43-46: Answer these questions according to the passage below.

There may be more bird flu cases in humans in the US than was previously thought. Health departments in two states took blood tests of workers on dairy farms known to have hosted infected cattle and found that about 7 per cent of them have antibodies for the disease. This included people who never experienced any flu symptoms. Since March, a bird flu virus known as H5N1 has been circulating in dairy cows across the US. So far, 473 cows in 15 US states have tested positive for the virus. Since April, 44 people in the US have tested positive for H5 – the influenza subtype that includes H5N1. All but one of these cases occurred in workers on poultry or dairy farms with H5N1 outbreaks. To better understand how many farm workers may have contracted the virus, the US Centers for Disease Control and Prevention (CDC) collaborated with state health departments in Colorado and Michigan to collect blood samples from 115 people working on dairy farms with H5N1-infected cattle. Nirav Shah at the CDC and his colleagues then removed seasonal influenza antibodies from the samples before testing them for the presence of H5N1 antibodies. They found H5N1 antibodies in eight of the samples, or about 7 per cent, suggesting that eight of the workers had been unknowingly infected with the virus. What's more, four of the workers didn't recall ever having symptoms. This is critical because when workers don't know that they are infected, they inadvertently may expose other people in their communities to the infection.

43. It can be inferred from the passage that ----.

A) at least 7 percent of the cows infected with bird flu have died so far

B) in the majority of the states, further blood tests were not made for farm workers

C) the USA has been dealing with bird flu in cattle farms for about a year now

D) officials thought that more humans than cows were infected by bird flu

E) the recent outbreak in the USA proved that bird flu can be passed from animals to humans

There may be more bird flu cases in humans in the US than was previously thought. Health departments in two states took blood tests of workers on dairy farms known to have hosted infected cattle and found that about 7 per cent of them have antibodies for the disease. This included people who never experienced any flu symptoms. Since March, a bird flu virus known as H5N1 has been circulating in dairy cows across the US. So far, 473 cows in 15 US states have tested positive for the virus. Since April, 44 people in the US have tested positive for H5 – the influenza subtype that includes H5N1. All but one of these cases occurred in workers on poultry or dairy farms with H5N1 outbreaks. To better understand how many farm workers may have contracted the virus, the US Centers for Disease Control and Prevention (CDC) collaborated with state health departments in Colorado and Michigan to collect blood samples from 115 people working on dairy farms with H5N1-infected cattle. Nirav Shah at the CDC and his colleagues then removed seasonal influenza antibodies from the samples before testing them for the presence of H5N1 antibodies. They found H5N1 antibodies in eight of the samples, or about 7 per cent, suggesting that eight of the workers had been unknowingly infected with the virus. What's more, four of the workers didn't recall ever having symptoms. This is critical because when workers don't know that they are infected, they inadvertently may expose other people in their communities to the infection.

44. One can conclude from the passage that workers in dairy and poultry farms in the USA ----.

A) may not have been tested at the same time that cows were tested for bird flu

B) were tested for bird flu antibodies only as an afterthought

C) have suffered from bird flu, so much so that almost 50 died as a result of the infection

D) never experienced any flu symptoms at all, but they were infected

E) were supposed to report their infection to the US Centers for Disease Control

There may be more bird flu cases in humans in the US than was previously thought. Health departments in two states took blood tests of workers on dairy farms known to have hosted infected cattle and found that about 7 per cent of them have antibodies for the disease. This included people who never experienced any flu symptoms. Since March, a bird flu virus known as H5N1 has been circulating in dairy cows across the US. So far, 473 cows in 15 US states have tested positive for the virus. Since April, 44 people in the US have tested positive for H5 – the influenza subtype that includes H5N1. All but one of these cases occurred in workers on poultry or dairy farms with H5N1 outbreaks. To better understand how many farm workers may have contracted the virus, the US Centers for Disease Control and Prevention (CDC) collaborated with state health departments in Colorado and Michigan to collect blood samples from 115 people working on dairy farms with H5N1-infected cattle. Nirav Shah at the CDC and his colleagues then removed seasonal influenza antibodies from the samples before testing them for the presence of H5N1 antibodies. They found H5N1 antibodies in eight of the samples, or about 7 per cent, suggesting that eight of the workers had been unknowingly infected with the virus. What's more, four of the workers didn't recall ever having symptoms. This is critical because when workers don't know that they are infected, they inadvertently may expose other people in their communities to the infection.

45. We understand from the passage that humans ----.

A) are more likely to die from H5N1 infection as their immune system is weaker than that of cows

B) may have risked cows by infecting them without being aware of it

C) might have started the latest bird flu outbreak in the USA according to CDC

D) may never develop antibodies even if they get H5N1 from cows

E) can have H5N1 infection without displaying any of the symptoms related to the disease

There may be more bird flu cases in humans in the US than was previously thought. Health departments in two states took blood tests of workers on dairy farms known to have hosted infected cattle and found that about 7 per cent of them have antibodies for the disease. This included people who never experienced any flu symptoms. Since March, a bird flu virus known as H5N1 has been circulating in dairy cows across the US. So far, 473 cows in 15 US states have tested positive for the virus. Since April, 44 people in the US have tested positive for H5 – the influenza subtype that includes H5N1. All but one of these cases occurred in workers on poultry or dairy farms with H5N1 outbreaks. To better understand how many farm workers may have contracted the virus, the US Centers for Disease Control and Prevention (CDC) collaborated with state health departments in Colorado and Michigan to collect blood samples from 115 people working on dairy farms with H5N1-infected cattle. Nirav Shah at the CDC and his colleagues then removed seasonal influenza antibodies from the samples before testing them for the presence of H5N1 antibodies. They found H5N1 antibodies in eight of the samples, or about 7 per cent, suggesting that eight of the workers had been unknowingly infected with the virus. What's more, four of the workers didn't recall ever having symptoms. This is critical because when workers don't know that they are infected, they inadvertently may expose other people in their communities to the infection.

