical observatories had very special designs. The angles and distances between various structures helped people make specific observations of stars. However, at Great



Zimbabwe, the angles and distances between the structures do not seem to be designed for any astronomical observation.

### **121124CNW1**

The policy of congestion pricing is enforced in some urban areas in order to alleviate traffic congestion. The reading passage explains the benefits of congestion pricing, while the lecture warns that this policy has a number of negative effects.

The reading suggests that congestion pricing reduces traffic so drivers can reach their destination in less time. However, the lecturer contends that not all people will find it time-saving. Some drivers will go round the pricing zone in order to avoid congestion surcharges. For example, delivery drivers will take a longer route to avoid this additional cost, so the delivery time is increased.

The second benefit mentioned in the reading is that congestion pricing improves urban environment.

However, the lecturer points out that this may be true for areas within the charging zone because there is less traffic there. But in the surrounding areas, pollution and noise may become worse as a result of increased level of traffic that moves to those areas.

Finally, according to the reading, congestion charges are a source of city revenue which can be used by the government to improve public facilities such as roads and bridges. Yet the lecturer argues that this policy will lead some people to switch from driving to using public transportation such as the subway. This will entail an additional cost for subway maintenance, which may even exceed the revenue from congestion pricing. Therefore the policy will not help improve roads and bridges.

### **121130CNW1 (=120422CNW1=100306NAW1)**

The Akkadian Empire, unlike other great empires of the world, lasted only a short period of time before it collapsed. According to the reading passage, three reasons may account for the downfall of the Akkadian Empire. However, the lecturer rejects all three reasons as unconvincing.

First, the reading material argues that resistance from defeated city-states may lead to the downfall of the empire. However, the professor immediately points out that after those city-states were defeated, their defensive walls were torn down. Without protective walls, their resistance was in vain.

Second, as to the scarce rainfall, the professor says that although it's true that sometimes the empire would suffer from periods of drought, their irrigation system could help bring water from very far away which could meet the needs of the empire. Therefore, the empire did not disappear because of lack of rainfall.

Third, it is true that there existed unfair trade which indeed aroused some estrangement. However, the professor claims that the empire had always been able to search for new trading routes and establish new trading contacts, which could make up for the loss the empire might have suffered due to the breakup of relationship with its former business partners.

### **120817NAW1**

The lecture raises objections to the three reasons presented in the reading passage as to why [animal name] had a giant body.

First, the lecturer says that higher levels of oxygen could not have been the reason because in the earth's earlier history, the oxygen level was actually considerably lower than it is today. This is because active volcanic activities on early earth would release large quantities of poisonous gas into the atmosphere, making it difficult for animals to breathe.

Second, the lecturer argues that although there were sufficient plants for [animal name] to feed on, they do not adequately support the growth of a large body because these plants were actually very low in nutrition.

Finally, according to the lecture, the warm climate back when [animal name] lived was actually a disadvantage when it comes to controlling body temperature. [animal name] needed to cool off constantly and a large body size constrained their efforts to do so.

### **121012NAW1**

The reading passage provides a list of advantages that electronic medical record has over paperbased record. However, the lecturer argues that these benefits are hardly true in reality.

First, the lecturer says that adopting electronic medical record will not save costs. This is because even if doctors convert to electronic medical record system, they still have the habit of keeping a physical copy in case any emergent situations occur. Therefore the costs associated with storing and transporting paper medical record will not be reduced.

Second, according to the lecture, electronic medical record will not reduce errors either. This is because when doctors examine a patient, they first record the patient' information on paper, and often another person will transfer the information to the computer system later. As doctors' handwriting is often very difficult to read / (poorly legible), this may lead to medical errors.

Finally, although electronic medical system may improve portability and accessibility of medical data, to actually use the data in medical research would require complicated legal procedures. Patients' medical record is protected by law and only after a patient grants permission can researchers obtain and use the data. So it is not likely to facilitate medical research.

### **121027NAW1**

The reading passage and the lecture present contrasting views regarding the hypothesis that bees existed prior to 200 million years ago.

According to the reading, all fossil records of bees, including the earliest one found in the state of Arizona, date the existence of bees to no more than 200 million years ago. However, the lecturer explains that this is because trees did not exist until about that time, so only after then was it possible for tree resins to preserve a fossilized bee. Clearly, this does not rule out the possibility that bees

may have predated the existence of tree (and tree resin) and so have an ancestry longer than 200 million years.

