INGILIZCE ÜDS İNG FEN BİL. / EKİM 2008 4. Twenty-five per cent of excess nitrogen from 1. - 18. sorularda, cümlede boş bırakılan yeroverfertilization of fields ---- into the oceans via lere uygun düşen sözcük ya da ifadeyi bulurivers. nuz. A) brings B) carries C) swims 1. Europe's deep-ocean margin, stretching from the D) expels E) flows Arctic to the Mediterranean and to the Black Sea, contains an ---- of biological energy and mineral resources. A) extension B) influence C) abundance D) element 5. The SOS (Space Observatories in School) E) assumption programme was ---- to make young people more aware of opportunities to study the fundamental sciences, especially those related to the universe. A) thought over B) built in C) made up D) set up E) found out 2. Cloud seeding, a technique which attempts to make precipitation by dispersing silver iodide particles into clouds, remains ---- because it is quite difficult to prove whether it actually works. 6. Ever since the sixteenth century, when Central A) valuable B) confidential America first appeared on European maps, schemes have been ---- to build canals there. C) essential D) fascinating A) set off B) put forward E) controversial C) run down D) taken up E) sent off 7. Scientists predict that should the current rate of 3. Some frozen areas of Greenland have always deforestation in the rainforests ----, a great many melted each summer, but recent research has of the species they support ---- completely by the shown that the extent of snowmelt in Greenland turn of the 22nd century. increased ---- between 1992 and 2005. continue / will have disappeared A) A) vaguely B) roughly is continued / will disappear B) C) scarcely D) drastically C) was continued / would disappear E) marginally D) had continued / would have disappeared E) will continue / would have disappeared

- Cosmologists believe that equal amounts of matter and antimatter ---- in the early universe, but since matter and antimatter annihilate each other, something ---- to create an excess of matter, leading to the universe we see today.
 - A) are created / happened
 - B) have been created / had happened
 - C) had been created / has happened
 - D) may have been created / must have happened
 - E) would be created / has been happening

ÜDS İNG FEN BİL. / EKİM 2008

- 11. If all of the Arctic ice ----, global sea levels ---- by 23 feet, submerging most coastal areas.
 - A) melted / will rise
 - B) is to melt / are rising
 - C) were to melt / could rise
 - D) will melt / rise
 - E) had melted / rose
- 12. We need to worry ---- the effects of fossil-fuel carbon dioxide ---- the atmosphere.
 - A) onto / below

C) for / at

D) about / in

B) on / by

E) towards / on

- 9. Since 1997, when the spacecraft "The Mars Global Surveyor" ---- over the surface of Mars for the first time, scientists ---- by the considerable magnetic anomalies identified on the planet.
 - A) has flown / are intrigued
 - B) flies / were intrigued
 - C) had flown / had been intrigued
 - D) was flying / may have been intrigued
 - E) flew / have been intrigued

13. There's a broad range of opinions ---- the biological consequences of being exposed ---- the contaminated environment near Chernobyl.

A) for / of	B) in / with

C) on / to D) about / at

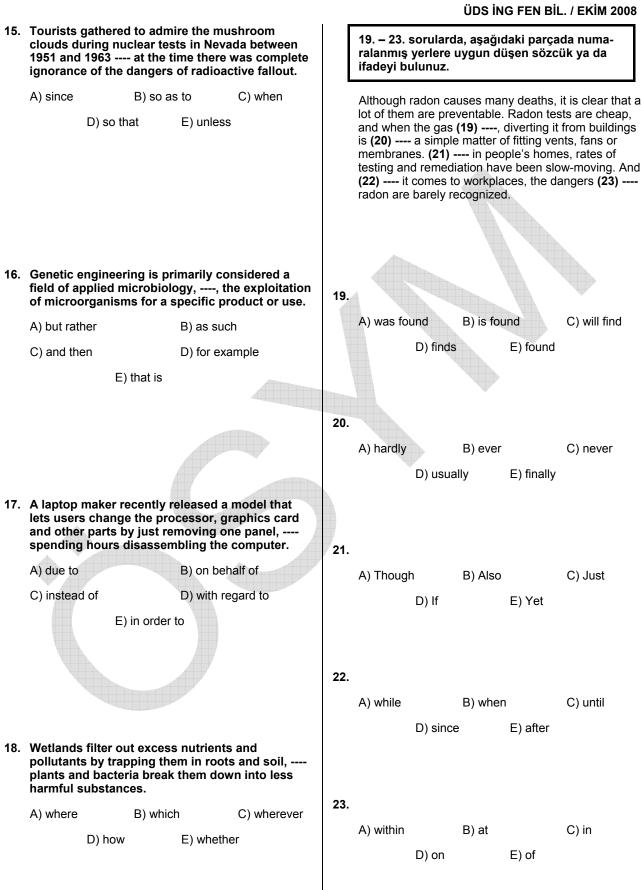
- 10. In 1998, 16 per cent of the world's coral reefs ---by bleaching caused by El Nino, but half of those reefs ---- signs of recovery, especially in protected areas where it is illegal to harvest coral.
 - A) have been killed / showed
 - B) were killed / are showing
 - C) had been killed / would have shown
 - D) have been killed / show
 - E) could be killed / had shown

genes remain activated long enough, they can dramatically enhance an organism's health and extend its life span.