46. What is the primary purpose of the author?

A) To explore the role of dairy cows in spreading bird flu across the US

B) To argue that the H5N1 virus is harmless due to the asymptomatic cases observed in many states across the US

C) To report on the underdiagnosed spread of bird flu among US farm workers and its potential community transmission risks

D) To compare bird flu infection rates between farm workers and the general population

E) To advocate for stricter regulations on poultry and dairy farming practices

47-50: Answer these questions according to the passage below.

Pompeii's plaster cast human figures aren't who they were assumed to be, genetic tests as part of a recent analysis have revealed, highlighting the way idealised stories can be projected onto archaeological evidence. The analysis also shows that the demography of Pompeii was far more complicated and diverse than previously thought. When Vesuvius erupted in AD 79, it buried several Roman towns, including Pompeii. Many of the town's residents were completely smothered in compacted ash during the eruption and, as their bodies decayed, cavities formed that perfectly preserved their positions in their final moments. In the 19th century, archaeologists developed a method of pouring plaster into the cavities to make lifelike casts. Since then, more than 100 of these casts have been made, preserving the victims' shapes along with any remaining bones that hadn't decayed over the centuries. However, it has long been known that many of the plaster casts were manipulated into different poses and sometimes placed together to add to the drama of the Pompeii story, says Valeria Amoretti at the Archaeological Park of Pompeii in Naples, Italy. To learn more about who these people were, Amoretti and her colleagues examined 14 of the plaster casts and extracted DNA from the bones preserved in five of them. What they found has completely altered the established interpretations of who these people were and their relationships to each other. In one case, an adult wearing a golden bracelet with a child on their lap was long believed to be the child's mother. The DNA analysis shows the adult is actually a male who is biologically unrelated to the child. A nearby figure, formerly interpreted as being the father, was also unrelated to the supposed mother and child.

47. According to the passage, the recent analysis ----.

A) has shed new light on the techniques used to create lifelike casts of human remains found in Pompeii, Naples

B) has, for the first time, used genetic tests to determine the type of plastic used in lifelike casts found in Pompeii

C) has provided important insight into the way archaeology can be improved in terms of new unearthing techniques

D) has come up with game-changing discoveries about Pompeii, which was buried after Vesuvius erupted in AD 79

E) has sparked a new heated discussion about the way archaeology is conducted in Europe

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48. It is clear from the passage that lifelike casts tourists see when they visit Pompeii ----.

A) have been lying in Pompeii unchanged for almost two millennia

B) are actually made of plastic − no original human remains can be found in them

C) are not what they seem as they are known to have been altered to have a more profound effect

D) were first found by Valeria Amoretti towards the end of 19th century

E) belonged mostly to families, as it was the case with the adult with a child on their lap

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49. According to the passage, Valeria Amoretti and her team ----.

A) examined all of the plaster casts on display in Pompeii

B) came up with a unique solution to a famous problem

C) confirmed that the parent wearing a golden bracelet was in fact the father of the child in their lap

D) are responsible for the established interpretations of the people in lifelike casts

E) have made a breakthrough in the perception of lifelike casts in Pompeii

deeply rooted approaches

Pompeii's plaster cast human figures aren't who they were assumed to be, genetic tests as part of a recent analysis have revealed, highlighting the way idealised stories can be projected onto archaeological evidence. The analysis also shows that the demography of Pompeii was far more complicated and diverse than previously thought. When Vesuvius erupted in AD 79, it buried several Roman towns, including Pompeii. Many of the town's residents were completely smothered in compacted ash during the eruption and, as their bodies decayed, cavities formed that perfectly preserved their positions in their final moments. In the 19th century, archaeologists developed a method of pouring plaster into the cavities to make lifelike casts. Since then, more than 100 of these casts have been made, preserving the victims' shapes along with any remaining bones that hadn't decayed over the centuries. However, it has long been known that many of the plaster casts were manipulated into different poses and sometimes placed together to add to the drama of the Pompeii story, says Valeria Amoretti at the Archaeological Park of Pompeii in Naples, Italy. To learn more about who these people were, Amoretti and her colleagues examined 14 of the plaster casts and extracted DNA from the bones preserved in five of them. What they found has completely altered the established interpretations of who these people were and their relationships to each other. In one case, an adult wearing a golden bracelet with a child on their lap was long believed to be the child's mother. The DNA analysis shows the adult is actually a male who is biologically unrelated to the child. A nearby figure, formerly interpreted as being the father, was also unrelated to the supposed mother and child.