Furthermore, the reading presents a similar argument, saying that flowers and flowering plants did not exist until 200 million years ago, so pollen-dependent bees could not have existed before then. However, the lecturer argues that the earliest bees did not necessarily feed on flowers. They could have fed on non-flowering plants such as pine trees or ferns, and only gradually evolved to depend on flowering plants.

Finally, the reading cautions that the fossil nest might not be that of bees because there is a crucial lack of spiraling structure in the bee chambers that is prevalent in modern bee nests. However, the lecturer points to the same water-proof substance found in both the fossilized chamber and modern bee chambers, arguing that the makers of the fossil nest were indeed bees.

### **121207NAW1**

The reading passage presents a series of arguments to oppose the installation of surveillance cameras on public road systems. However, the lecture rejects these arguments, saying that road cameras are beneficial.

First, the reading states that road cameras only capture, but do not stop dangerous driving behaviors. However, the lecturer argues that road cameras can successfully prevent reckless driving because unlike a traffic policeman, an electronic camera never misses a single violating driver. So road cameras serve as a very effective deterrence to would-be driving offenders.

Second, the reading says that since cameras cannot be installed everywhere, dangerous driving will be found more frequently in places that are known to have no cameras. Yet the lecturer argues that traffic policemen cannot be posted in every section of the roads either. More importantly, increasing police man powers is definitely more costly than ensuring complete video camera coverage.

Finally, regarding the reading's claim that road cameras may lead to traffic accidents on road junctions (机经内容不全, 暂时还不理解为什么摄像头会导致交通事故?难道是因为闪光灯?), the lecturer refutes by saying that these are only minor accidents. Those serious accidents involving sideways collisions are considerably reduced by 40%.

### **121208NAW1**

The reading passage presents three interesting myths that people often have about certain abilities and behaviors of elephants. However, the lecturer dispels these myths using evidence and facts.

The first myth is that an elephant seems to be able to predict(anticipate) its death and that it goes to special elephant graveyards to die, which is often near the water. However, the fact is that as elephants grow old, their teeth are gradually worn down, so old elephants usually start looking around for softer vegetation at the water's edge. This is where most elephants eventually die.

The second myth is that elephants have natural talents in drawing. They can hold a brush with their trunk and draw pictures such as flowers. However, according to the lecture, this ability is trained.

Trainers teach elephants how to paint and guide their painting by touching elephants' ears. An elephant is not really painting a picture out of its mind, it is simply creating fixed patterns of lines.

(据网上一些资料显示，训练手段有时很残忍，例如：When the elephant paints incorrectly they are beaten as punishment, often a hook is rammed into the elephants ear or they are hit on their head or trunk，所以以后大家到泰国旅游别买大象画的画啊！)

The third myth is that elephants fear mice. In an experiment, an elephant backed off when it saw a mouse. Yet the lecturer argues that this is not fear. It's an animal's natural instinct to be cautious when it sees something unfamiliar. Elephants that live in the zoo are not scared of mice at all because they are familiar with the presence of mice there.

### **130118NAW1**

An increasing number of people choose to start their own business instead of working for a company. The reading passage explains why self-employment has become so popular, while the lecturer points out several risks associated with this trend.

First, the reading says that big companies often have too many bureaucratic regulations and rules, making it difficult for individual employees to pursue their own ideas. Weixin:laoxikou. However, the lecturer argues that starting one's own business involves even more rules during the process of business registration.

Second, the reading states that employment by big companies nowadays is not as stable as it used to be, leading to a decreased sense of security among employees. However, the lecturer refutes this point by saying that starting up a new company involves far more risks and far less stability because it could mean the loss of personal investment or other assets.

Finally, the reading suggests that recently there is a trend for big companies to stop offering extra benefits, such as pension or medical insurance, to their employees. Yet the lecturer points out that these extra benefits are even less likely to be found in a start-up company.

### **120121NAW1**

The lecture and the reading passage both talk about a life-size marble bust, found during an archaeological excavation and retrieved from the bed of the river Rhone. While the author of the passage attributes this bust to Julius Caesar, the lecturer refutes each of the arguments presented in the reading.