14. Recently, researchers have found that ---- certain

D) if E) although

E) through / from



24. – 35. sorularda, verilen cümleyi uygun şekilde tamamlayan ifadeyi bulunuz.

- 24. Although the evolutionary origin of animals is unclear, ----.
 - A) scientists are no longer working on new theories
 - B) evolutionary biologists have abandoned traditional views about it
 - C) the cells that make up the animal body are specialized to perform specific functions
 - D) biologists have gathered enough evidence to put forward a new theory about it
 - E) much of the vegetation on land is similar to that found in the water

25. ---- if Gregor Mendel had never lived?

- A) Is it possible to compare the science of genetics to mathematics in that it consists of some basic principles
- B) Can the basic rules of genetic inheritance in human beings be fully discovered
- C) Are geneticists interested in the study of the transmission of genes
- D) Will our understanding of the relationship between an organism's genes and its characteristics be more advanced
- E) Would the development of the science of genetics in the 20th century have been any different

26. ---- that large amounts of Greenland's melted freshwater could dilute the salinated water of the Gulf Stream.

- A) With regard to the new data, it has been questioned
- B) A team of ecologists from Norway have wondered
- C) An increasing number of scientists from around the world believe
- D) In view of new evidence, one is puzzled
- E) Despite a great deal of reliable evidence, most environmentalists will not be certain

- 27. ----, but let's not forget where we live now that is, our own planet.
 - A) We have almost completely focused on space exploration
 - B) As scientists, we are able to monitor and predict environmental threats
 - C) Satellite images help researchers track hurricanes and glacial melting
 - D) Scientists pose intricate questions about the land, sky and oceans
 - E) Scientists make precise predictions about climatic changes
- 28. As investigators learn more about what is happening in the brain during the exact moment of insight, ----.
 - A) physicians are placing their hopes on stem cells, which have reversed some symptoms in monkeys
 - B) one aspect of mental imagery has been more or less neglected
 - C) the primary visual cortex seemed to be activated during the process of imagination
 - D) people are able to attribute new meanings to objects in their inner eye
 - E) all of us want to know what we can do to maximize the conditions that allow us to have brilliant thoughts
- 29. ---- because its ice sheet exerts a tremendous influence on many ecological cycles.
 - A) We probably have more information on nearby planets than we do on Greenland
 - B) The climatic change on Greenland is an indicator of things to come in the rest of the world
 - C) What happens on Greenland over the next decade does not worry scientists
 - D) The average temperature on Greenland has been steady in recent years
 - E) Less than one per cent of all the water on Earth is drinkable and not locked up in ice

30. Scientists worry ----.

- A) so that NASA may develop ways to shield astronauts from radiation on Mars
- B) just as exposure to radiation is a serious danger for manned spaceflight
- C) unless serious measures are taken to prevent fire on a space shuttle
- D) that high-energy cosmic rays could cause much damage to space shuttles
- E) provided that monitoring systems are placed throughout a spacecraft

ÜDS İNG FEN BİL. / EKİM 2008

- 33. By the end of the year, the NASA scientists should know for certain ----.
 - A) where the colourful images of Mars' south pole give indications of water
 - B) whether there is water on Mars in the form of ice
 - C) even though water once flowed over the surface of Mars
 - D) as life, similar to our own on Earth, could have existed on Mars
 - E) because the surface of Mars could only have been formed by flowing water

31. ----, it rode aboard the massive *Saturn V* rocket.

- A) Even if the scientists at NASA were concerned about the quality of the spacecraft *Apollo 11*
- B) Since the spacecraft *Apollo 11* had been designed by a special team of engineers
- C) Whether the spacecraft *Apollo 11* was to be used for lunar missions
- D) Although a lot of money was spent for the development of the spacecraft *Apollo* 11
- E) When the spacecraft *Apollo 11* went to the Moon in 1969
- 32. Sulphur dioxide emissions in Europe, ----, were reduced by 67% between 1980 and 2000.
 - A) which contribute to Arctic haze
 - B) as environmental pollution has adverse effects on our life
 - C) because there have been serious attempts so far
 - D) if the melting of the Arctic ice can be prevented
 - E) since pollution from industry and forest fires has become a major concern

- 34. Future computers will be able to tell us ----.
 - A) even if the universe consists mostly of dark matter and dark energy
 - B) unless we produce more work for less effort
 - C) so far as human beings can find new sources of food
 - D) while landmines in war zones will be detected
 - E) how we can improve our performance at work

- 35. ----, one cannot notice right away that it is moving.
 - A) While an iceberg is simply a chunk of ice
 - B) When glacier ice reaches the sea
 - C) Since a glacier creeps downhill at a few metres a year
 - D) If glacier ice is not static
 - E) Before a glacier forms from accumulated snowfall

Α

36. – 38. sorularda, verilen İngilizce cümleye anlamca <u>en yakın</u> Türkçe cümleyi bulunuz.