50. The passage is mainly about ----.

A) How DNA analysis has reshaped our understanding of Pompeii's plaster casts and the people they represent

B) The development of plaster casting techniques used by 19th-century archaeologists in Pompeii

C) The eruption of Mount Vesuvius and its impact on the Roman towns including Pompeii

D) The artistic and dramatic interpretations of life in Pompeii based on manipulated plaster casts

E) How gold jewellery found in Pompeii provides insights into the town's social hierarchy and relationships

51-54: Answer these questions according to the passage below.

From long and winding migration flights to intricate songs and clever tool use, many bird behaviours are known to be transmitted socially and persist across generations − what scientists define as animal "culture." Now a study suggests culture might play a role in avian architecture, too. Researchers analysed more than 400 structures built by 43 different groups of White-browed Sparrow-Weavers in the Kalahari Desert in southern Africa. These birds live communally, and the entire **cohort** works together to build a nest and multiple roosts from grass. The group's dominant female then lays eggs in the nest, which has a long, tubelike entrance. Individual birds slumber nearby in the U-shaped roosts, which have both an entrance and an exit. The scientists found that different gatherings of birds, even those living only a few meters from one another, built very different tube structures. The biggest difference was in "how short or long the structures are," says study lead author Maria C. Tello Ramos. Tube width also varied between groups. Furthermore, each group maintained the same architectural style over time − and when outsiders joined, they adapted to this style. To examine why the groups built differently, the team analysed factors that can determine a nest's size and shape for a given bird species: weather conditions, tree height, individuals' body size and genetic relatedness. Yet none of these factors seemed to play a relevant role in shaping how the Kalahari sparrows built their nests, the researchers report in Science. "Then we say, 'Okay, so what is left?'" Tello Ramos explains. She and her colleagues proposed that cultural transmission might be key to nest building.

51. It can be understood from the passage that avian architecture ----.

A) has long been known to be a possible outcome of bird behaviours passed down through generations

B) is the latest addition to socially transmitted bird behaviours across generations of birds

C) is determined by factors such as genetic relatedness and bird size

D) can be considered to be the most important part of bird behaviour in Kalahari Desert

E) manifests itself as a uniform structural unit across different bird species

From long and winding migration flights to intricate songs and clever tool use, many bird behaviours are known to be transmitted socially and persist across generations − what scientists define as animal “culture.” Now a study suggests culture might play a role in avian architecture, too. Researchers analysed more than 400 structures built by 43 different groups of White-browed Sparrow-Weavers in the Kalahari Desert in southern Africa. These birds live communally, and the entire **cohort** works together to build a nest and multiple roosts from grass. The group’s dominant female then lays eggs in the nest, which has a long, tubelike entrance. Individual birds slumber nearby in the U-shaped roosts, which have both an entrance and an exit. The scientists found that different gatherings of birds, even those living only a few meters from one another, built very different tube structures. The biggest difference was in “how short or long the structures are,” says study lead author Maria C. Tello Ramos. Tube width also varied between groups. Furthermore, each group maintained the same architectural style over time − and when outsiders joined, they adapted to this style. To examine why the groups built differently, the team analysed factors that can determine a nest’s size and shape for a given bird species: weather conditions, tree height, individuals’ body size and genetic relatedness. Yet none of these factors seemed to play a relevant role in shaping how the Kalahari sparrows built their nests, the researchers report in Science. “Then we say, ‘Okay, so what is left?’” Tello Ramos explains. She and her colleagues proposed that cultural transmission might be key to nest building.

52. Which of the following is responsible for the size and shape of a nest for a given bird species?

A) Weather conditions
B) Cultural transmission
C) Genetic relatedness
D) The height of the tree
E) The body size of the individual

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53. The underlined word ‘cohort’ **is closest in meaning to ----.**

A) individual
B) diversity
C) unit
D) nest
E) domain

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54. What could be the best title for the passage?

A) Genetic Factors in Avian Nest Construction

B) How Weather Shapes Bird Architecture in the Kalahari Desert

C) Social Dynamics in Egg-Laying Among Sparrow-Weavers

D) Cultural Influences in Nest Building Among Kalahari Sparrow-Weavers

E) Environmental Challenges in Sparrow-Weaver Nest Building

Cultural implications

55-58: Answer these questions according to the passage below.

Starting in the 1950s, scientists began analysing air bubbles trapped in ice cores drilled from the Greenland and Antarctic ice sheets to understand climate history. By the 1980s, they realized that the world's oceans could inhale or exhale enough CO2 to substantially contribute to Earth's long-term cycles of icesheet expansion and retreat across continents. The leading hypothesis at that time was that the surface water contained iron, which blew in from arid landscapes during cold periods, and its levels regulated phytoplankton growth across the seas. More iron would cause more growth, which would pull more CO2 from the air. Oceanographer John Martin proposed that artificially fertilizing the ocean with iron could influence climate. At a 1988 meeting, Martin voiced what would become one of the most memorable quotes in oceanography: "Give me half a tanker of iron, and I will give you an ice age." Martin's iron hypothesis prompted more than a dozen artificial iron-enrichment experiments between 1992 and 2009. Researchers released iron on the ocean's surface and tracked for days or weeks how the area's water chemistry and organisms changed. Results confirmed that iron enrichment could lead to a phytoplankton bloom when other conditions were favourable. The studies yielded extraordinary insight into the interacting biological and chemical processes that could alter climate on long timescales. Serious concerns about interfering with nature grew, however, and nations worldwide signed a 2008 amendment to the London Convention. It prohibited further ocean-fertilization experiments beyond "small-scale, scientific research studies within coastal waters," which chilled enthusiasm for such work. In the following decades, researchers have conducted studies mostly in virtual oceans, using models.