First, the style of the portrait could not be used as evidence to show that this bust was that of Julius Caesar. Although the bust was made in a style very popular during Caesar's time, this style continued to be popular many years after Caesar died. Therefore, this bust could very well have been made in a much later time for someone other than Caesar.

Second, the similarities between the bust and the portrait of Caesar on silver coins were rather limited to the hair only. In other features such as the neck and the nose, there are many obvious differences.

If the bust was Caesar's, then it should have looked the same in all features to other portraits of Caesar. Finally, the location where the bust was found could not prove anything. Archaeological study also excavated other items from the same place including a sculpture for the God of Neptune. This

indicates that people could have thrown things into the river because they have become useless rather than because of political reasons, as what the reading suggests.

#### 130215NAW1

答案: The reading passage proposes three hypotheses regarding the functions of the Erdstall, a narrow, underground structure built in [ name of place mentioned in the reading ]. However, the lecture points to the weakness of the three hypotheses.

First, the Erdstall could have been used to keep livestock or to store food. However, the lecturer argues that the Erdstall is not rainwater-proof. Particularly in the winter, the Erdstall could have been flooded. So it is not an ideal place to store food. Furthermore, no traces of grain have been found in the Erdstall. Therefore, the storage hypothesis is unlikely.

Second, the Erdstall could be a shelter against attack or burglary. This is also not possible in the lecturer's opinion, because, as he argues, the Erdstall is so small that it could barely accommodate one family, and the oxygen inside the Erdstall is sufficient to sustain only one person. Another obvious weakness of this hypothesis is that the Erdstall has only one entry point and does not have an exit, making it unlikely to serve as an escape route.

Finally, it is theorized that the Erdstall could have religious functions, serving as a chamber of soul for the deceased. Yet if this were true, according to the lecture, the Erdstall should have been found in every village across the whole region which shares the same religion. The fact, however, is that the Erdstall is only present in some, not all, of the villages. So the religion hypothesis is unconvincing, either.

#### 101009CNW1

The reading passage criticizes fish farms for causing a number of problems to the local environment. However, in the lecture, the professor argues that solutions have already been found to address each problem.

The first problem fish that grow in fish farms may produce large quantities of by-products and wastes that may contaminate the surrounding water. In the lecture, the professor points out that a kind of bacteria (也可能是 marine animal) has been introduced in fish farms to effectively break down (或 eat) the waste.

The second problem is that when the fish escape from the farms and breed with their wild relatives, they could produce offspring with genetic weakness and low viability. However, according to the lecture, domestication has made fish in the farms genetically different, and their reproductive ability much lower than that of the wild fish, so successful breeding for the escaped fish in the wild is highly unlikely.

The third problem concerns the overconsumption of freshwater resources in fish farms. To address this problem, the lecture says, scientists have invented a water recycling system, in which water is continuously filtered and recycled so the amount of water needed to run a large-scale fish farm is minimized. Furthermore, a type of plant called ( ) can be grown in salt water to help with the cleaning process.

#### 120217CNW1

The reading passage introduces three methods to prevent the Asian carp from entering the Great Lakes area. However, the lecture points to the problems associated with each method.

The first method is to construct walls in the Great Lakes to block the passage of the Asian carp. However, the lecture points out that this would negatively influence the shipping industry in the area

because cargo ships would also be blocked and have to unload the cargo at one side of the wall and reload the cargo at the other side, significantly increasing cost of transportation.

The second method is to use electrical devices to eliminate the Asian carp. However, according to the lecture, this method would not work successfully because small fish could still swim through the device, and continue to grow and reproduce in the other side of the lake.

The third method is a two-step approach involving the poisoning of the Asian carp first and then the introduction of new species. Yet the professor argues that this measure is too drastic and could have unpredictable results. The toxic chemicals released would lead to changes in the whole ecosystem that are dangerous to the fish population in the area.

### **130215NAW1**

The reading passage proposes three hypotheses regarding the functions of the Erdstall, a narrow, underground structure built in [ name of place mentioned in the reading ]. However, the lecture points to the weakness of the three hypotheses.

First, the Erdstall could have been used to keep livestock or to store food. However, the lecturer argues that the Erdstall is not rainwater-proof. Particularly in the winter, the Erdstall could have been flooded. So it is not an ideal place to store food. Furthermore, no traces of grain have been found in the Erdstall. Therefore, the storage hypothesis is unlikely.

