

A

İNGİLİZCE

FEN BİLİMLERİ

1. – 18. sorularda, cümlede boş bırakılan yerlere uygun düşen sözcük ya da ifadeyi bulunuz.

1. The greatest ---- to the spread of nuclear technology and nuclear power reactors to developing countries is that it will increase the risks of nuclear weapons proliferation.

A) obligation
B) contribution
C) solution
D) condition
E) objection

2. A combination of factors made the 1984 accident in a storage tank at a Union Carbide plant in India almost ----.

A) crucial
B) inevitable
C) vulnerable
D) bearable
E) permanent

3. In the opinion of most scientists, engineering does not ---- offer universally acceptable solutions.

A) randomly
B) previously
C) necessarily
D) excessively
E) extremely

4. Scientists suggest that huge amounts of greenhouse gases will be ---- into the atmosphere if rising temperatures cause the Arctic permafrost to melt.

A) produced
B) accelerated
C) disrupted
D) released
E) joined

5. Several research groups have been racing to ---- how to regenerate hair cells.

A) figure out
B) go for
C) connect with
D) set up
E) make up

6. An important aspect of the application of mathematics is that different ways of making mathematical sense of everyday questions ---- different answers.

A) keep up
B) bring over
C) lead to
D) show off
E) find out

7. Earthquake rupture ---- to occur by enlargement of a crack, but more recent observations ---- a "pulse-like" mode of rupture enlargement.

A) had been thought / would be indicated
B) can be thought / had indicated
C) was thought / will have indicated
D) has been thought / indicate
E) must be thought / may have indicated

Diğer sayfaya geçiniz.

8. Cosmologists are addressing some of the fundamental questions that people ---- to resolve over the centuries through philosophical thinking, but they ---- this based on systematic observation and quantitative methodology.

A) would attempt / have done
B) attempt / will do
C) may attempt / did
D) attempted / should do
E) have attempted / are doing

9. The shuttle ---- the atmosphere at precisely 38° for heat shields below the fuselage and the wings ---- the craft from heat damage.

A) must re-enter / to protect
B) has re-entered / having protected
C) re-entered / to have protected
D) re-enters / to be protecting
E) should re-enter / to have been protecting

10. From the year 1665, when Robert Hooke ---- cells, until the middle of the twentieth century, biologists ---- only light microscopes for viewing cells.

A) used to discover / could have had
B) had discovered / would have
C) discovered / had
D) has discovered / have had
E) could discover / have

11. Sea bindweed *Calystegia soldanella* ---- a fleshy-leaved cousin of the more widespread, white-flowered hedge bindweed (*C. sepium*) that ---- fences and hedges everywhere in the summer.

A) might be / had clothed
B) is / clothes
C) should be / has clothed
D) could be / would have clothed
E) was / can clothe

12. In February 1996, ---- a meeting in Bermuda, international partners in the Human Genome Project agreed to formalize the conditions of data access, including release of the sequence into public databases ---- 24 hours.

A) at / within
B) from / in
C) in / by
D) during / to
E) on / through

13. The United States government is about to start monitoring the air ---- major cities for biological weapons ---- looking for bacteria and viruses in the air filters that now monitor pollution.

A) of / on
B) at / towards
C) out of / with
D) in / by
E) from / through

14. Comets are thought to have changed very little over the last 4 billion years, ---- their composition should hold clues to the origin of the solar system.

A) but B) whereas
C) just as D) in that
E) so

15. Robots will never be much good at household tasks such as pouring coffee or polishing shoes ---- they can calculate their position accurately.

A) since B) when
C) unless D) so that
E) in case

16. About half of all women over 65 years of age take some type of nutrition supplement, ---- only about one-fifth of older men do.

A) before B) because
C) that is D) while
E) despite

17. Coal produces ---- CO₂ per energy unit ---- any other fossil fuel.

A) also / as B) more / than
C) such / that D) either / or
E) so / as

18. Every rock, ---- copper-veined, silver-clad, or black-glazed, tells a story about the Earth as a whole.

A) both B) also
C) whether D) all
E) that

19. – 23. sorularda, aşağıdaki parçada numaralanmış yerlere uygun düşen sözcük ya da ifadeyi bulunuz.

