IELTSFever Academic IELTS Reading Test 119

Reading Passage 1

You should spend about 20 minutes on Questions 1-13, which are based on the IELTSFever Academic IELTS Reading Test 119 Reading Passage The Impact of the Potato below.

The Impact of the Potato

Jeff Chapman relates the story of history the most important vegetable

{A} The potato was first cultivated in South America between three and seven thousand years ago, though scientists believe they may have grown wild in the region as long as 13,000 years ago. The genetic patterns of potato distribution indicate that the potato probably originated in the mountainous west-central region of the continent.

{B} Early Spanish chroniclers who misused the Indian word batata (sweet potato) as the name for the potato noted the importance of the tuber to the Incan Empire. The Incas had learned to preserve the potato for storage by dehydrating and mashing potatoes into a substance called Chuchu that could be stored in a room for up to 10 years, providing excellent insurance against possible crop failures. As well as using the food as a staple crop, the Incas thought potatoes made childbirth easier and used it to treat injuries.

{C} The Spanish conquistadors first encountered the potato when they arrived in Peru in 1532 in search of gold, and noted Inca miners eating chuchu. At the time the Spaniards failed to realize that the potato represented a far more important treasure than either silver or gold, but they did gradually begin to use potatoes as basic rations aboard their ships. After the arrival of the potato in Spain in 1570, a few Spanish farmers began to cultivate them on a small scale, mostly as food for livestock.

{D} Throughout Europe, potatoes were regarded with suspicion, distaste and fear. Generally considered to be unfit for human consumption, they were used only as animal fodder and sustenance for the starving. In northern Europe, potatoes were primarily grown in botanical gardens as an exotic novelty. Even peasants refused to eat from a plant that produced ugly, misshapen tubers and that had come from a heathen civilization. Some felt that the potato plant's resemblance to plants in the nightshade family hinted that it was the creation of witches or devils.

{E} In meat-loving England, farmers and urban workers regarded potatoes with extreme distaste. In 1662, the Royal Society recommended the cultivation of the tuber to the English government and the nation, but this recommendation had little impact. Potatoes did not become

a staple until, during the food shortages associated with the Revolutionary Wars, the English government began to officially encourage potato cultivation. In 1795, the Board of Agriculture issued a pamphlet entitled "Hints Respecting the Culture and Use of Potatoes"; this was followed shortly by pro-potato editorials and potato recipes in The Times. Gradually, the lower classes began to follow the lead of the upper classes.

{F} A similar pattern emerged across the English Channel in the Netherlands, Belgium and France. While the potato slowly gained ground in eastern France (where it was often the only crop remaining after marauding soldiers plundered wheat fields and vineyards), it did not achieve widespread acceptance until the late 1700s. The peasants remained suspicious, in spite of a 1771 paper from the Facult de Paris testifying that the potato was not harmful but beneficial. The people began to overcome their distaste when the plant received the royal seal of approval: Louis XVI began to sport a potato flower in his buttonhole, and Marie-Antoinette wore the purple potato blossom in her hair.

{G} Frederick the Great of Prussia saw the potato's potential to help feed his nation and lower the price of bread, but faced the challenge of overcoming the people's prejudice against the plant. When he issued a 1774 order for his subjects to grow potatoes as protection against famine, the town of Kolberg replied: "The things have neither smell nor taste, not even the dogs will eat them, so what use are they to us?" Trying a less direct approach to encourage his subjects to begin planting potatoes, Frederick used a bit of reverse psychology: he planted a royal field of potato plants and stationed a heavy guard to protect this field from thieves. Nearby peasants naturally assumed that anything worth guarding was worth stealing, and so snuck into the field and snatched the plants for their home gardens. Of course, this was entirely in line with Frederick's wishes.

{H} Historians debate whether the potato was primarily a cause or an effect of the huge population boom in industrial-era England and Wales. Prior to 1800, the English diet had consisted primarily of meat, supplemented by bread, butter and cheese. Few vegetables were consumed, most vegetables being regarded as nutritionally worthless and potentially harmful. This view began to change gradually in the late 1700s. The Industrial Revolution was drawing an ever increasing percentage of the populace into crowded cities, where only the richest could afford homes with ovens or coal storage rooms, and people were working 12-16 hour days which left them with little time or energy to prepare food. High yielding, easily prepared potato crops were the obvious solution to England's food problems.