Second, the Erdstall could be a shelter against attack or burglary. This is also not possible in the lecturer's opinion, because, as he argues, the Erdstall is so small that it could barely accommodate one family, and the oxygen inside the Erdstall is sufficient to sustain only one person. Another obvious weakness of this hypothesis is that the Erdstall has only one entry point and does not have an exit, making it unlikely to serve as an escape route.

Finally, it is theorized that the Erdstall could have religious functions, serving as a chamber of soul for the deceased. Yet if this were true, according to the lecture, the Erdstall should have been found in every village across the whole region which shares the same religion. The fact, however, is that the Erdstall is only present in some, not all, of the villages. So the religion hypothesis is unconvincing, either.

### **130302NAW1**

The mountain yellow-legged frog population has been undergoing rapid decline over the past 50 years. The reading passage attributes such decline to three possible causes, while the lecture points to the weakness of each cause proposed in the reading.

The first cause is the introduction of the trout in the frog's natural habitat. The trout feeds on tadpoles and therefore reduces the number of frogs. However, the lecture argues that the introduction of the trout took place over 100 years ago, long before the decline of the frog population, which occurred about 40 years ago.

The second cause is pesticide, which is widely used in farming. Remnants of pesticides which contain poisonous chemicals could have drifted to the frog's habitat, causing the decline in frog population. However, the lecture points to an important weakness in this theory because the frogs which inhabit areas in the upper streams of the river have also undergone a decline. Since the pesticides could not travel uphill through the river system, the pesticide theory is clearly flawed. Another possible cause is fungal disease, which could have infected the frog's skin and led to its

death. However, according to the lecture, the yellow-legged mountain frog has the ability to produce chemicals to protect themselves from infectious fungal disease.

### **130511CN =110813CNW1=100723NAW1**

The reading passage puts forward three hypotheses to explain the decline of the Harappan civilization. However, the lecturer challenges these hypotheses and uses evidence to prove that all of them are based on flawed speculations.

The first hypothesis is that the decline of Harappan civilization was caused by invasion from a nomadic tribe. However, the lecture argues that the Harappan culture covered a huge expanse of territory, so even if the nomad people invaded Harappan land, such invasion was confined to a small number of Harappan cities only, so it's unlikely to have led to the total destruction of the Harappan culture.

The second hypothesis is that climate change had led to the collapse of Harappan agriculture. With no food available, the Harappan people had to abandon their home. Reasonable as it may sound, there are flaws in this argument too, because, as the lecture indicates, the Egyptian civilization, a contemporary of the Harappan civilization, was able to make adjustment to its agriculture and managed to cope with the same inhospitable climate changes. There is no reason why the Harappan people could not have also adapted successfully to climate change.

The third hypothesis puts the blame on water contamination, suspecting that a water-borne disease had forced the Harappan people to migrate to other locations, leading to the decline of the entire civilization. This theory is not valid according to the lecture. The professor explains that Harappan people were excellent engineers who had created advanced canal systems that should be capable of preventing the transmission of disease through water.

### **130614NAW1**

In the reading, three theories are given to explain why moths often fly towards artificial lights. However, in the lecture, the speaker rejects these theories and argues that none of them seem convincing.

First, according to the reading passage, when moths see a predator, they often fly away from the predator and fly towards the moon. So moths could have mistakenly thought that artificial lights were coming from the moon and so fly towards these lights. However, in the lecture, the professor asserts that moths often circle around the artificial light and even collide into each other when flying. They also fly much longer than necessary, long after the predator is already gone. So this shows that they are certainly not making their way to the moon.

The second possible theory is that moths take man-made lights as the light from flowers so they fly into them to find nectar. However, the lecturer argues that moths can detect the CO<sub>2</sub> emitted from flowers and are drawn to these flowers. So they fly to the flowers not because of light but because of CO<sub>2</sub>. Research shows that a moth can detect the amount of CO<sub>2</sub> around them and know the source and variety of flowers that are nearby. Apparently artificial light does not release any CO<sub>2</sub>, so the second theory is also not convincing.

Finally, the reading passage claims that moths fly to artificial light to heat themselves in cold environment. This seems plausible but the professor states that if this theory was rational, moths would be flying to warmer lights more than to colder lights. For instance, they would fly into fluorescent light much less frequently because fluorescent light is cold. However, it seems that the moths prefer fluorescent lights to other kinds of lights.