- 36. The change in temperature distribution in the Arctic would also affect ocean currents in the Atlantic, which would, in turn, influence atmospheric circulation in the region.
 - A) Kuzey kutup dairesindeki sıcaklık değişimi Atlantik okyanusunda akıntıları da etkileyeceği için bölgede atmosfer dönüşümü de değişecektir.
 - B) Kuzey kutbunda sıcaklık dağılımının değişmesi sonucu, Atlantik'teki okyanus akıntıları da buna karşılık bölgedeki hava dolaşımını etkileyecektir.
 - C) Kutuplarda sıcaklık değişiminin dağılımı Atlantik'te de okyanus akıntıları üzerinde etki gösterecek, buna bağlı olarak, bölgedeki atmosfer basıncı da etkilenecektir.
 - D) Sıcaklık dağılımının kutuplardaki değişimi Atlantik'te okyanus akıntılarına da yansıyacak, bu da bölgenin hava dolaşımı üzerinde etkili olacaktır.
 - E) Kuzey kutup bölgesinde sıcaklık dağılımındaki değişme Atlantik'teki okyanus akıntılarını da etkileyecek, dolayısıyla, bu durum bölgedeki hava dolaşımını etkileyecektir.

37. Breaking the hypersonic barrier of 6,000 km/h for commercial air transport is a very serious research field for today's European aircraft manufacturers.

- Günümüzde, Avrupalı hava taşıtı üreticilerinin çok ciddi bir araştırma alanı da, ticari hava taşımacılığında 6.000 km/s lik hiper ses hızı sınırını aşabilmektir.
- B) Ticari hava taşımacılığı için, günümüzde Avrupalı hava taşıtı üreticilerinin çok ciddi bir araştırma alanı 6.000 km/s lik hiper ses hızı sınırının aşılması konusudur.
- C) Ticari hava taşımacılığındaki 6.000 km/s lik hiper ses hızı sınırını aşmak, günümüz Avrupalı hava taşıtı üreticileri için çok ciddi bir araştırma alanıdır.
- D) 6.000 km/s lik hiper ses hızı sınırını aşmak, günümüzde Avrupalı hava taşıtı üreticilerinin ticari taşımacılıkta çok ciddi bir araştırma alanı haline gelmiştir.
- E) Ticari hava taşımacılığı için 6.000 km/s lik hiper ses hızı sınırını aşmak, günümüzde Avrupalı hava taşıtı üreticileri için çok ciddi bir araştırma alanı olarak görülmektedir.

- 38. By stimulating dead brain tissue, neuroscientists have concluded that a specific receptor found in the outer layer of neurons functions differently in schizophrenic brains.
 - Ölü beyin dokularını uyaran sinirbilimciler, şizofren hastalarda sinirlerin dış katmanındaki bir tür reseptörün daha farklı işlev gösterdiğini ortaya koymuşlardır.
 - B) Sinirbilimcilerin ölü beyin dokularını uyarmaları, şizofrenlilerin beyinlerinde bulunan özel bir reseptörün sinirlerin dış katmanında farklı işlevler gösterdiğini kanıtlamıştır.
 - C) Sinirbilimciler, ölü beyin dokularının uyarılması durumunda, sinirlerin dış katmanında bulunan özel bir reseptörün şizofren hastaların beyinlerinde farklı tepkilere neden olduğunu anlamışlardır.
 - D) Ölü beyin dokularını uyararak, sinirbilimciler sinirlerin dış katmanında bulunan belirli bir reseptörün şizofrenik beyinlerde farklı biçimde işlev gösterdiği sonucuna varmışlardır.
 - E) Sinirbilimcilerin elde ettiği sonuçlara göre, ölü beyin dokularının uyarılması yüzünden, sinirlerin dış katmanında yer alan belirli bir reseptör şizofren hasta beyinlerinde daha farklı çalışmaktadır.

39. – 41. sorularda, verilen Türkçe cümleye anlamca <u>en vakın</u> İngilizce cümleyi bulunuz.

- 39. Tek bir türün yok olması çok etkili değildir ama bir ikinci, üçüncü veya daha fazla sayıda tür yok olduğunda ekosistemin tutarlılığı tehdit altına girer.
 - A) The disappearance of a single species is not dramatic but when a second, third, or greater number of species becomes extinct, the stability of the ecosystem is threatened.
 - B) The stability of an ecosystem is not threatened by the disappearance of a single species but with the extinction of a second or third species, the risk becomes dramatic.
 - C) Not only is the disappearance of a single species dramatic but the extinction of a second, third, or greater number of species also threatens the stability of the ecosystem.
 - D) While the disappearance of a single species may not be dramatic, when a second, third, or greater number of species becomes extinct it may threaten the stability of the ecosystem.
 - E) When a single species disappears, there is no cause for alarm; however, with the extinction of a second, third, or greater number of species, the very stability of the ecosystem is threatened.

2006 yazında Mars'ın atmosferinde oluşan bulutlar, ilk defa olarak beklenmeyen bir yükseklikte sıcaklığın -193°C olduğu 80-100 km arasında gözlemlendi.

- A) At an unexpected height of 80 to 100 km and a temperature of -193°C, cloud formations were observed in the atmosphere of Mars for the first time in the summer of 2006.
- B) Scientists observed clouds in the atmosphere of Mars for the first time in the summer of 2006, at the unusual height of between 80 and 100 km, where the temperature is -193°C.
- C) For the first time in the summer of 2006, clouds were observed forming in the atmosphere of Mars at an extreme height between 80 and 100 km with a temperature of -193°C.
- D) In the summer of 2006, clouds forming in the atmosphere of Mars were observed for the first time at an unexpected height between 80 and 100 km, where the temperature was -193°C.
- E) Clouds were observed forming in the atmosphere of Mars for the first time since the summer of 2006 at an unusual height between 80 and 100 km, where the temperature is -193°C.