{I} Whereas most of their neighbors regarded the potato with suspicion and had to be persuaded to use it by the upper classes, the Irish peasantry embraced the tuber more passionately than anyone since the Incas. The potato was well suited to the Irish the soil and climate, and its high yield suited the most important concern of most Irish farmers: to feed their families.

{J} The most dramatic example of the potato's potential to alter population patterns occurred in Ireland, where the potato had become a staple by 1800. The Irish population doubled to eight million between 1780 and 1841, this without any significant expansion of industry or reform of agricultural techniques beyond the widespread cultivation of the potato. Though Irish

landholding practices were primitive in comparison with those of England, the potato's high yields allowed even the poorest farmers to produce more healthy food than they needed with scarcely any investment or hard labor. Even children could easily plant, harvest and cook potatoes, which of course required no threshing, curing or grinding. The abundance provided by potatoes greatly decreased infant mortality and encouraged early marriage.

Questions 1-5

Do the following statements agree with the views of the writer in Reading Passage 1?

In boxes 1-5 on your answer sheet, write

TRUE	if the statement is True
FALSE	if the statement is false
NOT GIVEN	If the information is not given in the passage

(1) The early Spanish called potato as the Incan name 'Chuchu'.

(2) The purposes of Spanish coming to Peru were to find out potatoes.

(3) The Spanish believed that the potato has the same nutrients as other vegetables.

(4) Peasants at that time did not like to eat potatoes because they were ugly.

(5) The popularity of potatoes in the UK was due to food shortages during the war.

Questions 6-13

*Complete the sentences below with **NO MORE THAN ONE WORD AND** from the passage 1 for each answer.*

Write your answers in boxes 6-13 on your answer sheet.

(6) In France, people started to overcome their disgusting about potatoes because the King put a potato_____in his button hole.

(7) Frederick realized the potential of potato but he had to handle the_____ against potatoes from ordinary people.

(8) The King of Prussia adopted some_____psychology to make people accept potatoes.

(9) Before 1800, the English people preferred eating_____with bread, butter and cheese.

(10) The obvious way to deal with England food problems were high yielding potato_____

(11) The Irish_____and climate suited potatoes well.

(12) Between 1780 and 1841, based on the_____of the potatoes, the Irish population doubled to eight million.

(13) The potato's high yields help the poorest farmers to produce more healthy food almost without_____

Reading Passage 2

You should spend about 20 minutes on Questions 14-26, which are based on the IELTSFever Academic IELTS Reading Test 119 Reading Passage Origin of Species Continent Formation below.

Origin of Species Continent Formation

{A} THE FACT THAT there was once a Pangean supercontinent, a Panthalassa Ocean, and a Tethys Ocean, has profound implications for the evolution of multicellular life on Earth. These considerations were unknown to the scientists of the 19th century – making their scientific deductions even more

remarkable. Quite independently of each other, Charles Darwin and his young contemporary Alfred Russel Wallace reached the conclusion that life had evolved by natural selection. Wallace later wrote in My Life of his own inspiration:

{B} Why do some species die and some live? The answer was clearly that on the whole the best fitted lived. From the effects of disease the most healthy escaped; from enemies the strongest, the swiftest or the most cunning from famine the best hunters .. then it suddenly flashed on me that this self-acting process would improve the race, because in every generation the inferior would inevitably be killed off and the superior would remain, that is, the fittest would survive.

{C} Both Darwin's and Wallace's ideas about natural selection had been influenced by the essays of Thomas Malthus in his Principles of Population. Their conclusions, however, had been the direct result of their personal observation of animals and plants in widely separated geographic locations:Darwin from his experiences during the voyage of the Beagle, and particularly during the ship's visit to the Galapagos Islands in the East Pacific in 1835;Wallace

during his years of travel in the Amazon Basin and in the Indonesia-Australian Archipelago in the 1850s.