Names and numbers were causing trouble long before the Internet age. Biology had a naming crisis in the 17th and 18th centuries. The problem wasn't so much a shortage of names but an excess of (19) ----. Plants and animals (20) ---- by many different names in different places. Then came the great reform of Carolus Linnaeus and his system of Latin binomials, (21) ---- each organism by genus and species. The new scheme revolutionized taxonomy, not because there is any magic in Latin or in two-part names, but because Linnaeus and his (22) ---- laboured to preserve a strict one-to-one mapping between names and organisms. Official codes of nomenclature continue to enforce this rule – one name, one species – although rooting out synonyms and homonyms is a (23) ---- struggle.

19.

A) them B) that C) theirs
D) those E) themselves

20.

A) were to be known B) would be known
C) are known D) were known
E) will be known

21.

A) to have been identifying B) identified
C) to have identified D) to be identifying
E) identifying

22.

A) participants B) followers
C) occupants D) suppliers
E) practitioners

23.

A) constant B) primary
C) rapid D) similar
E) partial

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

24. Shortly after the Golden Gate Bridge was opened, ----.

- A) some aesthetic and artistic concerns may have dominated the visual design of the bridge
- B) it has been an enormously successful bridge by most aesthetic and functional criteria
- C) its roadway proved to be overly flexible under certain wind conditions
- D) the design of the bridge's towers was tested on scale models, and construction of the bridge started
- E) a number of such structures were acting similarly

25. ----, yet relatively few have been identified in modern organisms.

- A) Scientists hypothesize that the human hepatitis delta virus (HDV) arose from a ribozyme
- B) The CPEB3 ribozyme is structurally and biochemically related to human hepatitis delta-virus (HDV) ribozymes
- C) This ribozyme occurs exclusively in mammals
- D) The selection had yielded several ribozymes
- E) Ribozymes are thought to have played a pivotal role in the early evolution of life

26. Should the cabin pressure somehow be lost, ----.

- A) the oxygen canisters located above the passenger seats in a plane provide oxygen to the passengers through masks
- B) the oxygen-generator canisters must be replaced periodically to ensure that they will operate properly when needed
- C) the oxygen canister contains a core of sodium chlorate, which is activated by a small explosive charge
- D) the airline maintenance rules made it clear that a bright yellow safety cap must be installed on the oxygen canisters
- E) a small explosion was initiated when a passenger pulled the oxygen mask toward herself

27. ---- when they are exposed to higher than normal temperatures.

- A) Recent climate warming is associated with genetic change
- B) Recent global warming might already be driving such changes
- C) Researchers compiled data on chromosomal polymorphism covering periods of 13 to 46 years
- D) Some organisms undergo genetic change
- E) Weather records for the same periods and locations are studied

28. ---- as to why human mental capacities are so much greater than those of chimpanzees.

- A) Two scientists recently reported
- B) Scientists have always suspected
- C) Researchers have found a clue
- D) The newly adopted scheme also includes a third category
- E) Such a decision was reached after days of debate

29. Although stem cells are found in many tissues, ----.

- A) they have great potential to treat diseases
- B) the most promising ones seem to be those in bone marrow
- C) specialists have been very enthusiastic
- D) special staining techniques revealed that the cells were indeed dividing
- E) the results of that study have yet to be announced

30. Our eyes can detect photons, the smallest quantum unit of an electromagnetic wave, ----.

- A) whose frequencies lie in the narrow visible range
- B) in which the human retina has more "pixels" than a consumer digital camera
- C) that it increases our knowledge of the structure of atoms
- D) because scientists have lacked a detector able to see an individual photon
- E) if a revolution in photon detection is now under way

31. Abnormally heavy and early rainfall in the Sudan caused the River Nile to overflow in 2007, ----.

- A) so global land surface temperatures in January and April had reached the highest levels ever recorded for those months
- B) because the first documented tropical cyclone in the Arabian Sea hit Oman and Iran, causing 50 deaths
- C) but in May, ocean waves up to 5 metres high swamped parts of the Maldiv Islands
- D) unless other extreme weather events include the summer heatwave in southeastern Europe
- E) while unusually heavy snowfall affected South Africa and parts of South America

32. ALH84001 is one of several meteorites that are generally acknowledged to have come from Mars ----.

- A) when it is named for the place in Antarctica (Allan Hills) and the year (1984) it was found
- B) because they contain trapped gases that match the Martian atmosphere
- C) while geologists at NASA discovered in the rock a variety of surprising characteristics at a microscopic level
- D) where it turned out to be the oldest known rock from any planet
- E) so that the findings were based on meticulous studies and the papers of scientists at NASA