55. According to the passage, one thing scientists came to understand towards the end of the 20th century was that ----.

A) they could trace climate history by using air bubbles trapped in ice cores

B) oceans produce enough iron to dramatically change the amount of ice across the globe

C) oceans' ability to inhale or exhale CO2 had profound effects on the movements of icesheet

D) the growth of phytoplankton anywhere around the world depends entirely on the presence of iron

E) half a tanker of iron dust would trigger a new ice age on Earth

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56. Which could be inferred from the passage?

A) John Martin was later banned from fertilizing the ocean with iron.

B) Greenland and Antarctic icesheets are the only places where climate history can be understood.

C) Artificial iron-enrichment experiments began in 1988.

D) If it hadn't been for concerns over interfering with nature, climate change could have been prevented.

E) Iron enrichment might not always lead to a phytoplankton bloom.

Starting in the 1950s, scientists began analysing air bubbles trapped in ice cores drilled from the Greenland and Antarctic ice sheets to understand climate history. By the 1980s, they realized that the world's oceans could inhale or exhale enough CO2 to substantially contribute to Earth's long-term cycles of icesheet expansion and retreat across continents. The leading hypothesis at that time was that the surface water contained iron, which blew in from arid landscapes during cold periods, and its levels regulated phytoplankton growth across the seas. More iron would cause more growth, which would pull more CO2 from the air. Oceanographer John Martin proposed that artificially fertilizing the ocean with iron could influence climate. At a 1988 meeting, Martin voiced what would become one of the most memorable quotes in oceanography: "Give me half a tanker of iron, and I will give you an ice age." Martin's iron hypothesis prompted more than a dozen artificial iron-enrichment experiments between 1992 and 2009. Researchers released iron on the ocean's surface and tracked for days or weeks how the area's water chemistry and organisms changed. Results confirmed that iron enrichment could lead to a phytoplankton bloom when other conditions were favourable. The studies yielded extraordinary insight into the interacting biological and chemical processes that could alter climate on long timescales. Serious concerns about interfering with nature grew, however, and nations worldwide signed a 2008 amendment to the London Convention. It prohibited further ocean-fertilization experiments beyond "small-scale, scientific research studies within coastal waters," which chilled enthusiasm for such work. In the following decades, researchers have conducted studies mostly in virtual oceans, using models.

57. It can be understood from the passage that nowadays ----.

A) environmental activists are busy creating concerns over long-term effects of human interventions

B) the likes of John Martin are not held in great respect because of their unethical practices

C) iron-fertilization theory doesn't have any backers among the scientific community

D) not many scientists are conducting iron fertilization in actual bodies of water

E) scientific community is in denial of the decisions taken in the London Convention

Starting in the 1950s, scientists began analysing air bubbles trapped in ice cores drilled from the Greenland and Antarctic ice sheets to understand climate history. By the 1980s, they realized that the world's oceans could inhale or exhale enough CO2 to substantially contribute to Earth's long-term cycles of icesheet expansion and retreat across continents. The leading hypothesis at that time was that the surface water contained iron, which blew in from arid landscapes during cold periods, and its levels regulated phytoplankton growth across the seas. More iron would cause more growth, which would pull more CO2 from the air. Oceanographer John Martin proposed that artificially fertilizing the ocean with iron could influence climate. At a 1988 meeting, Martin voiced what would become one of the most memorable quotes in oceanography: "Give me half a tanker of iron, and I will give you an ice age." Martin's iron hypothesis prompted more than a dozen artificial iron-enrichment experiments between 1992 and 2009. Researchers released iron on the ocean's surface and tracked for days or weeks how the area's water chemistry and organisms changed. Results confirmed that iron enrichment could lead to a phytoplankton bloom when other conditions were favourable. The studies yielded extraordinary insight into the interacting biological and chemical processes that could alter climate on long timescales. Serious concerns about interfering with nature grew, however, and nations worldwide signed a 2008 amendment to the London Convention. It prohibited further ocean-fertilization experiments beyond "small-scale, scientific research studies within coastal waters," which chilled enthusiasm for such work. In the following decades, researchers have conducted studies mostly in virtual oceans, using models.

58. What is the primary purpose of the author?

A) To explain the development, implications, and controversies surrounding the study of iron fertilization and its role in climate science

B) To promote and advocate for the large-scale, implementation of iron fertilization in oceans as a definitive solution to climate change issues

C) To argue strongly against the use of any form of climate intervention methods, including those not directly related to iron fertilization

D) To focus on the discussions surrounding international treaties and agreements on oceanic resource use and environmental conservation

E) To provide an in-depth technical analysis of the tools, techniques, and methodologies used in drilling and studying ice cores from polar ice sheets

59-62: Answer these questions according to the passage below.