- 41. Dil teknolojilerinin en büyük ilerleme gösterdiği uygulama alanlarından biri ses komutuyla çalışan ev aletleri alanıdır.
 - A) Voice command operated domestic appliances constitute the field of application in which language technology is progressing the fastest.
 - B) One of the fields of application in which language technology is progressing the most is that of domestic appliances operated by voice command.
 - C) One of the newest and most exciting fields of application for language technology is that of domestic appliances operated by voice command.
 - D) Domestic appliances which are operated by voice command are an interesting, if not new, application of language technology.
 - E) Language technology's most profitable and promising field of application is surely domestic appliances operated by voice command.

42. – 46. sorularda, boş bırakılan yere, parçada anlam bütünlüğünü sağlamak için getirilebilecek cümleyi bulunuz.

- 42. Is there such a thing as a "gay brain"? ----. Gay men tended to have brains that were more like those of straight women than of straight men the right and left sides were about the same size, the researchers found. Gay women's brains tended to be more like those of straight men than of straight women the right side tended to be slightly larger than the left.
 - A) Such research is full of uncertainty, and it could not rule out the possibility that the findings were the result of changes that occurred in response to experiences and behaviours, rather than being inborn
 - B) Some scientists say the new findings are part of an increasingly convincing body of evidence that suggests sexual orientation results from fundamental developmental differences that are probably caused by hormonal exposures in the womb
 - C) Some scientists remain sceptical, saying that there has been a history of jumping to conclusions and over-interpreting findings in the field of human sexual orientation
 - D) In 1991, brain scientists reported that the hypothalamus, which is involved in sexual behaviour, tended to be smaller in gay men than in straight men
 - E) To find out, scientists used magnetic resonance imaging, or MRI, to compare the symmetry of the brains of 25 "straight" men and 25 "straight" women with those of 20 gay men and 20 gay women

ÜDS İNG FEN BİL. / EKİM 2008

- 43. In 1815, on the Indonesian island of Sumbawa, Mount Tambora blew up in the largest volcanic eruption in recorded history, ejecting 20 times the amount of rock that flew from Vesuvius in 79 A.D. Superhot ash and rock burned or buried all in its path, including the tiny kingdom of Tambora. The death toll was 92,000. Wind-blown clouds from the 27-mile-high plume of ash dimmed the Sun's rays. ----. After the eruption, Sumbawa was largely uninhabited for decades.
 - A) Scientists have uncovered three houses under ten feet of ash near Tambora
 - B) As a result of the darkness, crops in the surrounding regions failed, and many people went hungry
 - C) Volcanologists are searching the area with ground-penetrating radar
 - D) Archaeologists will continue excavating the area
 - E) Some scientists say that Tambora could be the Pompeii of the East
- 44. The honeybees that pollinate agricultural crops in the US were bred from stock originally brought over from Europe in the 1600s. ----. Whether caused by a new insecticide, disease, or a mix of stressors, the losses have resulted in a great deal of research and a query: Could native bees take their place? Of the thousands of US species, some efficiently tend crops like apples and alfalfa. A few, like the orchard mason bee, are already in commercial use. Advocates are fighting to preserve wild and weedy lands that support these natives.
 - A) The US honey yield for 2006 was 155 million pounds, and 33% of the US diet was tied to honeybee services
 - B) The big, social colonies of honeybees are ideal for commercial pollination, and entire colonies are often transported to different farms
 - C) However, some once common native bee species are in decline and data on others are incomplete
 - D) Honeybees remain important workers in the US, where the value of their pollination work is \$14.6 billion a year
 - E) Since 2006, however, hundreds of thousands of these honeybees have died out in what is being called *colony collapse disorder*

Α

- 45. The biofuels currently manufactured in the US are doing great things for some farmers and some large agricultural companies, but little for the environment. The corn used to manufacture ethanol requires large doses of herbicide and nitrogen fertilizer and can cause more soil erosion than any other crop. ----. Biodiesel from soybeans is only slightly better. Environmentalists also fear that rising prices for both crops will push farmers to plow up some 35 million acres of marginal farmland now set aside for soil and wildlife conservation, potentially releasing even more carbon from the soil in those fields.
 - A) Unlike the ancient carbon unlocked by the burning of fossil fuels, the carbon in biofuels comes from the atmosphere and is returned there when the fuels are burned
 - B) Such renewable fuels could also improve the US economy and help it to become less dependent on other countries
 - C) The boom in corn production has pushed corn prices to levels not seen in years, causing US growers to plant the largest crop since World War II
 - Additionally, producing corn ethanol consumes just about as much fossil fuel as the ethanol itself replaces
 - E) The key to intelligent biofuel production is to learn how to make it from plant material other than food, such as plant stalks, grasses, fastgrowing trees, or even algae