{D} Darwin had been documenting his ideas on natural selection for many years when he received a paper on this same subject from Wallace, who asked for Darwin's opinion and help in getting it published. In July 1858, Charles Lyell and J. D Hooker, close friends of Darwin, pressed Darwin to present his conclusions so that he would not lose priority to an unknown naturalist. Presiding over the hastily called but now historic meeting of the Linnean Society in London, Lyell and Hooker explained to the distinguished members how "these two gentlemen" (who were absent: Wallace was abroad and Darwin chose not to attend), had “independently and unknown to one another, conceived the same very ingenious theory,”

{E} Both Darwin and Wallace had realized that the anomalous distribution of species in particular regions had profound evolutionary significance. Subsequently, Darwin spent the rest of his days in almost total seclusion thinking and writing mainly about the origin of species. In constrast, Wallace applied himself to the science of biogeography, the study of the pattern and distribution of species, and its significance, resulting in the publication of a massive two-volume work the Geographical Distribution of Animals in 1876

{F} Wallace was a gentle and modest man, but also persistent and quietly courageous. He spent years working in the most arduous possible climates and terrains, particularly in the Malay archipelago, he made patient and detailed zoological observations and collected huge numbers of speciments for museums and collectors-which is how he made a living. One result of his work was the conclusion that there is a distinct faunal boundary called "wallace's line," between an Asian realm of animals in Java, Bornco and the Philippines and an Australian realm in New Guinea and Australia. In essence this boundary posed a difficult question: How on Earth did plants and animals with a clear affinity to the Northern Hemisphere meet with their Southern Hemispheric counterparts along such a distinct Malaysian demarcation zone? Wallace was uncertain about demarcation on one particular island- Celebes, a curiously shaped place that is midway between the two groups. Initially he assigned its flora-fauna to the Australian side of the line, but later he transferred it to the Asian side. Today we know the reason for his dilemma. 200MYA East and West Celebes were islands with their own natural history lying on opposite sides of the Tethys Ocean. They did not collide until about 15 MYA. The answer to the main question is that Wallace's Line categorizes Laurasia-derived flora-fauna (the Asian) and Gondwana-derived flora-fauna (the Australian), fauna that had evolved on opposing shares of the Tethys. The closure of the Tethys Ocean today is manifested by the ongoing collision of Australia/New Guinea with Indochina/Indonesia and the continuing closure of the Mediterranean Sea-a remnant of the Western Tethys Ocean.

{G} IN HIS ORIGIN OF CONTINENTS AND OCEANS, Wegener quoted at length from Wallace's Geographical Distribution of Animals. According to Wegener's reading, Wallace had identified three clear divisions of Australian animals, which supported his own theory of continental displacement. Wallace had shown that animals long established in southwestern Australia had an affinity with animals in South Africa, Madagascar, India, and Ceylon, but did not have an affinity with those in Asia. Wallace also showed that Australian marsupials and

monotremes are clearly related to those in South America, the Moluccas, and various Pacific islands, and that none are found in neighboring Indonesia. From this and related data, Wegener concluded that the then broadly accepted "landbridge" theory could not account for this distribution of animals and that only his theory of continental drift could explain it.

{H} The theory that Wegener dismissed in preference to his own proposed that plants and animals had once migrated across now-submerged intercontinental land bridges. In 1885, one of Europe's leading geologists, Eduard Suess, theorized that as the rigid Earth cools, its upper crust shrinks and wrinkles like the withering skin of an aging apple. He suggested that the planet's seas and oceans now fill the wrinkles between once-contiguous plateaus.

{I} Today, we know that we live on a dynamic Earth with shifting, colliding and separating tectonic plates, not a "withering skin", and the main debate in the field of biogeography has shifted. The discussion now concerns" dispersalism" versus "vicarisanism" :unrestricted radiation of species on the one hand and the development of barriers to migration on the other. Dispersion is a short-term phenomenon--the daily or seasonal migration of species and their radiation to the limits of their natural environment on an extensive and continuous landmass. Vicarian evolution, however, depends upon the separation and isolation of a variety of species within the confines of natural barriers in the form of islands, lakes, or shallow seas -topographical features that take a long time to develop.

Questions 14-18

Use the information in the passage to match the people (listed A-E) with opinions or deeds below. Write the appropriate letters A-E in boxes 14-18 on your answer sheet.

NB you may use any letter more than once

A Suess

B Wallace

C Darwin and Wallace

D Wegener

E Lyell and Hooker

(14) Persuade Darwin to publish his scientific findings

(15) Depicted physical features of earth's crust.