A headache, in the mind of a person with hypochondria, may well be a brain tumour. A rapid heartbeat can be interpreted as a brewing heart attack by the same person. However, the fast beats may be driven by overwhelming, incapacitating anxiety. Hal Rosenbluth, a businessman in the Philadelphia area, says he used to seek medical care for the slightest symptom. In his recent book *Hypochondria*, he describes chest pains, breathing difficulties and vertigo that came on after he switched from a daily diabetes drug to a weekly one. He ended up going to the hospital by ambulance for blood tests, multiple electrocardiograms, a chest x-ray, a cardiac catheterization and an endoscopy, all of which were normal. Rosenbluth's worries about glucose levels had led him to push for the new diabetes drug, and its side effects were responsible for many of his cardiac symptoms. His own extreme anxiety had induced doctors to order the extra care. Hypochondria can, in extreme cases, leave people unable to hold down a job or make it impossible for them to leave the house, cook meals, or care for themselves and their families. Recent medical research has shown that hypochondria is as much a real illness as depression and post-traumatic stress disorder. This work, scientists hope, will convince doctors who believed the disorder was some kind of character flaw that their patients are truly ill − and in danger. A study published just last year showed that people with hypochondria have higher death rates than similar but non-afflicted people, and the leading nonnatural cause of death was suicide. It was relatively rare, but the heightened risk was clear.

59. According to the passage, symptoms that are normal for ordinary people ----.

A) will seriously affect people with hypochondria, resulting in serious issues like brain tumour

B) can be overexaggerated by people with hypochondria

C) can lead to complications, such as a heart attack, in people with hypochondria

D) may have unintended consequences if they have hypochondria

E) often cause them to seek emergency medical help

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60. We understand from the passage that the symptoms that cause people with hypochondria to end up in emergency rooms ----.

A) are likely the result of the devastating anxiety that they experience

B) include cardiac symptoms like fast heart beat more than any other

C) often necessitate further diagnostic tools like electrocardiogram and chest x-ray

D) were all elaborated on in a recent book called *Hypochondria*, written by Hal Rosenbluth

E) have been mentioned in various publications by medical professionals for a long time

A headache, in the mind of a person with hypochondria, may well be a brain tumour. A rapid heartbeat can be interpreted as a brewing heart attack by the same person. However, the fast beats may be driven by overwhelming, incapacitating anxiety. Hal Rosenbluth, a businessman in the Philadelphia area, says he used to seek medical care for the slightest symptom. In his recent book *Hypochondria*, he describes chest pains, breathing difficulties and vertigo that came on after he switched from a daily diabetes drug to a weekly one. He ended up going to the hospital by ambulance for blood tests, multiple electrocardiograms, a chest x-ray, a cardiac catheterization and an endoscopy, all of which were normal. Rosenbluth's worries about glucose levels had led him to push for the new diabetes drug, and its side effects were responsible for many of his cardiac symptoms. His own extreme anxiety had induced doctors to order the extra care. Hypochondria can, in extreme cases, leave people unable to hold down a job or make it impossible for them to leave the house, cook meals, or care for themselves and their families. Recent medical research has shown that hypochondria is as much a real illness as depression and post-traumatic stress disorder. This work, scientists hope, will convince doctors who believed the disorder was some kind of character flaw that their patients are truly ill − and in danger. A study published just last year showed that people with hypochondria have higher death rates than similar but non-afflicted people, and the leading nonnatural cause of death was suicide. It was relatively rare, but the heightened risk was clear.

61. We learn from the passage that some doctors ----.

A) have started to get positive results in decreasing suicide rates among people with hypochondria

B) treat people with hypochondria the same way they treat people with depression

C) were persuaded by others that people with hypochondria are in danger of death

D) ignore the fact that more people die from hypochondria than they do from depression

E) think people with hypochondria aren't suffering from a real disorder

A headache, in the mind of a person with hypochondria, may well be a brain tumour. A rapid heartbeat can be interpreted as a brewing heart attack by the same person. However, the fast beats may be driven by overwhelming, incapacitating anxiety. Hal Rosenbluth, a businessman in the Philadelphia area, says he used to seek medical care for the slightest symptom. In his recent book *Hypochondria*, he describes chest pains, breathing difficulties and vertigo that came on after he switched from a daily diabetes drug to a weekly one. He ended up going to the hospital by ambulance for blood tests, multiple electrocardiograms, a chest x-ray, a cardiac catheterization and an endoscopy, all of which were normal. Rosenbluth's worries about glucose levels had led him to push for the new diabetes drug, and its side effects were responsible for many of his cardiac symptoms. His own extreme anxiety had induced doctors to order the extra care. Hypochondria can, in extreme cases, leave people unable to hold down a job or make it impossible for them to leave the house, cook meals, or care for themselves and their families. Recent medical research has shown that hypochondria is as much a real illness as depression and post-traumatic stress disorder. This work, scientists hope, will convince doctors who believed the disorder was some kind of character flaw that their patients are truly ill − and in danger. A study published just last year showed that people with hypochondria have higher death rates than similar but non-afflicted people, and the leading nonnatural cause of death was suicide. It was relatively rare, but the heightened risk was clear.

62. The passage is mainly about ----.

A) the side effects of diabetes medications and their potential impact on heart health

B) the relationship between hypochondria and the risk of natural and nonnatural causes of death

C) Hal Rosenbluth's personal journey with diabetes and his experience with unnecessary medical interventions

D) hypochondria, its symptoms, effects, and the recognition of it as a serious medical condition

E) anxiety disorders and their classification alongside depression and post-traumatic stress disorder

63 - 67: For these questions, choose the best option to complete the dialogue.

63. Leyla:

— I always feel anxious when I am speaking English in public.

Adem:

— ...?

Leyla:

— How do you know that?