- 46. ----. Forests are dying, most impressively by burning. The damage done by wildfires in the US, the vast majority of them in the western states, has increased greatly since the late 1980s. In 2006, nearly ten million acres were destroyed. With temperatures in the region up by 2°C over the past 30 years, spring is coming sooner to the western mountains. The snowpack already diminished by drought melts earlier in the year, drying the land and creating perfect conditions for wildfires. As hotter summers extend into autumn, the fires are ending later as well.
 - A) People in the western part of the US are not yet suffering from water shortage, but trees are
 - B) It is thought that precipitation in the southwestern US will decline steadily over the next few decades
 - C) The fires are not only more frequent; they are also hotter and more damaging
 - Most forests in the southwest of the US have always burned frequently, but at low intensity
 - E) The typical tree bears the marks of many such fires, with black scars where the flames consumed the bark

ÜDS İNG FEN BİL. / EKİM 2008

47. – 51. sorularda, karşılıklı konuşmanın boş bırakılan kısmını tamamlayabilecek ifadeyi bulunuz.

- 47. Fred :
 - I am sure you are familiar with Darwin's theory of evolution, aren't you?

Student :

 Well, I can't say I am. Can you summarize it for me?

Fred :

Student :

- Now I can understand clearly what he meant by his theory.
- A) I would suggest that Darwin's theory revolutionized our perception of life science.
- B) Simple. For Darwin, new species arise naturally by a process of evolution.
- C) It would be useful first to do some research on Darwin's theory.
- D) Let me first urge you to do some reading in life science.
- E) Before we discuss the theory, let's remember how Darwin formed his theory.
- 48. Karen :
 - Did you know that nicotine actually changes the structure of the brain in a way that may cause addiction?

Scott :

Karen :

- And that's not all; between 1998 and 2004, tobacco companies increased the amount of nicotine in cigarettes.
- A) Yes, and ten per cent of new smokers become addicted within only two days!
- B) But aren't there new anti-smoking medications?
- C) That's right; after one smoke-free year, the risk of coronary artery disease is reduced by half.
- D) I read that each year more than 19 million people try to quit smoking.
- E) Most people who want to stop smoking try many times before they succeed.

49. Brian : - Have you ever heard of "exoplanets"?

Duncan :

- Exoplanets? No. What are they?

Brian :

Duncan :

- So you mean they are extrasolar planets orbiting their own suns.

- A) The vast majority of exoplanets use what is called "the radial-velocity method".
- B) Well, most of these planets are of a type known as hot gas giants.
- C) So far, some 300 such bodies have been detected.
- D) Put simply, they are planets outside our own solar system.
- E) They are planets with their own life forms.

ÜDS İNG FEN BİL. / EKİM 2008

- 50. Stephen :
 - Currently, the plastics industry is undergoing a major change.

Timothy :

- How do you mean?

Stephen :

- ----

Timothy :

- That is good news because, as you know, petrochemicals have adverse environmental effects.
- A) Plastic shopping bags, which are produced from petrochemical materials, are widely used throughout the world.
- B) As you know, the plastics industry has always depended on petrochemicals as raw material.
- C) It is a fact that the production and burning of petrochemical plastics increases CO₂ levels in the atmosphere.
- Evidently, recycling bioplastics into fuel could reduce concerns about the use of food crops in biofuels production.
- E) There is a radical shift in the industry from petrochemicals to bio-based renewable polymers.

51. Anthony :

 Our research shows that the continents contain rocks up to 4 billion years old.

Simon :

- That is amazing, isn't it?

Anthony :

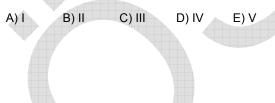
- A) To the contrary. We have found evidence that supports the theory of plate tectonics, which explains how plates converge and disperse.
- B) According to the theory of plate tectonics, the Earth has a rigid outer layer known as the lithosphere.
- C) Indeed. It's really dazzling to think of how the landmasses we see around us today were formed billions of years ago.
- D) As most scientists suggest, over millions of years, mountains rise where plates collide, and oceans form where plates diverge.
- E) In fact, it is generally accepted that almost all of the oceanic floor is less than 180 million years old.

52. – 56. sorularda, cümleler sırasıyla okunduğunda parçanın <u>anlam bütünlüğünü bozan</u> cümleyi bulunuz.

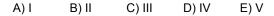
52. (I) More people than ever before live in areas vulnerable to natural disasters. (II) For average citizens, this research translates to better preparedness when faced with the unexpected. (III) Over a billion people live under the shadow of the world's 1,900 active volcanoes, yet only a few of these volcanoes are adequately monitored. (IV) Accurate weather forecasting is the best defense against hurricanes, but landfall predictions remain inaccurate by an average of 70 miles, and many hurricane warnings go unheeded. (V) Tsunamis can form too quickly for an official warning, but recognizing the immediate signs, such as a rapidly receding ocean, can give people precious minutes to reach safety.

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

53. (I) Moving slowly helps the pygmy three-toed sloth escape the notice of predators. (II) The sloth can move quickly when threatened, but generally expends no more energy than is necessary to hang around all day eating leaves. (III) Confined to one remote island that separated from Panama long ago, this smaller cousin of mainland sloths has managed to survive quietly so far, but any disruption to its habitat could have huge consequences. (IV) Algae that sometimes coats its fur adds another level of camouflage. (V) Nearby development could well be the end of it.