(16) Introduced continental drift theory.

(17) Published works about wildlife distribution in different region.

(18) Evolution of species is based on selection by nature.

Questions 19-21

The reading Passage has nine paragraphs A-I.

Which paragraph contains the following information?

Write the correct letter A-1, in boxes 19-21 on your answer sheet.

(19) Best adaptable animal survived on the planet.

(20) Boundary called Wallace's line found between Asia and Australia.

(21) Animal relevance exists between Australia and Africa.

Questions 22-26

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 22-26 on your answer sheet.

Wegener found that continental drift instead of "land bridge" theory could explain strange species' distribution phenomenon. In his theory, vegetation and wildlife_____**22**_____ intercontinentally. However, Eduard Suess compared the wrinkle of the crust to _____**23**_____of an old apple. Now it is well known that we are living on a constant mobile _____**24**_____ instead of what Suess described. Hot spot in biogeography are switched to concerns between two terms:"_____**25**_____" and "_____**26**_____ "

Reading Passage 3

You should spend about 20 minutes on Questions 27-40, which are based on the IELTSFever Academic IELTS Reading Test 119 Reading Passage The Bite That Heals below.

The Bite That Heals

Scientists are unlocking the medical potential of venom.

{A} Michael decided to go for a swim. He was on vacation with his family in Guerrero, Mexico, and it was hotter than blazes. He grabbed his swimming trunks from where they'd been drying on a chair, slid them on, and jumped into the pool. Instead of cool relief, a burning pain ripped through the back of his thigh. Tearing off his trunks, he leaped naked from the pool, his leg on fire. Behind him a small, ugly, yellow creature was treading water. He scooped it into a Tupperware container, and the caretaker of the house rushed him to the local Red Cross facility, where doctors immediately identified his attacker: a bark scorpion, Centruroides sculpturatus, one of the most venomous species in North America. The fierce pain from a sting is typically followed by what feels like electric shocks racking the body. Occasionally victims die.

{B} Luckily for Michael (who asked me not to give his full name), the bark scorpion is common in the area, and antivenom was readily available. He had an injection and was released a few hours later. In about 30 hours the pain was gone. What happened next could not have been predicted. For eight years Michael had endured a condition called ankylosing spondylitis, a chronic autoimmune disease of the skeleton, a sort of spinal arthritis. No one knows what triggers it. In the worst cases the spine may fuse, leaving the patient forever stooped and in anguish. "My back hurt every morning, and during bad flare-ups it was so horrible I couldn't even walk," he says.

{C} But days after the scorpion sting, the pain went away, and now, two years later, he remains essentially pain free and off most of his medications. As a doctor himself, Michael is cautious about overstating the role of the scorpion's venom in his remission. Still, he says, "if my pain came back, I'd let that scorpion sting me again." Venom- the stuff that drips from the fangs and stingers of creatures lurking on the hiking trail or hiding in the cellar or under the woodpile—is nature's most efficient killer. Venom is exquisitely honed to stop a body in its tracks. The complex soup swirls with toxic proteins and peptides—short strings of amino acids similar to proteins. The molecules may have different targets and effects, but they work synergistically for the mightiest punch. Some go for the nervous system, paralyzing by blocking messages between nerves and muscle. Some eat away at molecules so that cells and tissues collapse. Venom can kill by clotting blood and stopping the heart or by preventing clotting and triggering a killer bleed.

{D} All venom is multifaceted and multitasking. (The difference between venom and poison is that venom is injected, or dibbled, into victims by way of specialized body parts, and poison is ingested.) Dozens, even hundreds, of toxins can be delivered in a single bite, some with

redundant jobs and others with unique ones. In the evolutionary arms race between predator and prey, weapons and defenses are constantly tweaked. Drastically potent concoctions can result: Imagine administering poison to an adversary, then jabbing him with a knife, then finishing him off with a bullet to the head. That's venom at work.