Adem:

— Well, it has been proven that a second language learned in a more organic environment will manifest itself more naturally. That's why you are experiencing anxiety.

Leyla:

— Wow. I have never thought of it this way. I am relieved, somewhat.

A) Using one language or another can influence the construction of discourse.

B) English offers some advantages when you want to keep an emotional distance.

C) It is because you have learned it in an academic environment.

D) The level of proficiency in a second language plays a huge role.

E) It may be because of your attitude towards the language.

64. Patient:

— **I have followed your advice and kept venting about the things that frustrate me, but I have experienced only a short relief.**

Psychologist:

— **Actually, that wasn't what I really meant. Venting is OK from time to time, but not always.**

Patient:

— **How so? Did I overdo it then?**

Psychologist:

— **----**

A) In fact, yes. When we complain, our brains release stress hormones like cortisol, which can reinforce negative thought patterns upon repetition.

B) The answer is "yes and no": Redirecting focus from what frustrates you to what you can control is a powerful antidote.

C) Complaining often feels cathartic, but in reality, it rarely solves the problem, which is why you keep coming for my advice.

D) In fact, shared negativity might foster short-term bonding but erode long-term trust and positivity in people like you.

E) Research shows that gratitude rewires the brain, increasing overall happiness and reducing the need to focus on negativity.

65. Chris:

— I am so scared of developing dementia when I get old.

Kate:

— ----

Chris:

— I can't see the relation. Could you please elaborate a bit?

Kate:

— Of course. Age-related muscle loss is bad for overall health, but the shrinkage in one particular muscle – temporalis – was found by various researchers to be related to an increased risk of developing dementia.

Chris:

— Well then. I guess we all have to do something to keep our muscle mass in good shape. Thank you for the eye-opener.

A) So you must have started doing something about the level of tau protein in your brain.

B) Then, you'd better leave that beloved couch of yours and start lifting weights.

C) This means you have little or no knowledge about the importance of gray matter in brain.

D) Then, you know that alongside physical activity, it is important to consume enough protein to build muscle.

E) So, just like me, you must be a huge fan of chair workouts for older adults trying to build muscle at home.

66. Darren:

— Wow! *Fix You* is playing on the radio. That song always brings back fond memories from my teenage years.

Kandy:

— ----

Darren:

— What are you talking about? I know what I remember alright.

Kandy:

— Come on! We practically grew up together, and in some of those memories we cried or got frustrated together. Plus, what I have just said is backed up by scientific studies.

A) Maybe it is the tune that was playing during your first dance, or the anthem of a memorable road trip you had with friends.

B) When you listen to music, it's not just your ears that are engaged: the areas of your brain responsible for emotion and memory also become active.

C) It is because that song is emotionally charged, which means you may be remembering not-so-fond memories as fond ones.

D) It has a similar effect on me, as well. Do you remember the first time we listened to this song together?

E) The way I remember this song is completely different than yours: anxiety kicks in whenever I hear the song.

67. Student:

— Sir, you must be familiar with the computer game and the TV series *Last of Us*, in which a fungus turns humans to zombies and takes over the world.

Professor:

— Yes, I watched the first season of the series, and, I'm not going to lie, I liked it. So what do you want to know about it?

Student:

— ----

Professor:

— A fungus that specializes in infecting and controlling ants or cicadas would have to evolve vastly new tools over millions more years to be able to infect even another insect, even one that's closely related, let alone a human. So the answer is a definite 'no'.

Student:

— Thank you, sir. It is good to get a confirmation from a scientist.

A) I wonder if fungi could actually cause a zombie apocalypse?

B) How long does it take such a fungus to invade its insect host?

C) Can different fungi collaborate to manipulate other insects than ants?

D) Will it take one single fungus species or multiple species to invade human brain?

E) Does everyone in the scientific community as skeptical about this issue as you are?

68-71: For these questions, choose the best rephrased form of the given sentence

68. Known for their white aprons, secret handshakes, and mysterious symbols, the Freemasons have allegedly helped plot the American and French Revolutions and plan the design of Washington, D.C.

A) Recognized for their white aprons, secret handshakes, and enigmatic symbols, the Freemasons are rumored to have influenced the American and French Revolutions and the design of Washington, D.C.

B) Famous for their white aprons, secret handshakes, and cryptic symbols, the Freemasons have played a role in the American and French Revolutions and the planning of Washington, D.C.

C) The Freemasons, who were recognized for their white aprons, secret handshakes, and enigmatic symbols, are rumored to have machinated the American and French Revolutions and planned the design of Washington, D.C.

D) Known for their white aprons, secret handshakes, and mysterious symbols, the Freemasons are believed to have shaped the American and French Revolutions, as well as designing Washington, D.C.

E) Renowned for their aprons, handshakes, and symbols, the Freemasons are believed to have influenced the American and French Revolutions and the design of Washington, D.C.

69. Career choices are among the most important decisions we ever make as they matter for our identity and reputation, the people we are surrounded by, and material well-being.

A) Career choices shape our identity, reputation, social circle, and financial well-being; thus, they are some of the most significant decisions we ever make.

B) The careers we choose are pivotal, influencing our identity, reputation, social connections, and, importantly, our financial stability.

C) Choosing a career is a crucial decision that impacts our identity, reputation, social environment, and, above all, our financial well-being.

D) Career decisions are critical, defining our identity, shaping our reputation, influencing our social circles, and determining our financial stability.