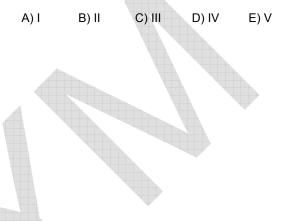


54. (I) The magnificent Philippine eagle is one of the planet's most endangered birds of prey. (II) There is no competition for prey from tigers, leopards, bears, or wolves in the Philippine islands, the eagle's only home, so it became the top predator in the rain forest. (III) However, with deforestation rates in the Philippines among the highest in the world, the eagle has been reduced to a population estimated at several hundred breeding pairs. (IV) The forest that allowed them to prosper is almost gone, and if the forest disappears, the eagle will become extinct. (V) A series of devastating floods and mud slides in the past decade has convinced Filipinos that the loss of forest affects not just wildlife, but people too.



ÜDS İNG FEN BİL. / EKİM 2008

55. (I) The global climate is changing as it always has; species will go extinct as they always have; other species will prosper. (II) Humans may be influencing the change, but they didn't create the change. (III) Global warming is as dynamic as many other earthly processes. (IV) Of course it is important to monitor which changes are being influenced by humans, but it must be remembered that change is natural, and Earth will continue to change no matter what humans may or may not do. (V) Humans as a species must accept this, and figure out how best to adapt to the change, not how to control it.



56. (I) The fate of the polar-region ice sheets will determine how much the sea level rises in the coming century. (II) Under the frozen surfaces of Himalayan glaciers on the flanks of Mount Everest and its fellow giant peaks, caves wind through the ice. (III) They follow twisting paths carved out by flowing meltwater, with unusual underground formations and narrow passages that open into huge galleries. (IV) The way meltwater moves inside glaciers is poorly understood, so scientists are going beneath the surface to track how water eats away at glaciers from the inside. (V) What we see on the surface is just part of the story.

57. – 60. soruları aşağıdaki parçaya göre cevaplayınız.

Dark matter is the invisible and mysterious material that makes up 22 per cent of the stuff in the universe. It is one of the greatest scientific unknowns. It does not emit light; nor does it reflect light or absorb it. While we are unable to see dark matter itself, we are able to create maps of it. We can clearly pinpoint its location by observing the effects of its mass on light from distant galaxies. This can be explained with reference to Einstein, who points out that a massive object will curve the fabric of space and that light will follow this deformed path. So we can look at how light from galaxies has been bent and, consequently, infer the quantity and location of the matter that did the bending. In fact, by using this method, a team of astronomers have recently managed to create the first three-dimensional map of the immense structure of dark matter.

57. One understands from the passage that dark matter ----.

- A) has a very complex structure that has caused much controversy among astronomers
- B) has been thoroughly explored and studied by a number of astronomers
- C) accounts for more than half of the material that makes up the universe
- D) has a bending effect on the light that comes from distant galaxies
- E) with its great mass was already known by Einstein and a team of astronomers

ÜDS İNG FEN BİL. / EKİM 2008

- 58. It is pointed out in the passage that the mapping of dark matter ----.
 - A) has only been possible on the basis of a theory formulated by Einstein
 - B) has been an easy task for astronomers, since they know its exact location
 - C) was originally suggested by Einstein, but it is only now that this has been achieved
 - D) has revealed a much closer and more extensive interaction among galaxies
 - E) was first attempted by Einstein, who had already studied the light emitted by galaxies
- 59. It is clear from the passage that the mass and size of dark matter ----.
 - A) have been measured through the use of a threedimensional map of space
 - B) have ceased to be one of the greatest mysteries ever known in science
 - C) distort the fabric of space and, therefore, cannot be explored properly
 - D) are so immense that it is out of question to study them in detail
 - E) can only be understood through the curves made by the light from galaxies

60. One can maintain that the passage ----.

- A) focuses solely on the process whereby Einstein was able to locate dark matter
- B) deals with the nature of dark matter and how its presence has been revealed
- C) clearly explains where in space dark matter can be located and observed
- D) sheds a great deal of light on the amount of research astronomers have done
- E) largely dwells on the question of how light from galaxies becomes curved in space

61. – 64. soruları aşağıdaki parçaya göre cevaplayınız.

Using coal to make electricity accounts for about a third of America's carbon emissions. As a result, tackling emissions from coal-fired power plants represents our best opportunity to make sharp reductions in greenhouse gases. Fortunately, the United States already has the technology to do that. Unfortunately, right now the country is addicted to coal, a cheap, abundant power source. Burning coal produces more than half the country's electricity, despite its immense human and environmental costs. Air pollutants from coal-fired power plants cause somewhere between 20,000 and 30,000 premature deaths in the United States each year. Besides, fifty tons of mercury are pumped into the atmosphere annually from coal plants. In addition, the extraction of coal, from West Virginia to Wyoming, devastates the physical environment, and its processing and burning produce gigantic volumes of waste.