{E} Ironically, the properties that make venom deadly are also what make it so valuable for medicine. Many venom toxins target the same molecules that need to be controlled to treat diseases. Venom works fast and is highly specific. Its active components—those peptides and proteins, working as toxins and enzymes-target particular molecules, fitting into them like keys into locks. Most medicines work the same way, fitting into and controlling molecular locks to thwart ill effects. It's a challenge to find the toxin that hits only a certain target, but already top medicines for heart disease and diabetes have been derived from venom. New treatments for autoimmune diseases, cancer, and pain could be available within a decade.

{F} “We aren't talking just a few novel drugs but entire classes of drugs,” says National Geographic Society Emerging Explorer Zoltan Takacs, a toxinologist and herpetologist. So far, fewer than a thousand toxins have been scrutinized for medicinal value, and a dozen or so major drugs have made it to market. "There could be upwards of 20 million venom toxins out there waiting to be screened,” Takacs says. "It's huge. Venom has opened up whole new avenues of pharmacology." Toxins from venom and poison sources are also giving us a clearer picture of how proteins that control many of the body's crucial cellular functions work. Studies of the deadly poison tetrodotoxin (TTX) from puffer fish, for instance, have revealed intricate details about the way nerve cells communicate.

{G} "We 're motivated to look for new compounds to lessen human suffering,” Angel Yanagihara of the University of Hawaii told me. “But while doing that, you may uncover things you don't expect.” Driven in part out of revenge for a box jellyfish sting she endured 15 years ago, Yanagihara discovered a potential wound-healing agent within the tubules that contain jellyfish venom. "It had nothing to do with the venom itself," she said. "By getting intimate with a noxious animal, I've been informed way beyond my expectations."

{H} More than 100,000 animals have evolved to produce venom, along with the glands to house it and the apparatuses to expel it: snakes, scorpions, spiders, a few lizards, bees, sea creatures such as octopuses, numerous species of fish, and cone snails. The male duck-billed platypus, which carries venom inside ankle spurs, is one of the few venomous mammals. Venom and its components emerged independently, again and again, in different animal groups. The composition of the venom of a single snake species varies from place to place and between adults and their young. An individual snake's venom may even change with its diet.

{I} Although evolution has been fine-tuning these compounds for more than a hundred million years, venom's molecular architecture has been in place much longer. Nature repurposes key molecules from around the body—the blood, brain, digestive tract, and elsewhere—to serve animals for predation or protection. "It makes sense for nature to steal the scaffolds already in place," Takacs says. "To make a toxin to wreck the nervous system, it's most efficient to take a template from the brain that already works in that system, make some tiny changes, and there you have it: Now it's a toxin." Not all venom kills, of course—bees have it as a nonlethal

defense, and the male platypus uses it to show rival males who's boss during mating season. But mostly it's for killing, or at least immobilizing, an animal's next meal. Humans are often accidental victims. The World Health Organization estimates that every year some five million bites kill 100,000 people, although the actual number is presumed to be much higher. In rural areas of developing countries, where most bites occur, victims may not be able to get treatment or may instead choose traditional therapies and are therefore not counted.

Questions 27-35

Do the following statements agree with the information given in Reading Passage 3? In boxes 27-35 on your answer sheet, write

TRUE	if the statement is True
FALSE	if the statement is false
NOT GIVEN	If the information is not given in the passage

(27). Michael was unluckily hit by electric shocks and nearly lost his life during his vacation.

(28). The disease Michael had suffered from for eight years was caused by an accident.

(29). Michael is grateful for the bark scorpion bite because it helped him recover from the ankylosing spondylitis.

(30). No venom is just responsible for one job.

(31). There is no difference between venom and poison.

(32). Venom can kill while it can also be used as medicine to save.

(33). New treatments for cancer are now available in the market.

(34). So far 20 million venom toxins have been checked for medical use.

(35). The majority of mammals carry venom inside their bodies.

Questions 36-40

*Complete the sentences below. Choose **NO MORE THAN TWO words** from the Reading Passage for each answer. Write your answers in boxes 36-40 on your answer sheet.*

(36). The way how venom works is compared to that of_____

(37). A venom source such as_____has helped to present complex facts about how nerve cells convey information to each other.

(38). Tens of thousands of animals have developed_____ and_____which are respectively responsible for storing and letting out venom.

(39). The makeup of venom of a snake may change with places, ages and_____

(40). Some animal uses venom to warn_____of its exclusive power during the mating season.