E) By shaping our identity, building our reputation, influencing our relationships, and impacting our financial success, career choices become crucial for us.

70. Understanding how inflammation affects our mental health and how it is in turn influenced by factors like diet, medications and lifestyle, we gain important insights into the pathophysiology of psychiatric conditions and pave the way for innovative treatments.

A) When we understand the way inflammation impacts our mental health and how it is also influenced by factors, such as diet, medications, and lifestyle, we will gain valuable insights into the pathophysiology of psychiatric conditions and open doors to innovative treatments.

B) Gaining insight into how inflammation affects mental health − and how factors like diet, medications, and lifestyle influence it − provides a deeper understanding of psychiatric pathophysiology and paves the way for groundbreaking treatments.

C) Upon understanding how inflammation influences mental health − and how it is shaped by factors like diet, medications, and lifestyle − we may get insights into the pathophysiology of psychiatric conditions and unlock opportunities for treatments.

D) As we can now understand how inflammation influences mental health, and how different factors like diet and medications influence it, we gain insights into the pathophysiology of psychiatric conditions and unlock pathways to treatments.

E) By understanding how inflammation affects mental health − and how it is shaped by factors such as diet, medications, and lifestyle − we will probably gain critical insights into the pathophysiology of psychiatric conditions and unlock pathways to innovative treatments.

71. Even inexpensive and common berries like blackberries and blueberries are bursting with vitamin C, and though most people associate that nutrient with the immune system, the brain needs it too.

A) Surprisingly, affordable and common berries like blackberries and blueberries have a huge amount of vitamin C, which is typically associated with the immune system, not the brain.

B) Even inexpensive and common berries like blackberries and blueberries are rich in vitamin C, a nutrient usually linked to immune health rather than brain function.

C) People associate vitamin C, found in abundance in even affordable and common berries like blackberries and blueberries, with the immune system, but it is more essential for the brain.

D) Even affordable and widely available berries like blackberries and blueberries are packed with vitamin C, a nutrient commonly linked to immune health but equally essential for brain.

E) Vitamin C, abundant in inexpensive and common berries like blackberries and blueberries, is often associated with immune health but is even more vital for the brain.

72-75: For these questions, choose the best option to complete the missing part of the passage.

72. The Permian extinction was a series of extinction pulses that contributed to the greatest mass extinction in Earth's history. Many geologists and paleontologists contend that the Permian extinction occurred over the course of 15 million years during the latter part of the Permian Period (299 million to 252 million years ago). ---- In either scenario, the Permian extinction was characterized by the elimination of about 90 percent of the species on Earth, which included more than 95 percent of the marine species and 70 percent of the terrestrial species.

A) Another temperature-related hypothesis posits that photosynthetic symbionts, which may have lived within the tissues of some marine invertebrates, were unable to survive the higher ocean temperatures and abandoned their hosts.

B) Although other single-event causes have been suggested, current explanations of Permian extinction events have focused on how biological and physical causes disrupted nutrient cycles.

C) Thus, shallow warm-water marine invertebrates, including the trilobites, rugose and tabulate corals, show the most-protracted and greatest losses during the Permian extinction.

D) In addition, more than half of all taxonomic families present at the time disappeared, which ranks it first in severity of the five major extinction episodes that span geologic time.

E) However, others claim that the extinction interval was much more rapid, lasting only about 200,000 years, with the bulk of the species loss occurring over a 20,000-year span near the end of the period.

73. People say laughter is the best medicine, but a bit of fear might be a strong contender, as getting spooked in a haunted house seems to lower people's levels of inflammation. Marc Andersen at Aarhus University in Denmark and his colleagues looked at 113 people who spent 1 hour in a haunted house attraction, which was filled with clowns, zombies and butchers with pig masks wielding chainsaws. ---- The researchers also took blood samples three days later. They focused on the 22 participants who had elevated inflammation - measured by levels of a marker called C-reactive protein (CRP) - before entering the haunted house. Three days after the visit, 18 of these people had reduced CRP levels.

A) They drew blood from the participants right before and after they made their way through the house's 50 rooms.

B) The study didn't control for stress, alcohol consumption, and menstrual phase, which can affect CRP levels.

C) They found that social stimuli that conjure up terror, such as horror films, may temporarily lower inflammation.

D) While inflammation has been linked to many health conditions, including heart disease and dementia, it is also a vital part of the immune response

E) This, the researchers claim, means that watching horror films in one's spare time could have life-extending benefits.

74. Protists are a huge, varied group of mostly one-celled organisms. On the traditional "tree of life," they comprise a whole kingdom, alongside those for animals, plants, fungi, bacteria and archaea. Protists are among the closest microbial cousins to multi-celled life. ---- Yet they are often overlooked, drawn in many science textbooks as a lower branch beneath the crown of many-celled life.

A) It is becoming clear, however, that the small can be mighty.

B) However, single-celled microbes – protists among them – dominate the planet.

C) What scientists are learning challenges old notions that single cells are simple.

D) Like animals, plants and fungi, they wrap their genetic material inside a cell nucleus.

E) Protists' tiny size means that they inhabit a different version of the world than we do.

75. Oil spills at sea pose risks to aquatic life and people. Attempts to remove that oil tend to be messy and costly and are often not very effective. ---- Past research had shown that cork could collect oil. Treating cork with lasers speeds up the pace at which cork picks up oil on water, reports Yuchun He, the head of the team conducting research.