- 61. It is stated in the passage that coal-fired power plants in the United States ----.
 - A) are noted for lower carbon emissions than other kinds of power plants
 - B) are concentrated in West Virginia and Wyoming more than in any other area
 - C) produce a great amount of the country's electricity
 - D) are blamed more for mercury emissions than for carbon emissions
 - E) have caused widespread environmental destruction in West Virginia and Wyoming

ÜDS İNG FEN BİL. / EKİM 2008

- 62. Emphasis is put on the fact that the United States
 - has the ability to drastically decrease greenhouse gases in the country
 - B) has developed efficient technologies for the prevention of environmental pollution
 - C) is the only country in the world that largely depends on coal for its energy needs
 - D) has made great technological advances in processing large amounts of waste
 - E) is seriously concerned about the human and environmental effects of its energy policy

63. As one learns from the passage, coal ----.

- A) has always been used as a primary source of energy, but new technologies are needed to extract it more cheaply
- B) is so abundant in America that more and more coal-fired power plants are being constructed throughout the country
- c) is extracted in gigantic amounts in West Virginia and Wyoming, since these two states have the richest reserves in the country
- b) is so indispensable for the production of electricity that nobody is concerned about its adverse effects on the environment
- E) is a major power source in America, although it has various human and environmental disadvantages
- 64. In the passage, the writer ----.
 - A) clearly explains the adverse effects that coalfired power plants have in America
 - B) criticizes the United States government for not following a clear energy policy
 - C) is fully in favour of the use of coal, as it is a readily-available and cheap energy source
 - D) calls for the development of new technologies for the reduction of carbon emissions
 - E) is worried about how gigantic volumes of powerplant waste can be efficiently treated

65. – 68. soruları aşağıdaki parçaya göre cevaplayınız.

According to the most accurate scientific theory ever created and generally known as the standard model, all of space is filled with a mysterious stuff called "the Higgs field". Unlike magnetic or gravitational fields, which vary from place to place (as, for instance, the fact that things weigh more on Earth than on the surface of the Moon), the Higgs field is exactly the same everywhere. What varies is how the different fundamental particles interact with it. That interaction, the theory goes, is what gives particles mass. In other words, the Higgs field is what makes some particles, such as protons and neutrons, relatively heavy, others (like electrons) subatomic lightweights, and still others (like photons) utterly massless. If photons weren't so light, a person would be shredded by a photon hailstorm every time he or she was exposed to a sunbeam. Then again, if protons and neutrons weren't so heavy, one wouldn't dare to go outside to sunbathe anyway. So without mass and its affinity for gravity, there would be no galaxies, no stars, and no us.

65. One learns from the passage that, in magnetic or gravitational fields, ----.

- A) photons have an equal mass to that of protons and neutrons
- B) things do not interact at all and are therefore massless
- C) the weight of things is never the same, but changes according to location
- D) there are still many mysteries that need to be explained accurately
- E) it is not clear how different fundamental particles interact with each other

ÜDS İNG FEN BİL. / EKİM 2008

66. It is emphasized in the passage that mass ----.

- A) is the weight of a thing and is wholly dependent on gravity
- B) is fundamentally different from weight and the two terms should not be confused
- C) can only be observed in magnetic and gravitational fields
- D) shows no difference on Earth and on the surface of the Moon
- E) is essentially a function of how particles interact with the Higgs field
- 67. As is pointed out in the passage, the Higgs field ----.
 - A) covers space completely and is of a homogeneous nature
 - B) has the same characteristics as a magnetic or gravitational field
 - C) has been known for centuries and led to the theory of gravity
 - D) has had no impact on the formation of galaxies and stars
 - E) is only related to the interactions of photons, protons, and neutrons
- 68. In the passage, attention is drawn to the fact that the theory of the Higgs field ----.
 - A) has been used as the standard model for an explanation of magnetic fields
 - B) is absolutely reliable and sheds light on how the universe was formed
 - C) helps us understand how to avoid the dangerous effects of solar rays
 - D) constitutes the basis of nuclear physics, since it is concerned with nuclear elements
 - E) is indispensable for an understanding of the Moon's gravity and its effects

69. – 72. soruları aşağıdaki parçaya göre cevaplayınız.

Hurricanes, which are circular storms spinning around a region of low atmospheric pressure, are powered by energy released by spiralling surface winds that draw heat from the ocean. Warmer seas provide more energy and make hurricanes stronger. This is what happened during Hurricane Katrina in August 2005, which submerged New Orleans and the vicinity. In fact, according to climate scientists, both the intensity and destructiveness of hurricanes have increased markedly since the 1970s. In other words, the energy released by an average hurricane appears to have increased by about 70 per cent within the past 30 years. This increase correlates very closely with rises in sea surface temperatures. Furthermore, tropical oceans have warmed about one degree Fahrenheit in the past 50 years, a rise that is believed to be chiefly the result of global warming.

69. One understands from the passage that Hurricane Katrina was obviously extremely destructive because ----.

- A) no measures had been taken over the last 30 years to protect New Orleans and its surroundings
- B) New Orleans, situated so close to the ocean, has always had adverse effects on global warming
- C) at the time, global warming affected the New Orleans area more than anywhere else
- D) the increasingly warm ocean must have provided it with an unusual amount of energy
- E) climate scientists did not believe that such a hurricane could happen in the New Orleans area

ÜDS İNG FEN BİL. / EKİM 2008

70. It is suggested in the passage that global warming ----.

- A) has always been considered to be the single most important cause of hurricanes throughout the world
- B) has been a major topic of research among climate scientists over the past 50 years or so
- c) is most intense in regions where atmospheric pressure is very low and sea surface temperatures very high
- was first recognized by climate scientists in the 1970s and has always been correlated with hurricanes
- E) may have played a major role over the years in the rise of temperature in the oceans in tropical regions

71. It is explained in the passage that a hurricane ----.

- A) can only be destructive so long as the surface temperatures of tropical oceans continue to rise steadily
- P) releases its energy when the temperature of the sea surface increases markedly and causes spiralling winds
- C) develops from spiralling surface winds that, according to climate scientists, mostly happen in tropical regions
- b) is a storm that has a circular pattern and moves quickly around an area of low atmospheric pressure
- E) derives its energy from the oceans, whose surface temperature has changed very little over the past 50 years

72. One of the points emphasized in the passage is that, over the last 30 years, ----.

- A) the average hurricane's energy has risen by almost three-quarters
- B) Katrina has been the only destructive hurricane in the New Orleans area
- C) climate scientists have made no progress in understanding hurricanes
- D) there has been a marked decrease in the strength of spiralling surface winds
- E) a great deal of research has been done regarding the causes of global warming

73. – 76. soruları aşağıdaki parçaya göre cevaplayınız.

Rivers and streams generally support communities of organisms quite different from those of lakes and ponds. A river or stream changes greatly between its source and the point at which it empties into a lake or the sea. Near the source, a stream's water is usually cold, low in nutrients, and clear. The channel is often narrow, with a swift current that does not allow much silt to accumulate on the bottom. Most of the organisms found here are supported by the photosynthesis of algae attached to rocks or by organic material, such as leaves, carried into the stream from the surrounding land. Downstream, a river or stream generally widens and slows. The water is usually warmer and may be cloudier because of sediments and other particles suspended in it. Worms and insects that burrow into the mud are abundant, as are waterfowl, frogs, fish, and other water animals.

73. It is maintained in the passage that, near the end of its course, a river or stream ----.

- A) flows so fast that no sediment or silt accumulates on the bottom
- B) becomes so polluted that no use can be made of its water
- C) shows a significant ecological and physical difference from its source
- D) is usually rich in algae indispensable for the survival of various water animals
- E) loses much of its nutrient capacity and turns into a muddy waterway

ÜDS İNG FEN BİL. / EKİM 2008

- 74. A point made in the passage is that the organisms found in rivers and streams -----.
 - A) live in the silt that is formed by the accumulation of various kinds of organic material
 - B) are completely consumed by waterfowl, frogs, and fish
 - C) are more abundant nearer to the source
 - D) depend on worms and insects for their food rather than on algae and other nutrients
 - E) are quite unlike the ones found in lakes and ponds
- 75. As is clear from the passage, there is a sharp contrast between ----.
 - A) the variety of waterfowl upstream and downstream
 - B) rivers and lakes as regards the kind of water plants found in them
 - C) the kinds of organic material found upstream and downstream
 - D) the quality of the water at a river's source and downstream
 - E) the types of organisms found in different rivers and streams

76. The passage gives us ----.

- A) a biological and ecological description of rivers and streams
- B) a warning about the dangers of pollution in rivers and streams
- C) a full picture of the kinds of organisms found in rivers and lakes
- D) an insight into adverse environmental effects on rivers and streams
- E) an account of how water animals, including worms and insects, feed

77. – 80. soruları aşağıdaki parçaya göre cevaplayınız.

People have been pushing into forestlands for thousands of years, but during the last century, scientists say, the rate of global forest reduction has reached alarming levels. About 50 million acres of forest are cleared every year. Much of Europe's original forests are gone. The forests of North America, which once dominated the landscape, have shrunk by almost 40% in the last two centuries to make room for people and meet the demand for lumber and paper. Not only have many of the animals that depend on these ecosystems disappeared, but various species of trees have also been depleted. Timber farms on land that once sustained natural forests have little of the biodiversity of the original forests, with pesticides and other chemicals allowing the land to support only a few kinds of life.

77. The passage as a whole deals with ----.

- A) the process of deforestation in Europe taking place over thousands of years
- B) the steps taken for the restoration of lost forestlands in North America
- C) the biodiversity that the lost forests of Europe once had
- D) the alarming question of deforestation and its harmful impact on ecosystems
- E) the uses of pesticides and chemicals for the protection of forestlands

78. It is claimed in the passage that forest farms planted for timber ----.

- A) can be most useful in recovering the lost forestlands in Europe
- B) lack the extensive biodiversity found in natural forests
- C) have a beneficial impact on the environment because of the variety of trees there
- D) have become widespread in North America and are preferable to natural forests
- E) have increased throughout the world over the last two centuries

80. It is stressed in the passage that, over the last two centuries, ----.

- A) the demand in the world for lumber and paper has reached alarming levels
- B) many lost species of trees have been recovered in Europe's forestlands
- C) no pesticides and chemicals have been allowed in North America's forests
- D) nearly half of North America's forestlands have been cleared for various reasons
- E) the area of natural forests has been sustained throughout the world

TEST BİTTİ.

CEVAPLARINIZI KONTROL EDİNİZ.

- 79. According to the passage, it is over the last century that ----.
 - A) deforestation in the world has become dangerously extensive
 - B) scientists have become aware of the variety of ecosystems in North America
 - C) the paper industry in America has become dependent on forest farms
 - D) solutions for the conservation of natural forestlands have gone into effect
 - E) the reduction of natural forests has been brought under control