A) Even though oil is highly viscous, or thick, it gets thinner when it warms up.

B) But scientists in China think they have found a new way to "sponge" up that sticky pollution: cork.

C) Today, cleaning up a spill takes a mix of tools, and it is a tedious process.

D) So cork appears to offer a greener alternative as it is renewable and environmentally friendly.

E) After it is harvested from a tree, the cork grows back in about 10 years.

76-80: For these questions, choose the irrelevant sentence in the passage.

76. **(I)** The contents of 200-million-year- old faeces and vomit are showing how dinosaurs took over the world at the start of the Jurassic Period. **(II)** Fossil evidence shows that the first dinosaurs - with legs under the body like mammals, rather than out to the sides like lizards - appeared more than 230 million years ago in the Triassic Period. **(III)** Well-preserved plants, bones, fish parts and insects embedded in ancient animal droppings suggest that dinosaurs' broad diets made them survivors in a changing ecosystem. **(IV)** This then led them to grow larger and establish their "dynasty on land", says Martin Qvarnström at the University of Uppsala, Sweden. **(V)** To investigate what happened, Qvarnström and his colleagues examined 532 bromalites, or fossilised faeces and vomit, from dinosaurs and other animals.

A) I B) II C) III D) IV E) V

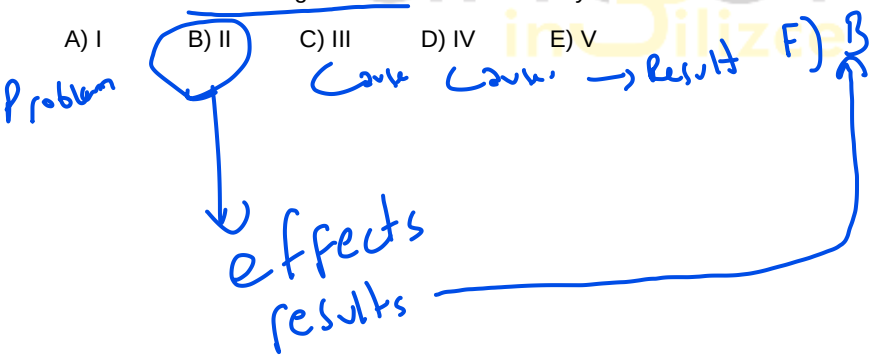
77. **(I)** On a rainy day, you will often see lots of earthworms on sidewalks and roads. **(II)** But what makes the worms crawl away from the safety of the soil when it's raining? **(III)** Although some people assume worms come to the surface so they do not drown in their burrows, worms don't have lungs like we do. **(IV)** Another popular theory is that the "vibrations from the rain are perceived by the worms to be similar to the vibrations that normally warn them a mole is coming. **(V)** Instead, earthworms absorb oxygen through their skin, and they can do so from water as well as from air.

A) I B) II C) III D) IV E) V

causes VS effects
reasons VS results

78. **(I)** A new health and climate change report by a prominent medical journal documents how the climate-ecosystem-biodiversity (C-E-B) crisis is generating "record-breaking threats to the wellbeing, health, and survival" of people worldwide. **(II)** The stresses and traumas produced by these impacts are amplifying anxiety, depression, post-traumatic stress disorders, and other mental health issues worldwide. **(III)** This is happening because global greenhouse gas emissions reached an all-time high in 2023. **(IV)** In addition, almost 182 million hectares of forests were lost between 2016 and 2022, which reduced the earth's natural capacity to sequester carbon and diminished biodiversity. **(V)** As a result, this year global temperatures will breach the 1.5 degrees Celsius extreme danger threshold for an entire year.

A) I B) II C) III D) IV E) V



79. (I) Though living in the desert is a challenge, the Mojave desert woodrat has an ace to play: it can eat poison. **(II)** This allows the cute little rodent to survive and thrive by feeding on toxic creosote bushes. **(III)** Faced with climate change, species must adapt fast or go extinct, and evidence is mounting that extragenetic adaptations, such as those found in the desert woodrat, can rescue organisms from the brink. **(IV)** Although it hasn't evolved the genes required to do so, it eats the faeces of other woodrats and thereby inherits detoxifying bacteria that take up residence in its gut. **(V)** The desert woodrat is an example of how the things organisms do can affect their evolution.

A) I B) II C) III D) IV E) V

ana konuyu örnek veya alt başlık konumuna düşüren seçenek yanlıştır

80. **(I)** Hunter-gatherers lived across Europe for thousands of years and were the dominant human presence in the region for most of this time, but they disappeared from the picture. **(II)** Researchers don't yet know the exact set of circumstances that drove Europe's hunter-gatherers to disappear, but their decline broadly coincided with the spread of farming in the region. **(III)** Neolithic farmers arrived in Europe around 8,000 years ago and ultimately replaced hunter-gatherers after a period of sharing the continent with them. **(IV)** Farmers started to push into Europe from the Near East, bringing domesticated animals and domesticated plants, and then there is a coexistence of farmers and hunter-gatherers until 5,000 years ago when the hunter-gatherers disappeared. **(V)** Europe's hunter-gatherers weren't a single entity but a series of different human populations and cultures who survived by hunting animals and foraging for wild food.

A) I B) II C) III D) IV E) V