33. Until fairly recently, we viewed the ocean as a bountiful, virtually limitless resource, ----.

- A) so many countries are also taking steps to restore and conserve wetlands
- B) unless we are now seeing the effects of our disregard for marine communities
- C) yet seafood would become less plentiful
- D) and we have harvested the ocean heavily and used it as a dumping ground for wastes
- E) regardless of the fact that laws in many countries now prohibit disposal of sewage and other wastes at sea

34. In the Pacific Ocean, the analogue of the Gulf Stream Current in the Atlantic is the Kuroshio Current, ----.

- A) which flows north along the coast of Asia to the east coast of Japan
- B) as it flows northeast across the Atlantic from its source in the Gulf of Mexico
- C) so the Gulf Stream Current indeed contributes to Europe's warmth
- D) where it transports no heat to locations on the eastern side of the Pacific
- E) but ocean currents do little to warm the region

35. Researchers have found that the DNA in bacteria deteriorates sharply after about 1.1 million years, ----.

- A) whereas the DNA of the average bacterium has about 3 million units
- B) which consisted of just 210 units linked together
- C) after which the size of the DNA gets cut in half
- D) but older microorganisms didn't perform as well
- E) and some of the oldest microorganisms were watched for as long as a year

36. – 38. sorularda, verilen İngilizce cümleye anlamca en yakın Türkçe cümleyi bulunuz.

36. Scientists tell us that 90 per cent of all matter in the universe consists of hydrogen.

- A) Bilim adamlarının bize söylediğine göre, hidrojen içeren maddeler evrendeki tüm maddelerin yüzde 90'ını oluşturmaktadır.
- B) Bilim adamları bize, evrendeki tüm maddelerin yüzde 90'ının hidrojen içerdiğini söylemektedir.
- C) Hidrojenin evrendeki tüm maddelerin yüzde 90'ını oluşturduğu, bize bilim adamlarınca söylenen bir gerçektir.
- D) Bilim adamlarının bize söylediği gibi, hidrojen, evrendeki maddelerin yüzde 90'ında bulunmaktadır.
- E) Bilim adamları, hidrojenin, evrendeki tüm maddelerin yüzde 90'ını oluşturduğunu söylüyor.

37. Inventions of modern science are no longer the creations of a single person, as they were in the past.

- A) Çağdaş bilimin buluşları, artık, geçmişte olduğu gibi tek bir kişinin yaratıları değildir.
- B) Çağımızda bilimsel buluşlar, geçmişte olduğunun tersine, bir kişinin yaratıcılığına dayanmaktadır.
- C) Çağdaş bilimde artık, geçmişte olduğu gibi, tek kişinin yaratıcılığına dayanan buluşlara rastlanmamaktadır.
- D) Çağdaş bilimle ortaya konan buluşlar, geçmişten farklı olarak, birden çok kişinin ortaya koyduğu yaratılardır.
- E) Geçmişteki buluşlar, çağdaş bilimdekilerin tersine, bir tek kişinin yaratılarıydı.

38. Meteorites provide the best available data about the chemical and physical processes that occurred during the first few million years of our solar system's history.

- A) Güneş sistemimizin tarihinde, ilk birkaç milyon yıl içinde ortaya çıkmış olan kimyasal ve fiziksel oluşumlara ilişkin elde edilebilen en iyi veriler göktaşlarında bulunmaktadır.
- B) Güneş sistemimizin başlangıcındaki birkaç milyon yıl içinde meydana gelmiş kimyasal ve fiziksel süreçlerle ilgili kullanılabilir verilerin en iyileri göktaşlarından elde edilmiştir.
- C) Göktaşlarının sağladığı veriler, güneş sistemimizin tarihinin ilk birkaç milyon yıllık sürecindeki kimyasal ve fiziksel oluşumları anlayabilmemize en büyük katkısı sağlamıştır.
- D) Güneş sistemimizin ilk birkaç milyon yıllık tarihinde meydana gelen kimyasal ve fiziksel süreçlerle ilgili verilerin en güvenilir olanları göktaşlarından sağlanmıştır.
- E) Göktaşları, güneş sistemimizin tarihinin ilk birkaç milyon yılında meydana gelmiş olan kimyasal ve fiziksel süreçler hakkında mevcut en iyi verileri sağlar.

39. – 41. sorularda, verilen Türkçe cümleye anlamca en yakın İngilizce cümleyi bulunuz.

39. Bilim adamlarına göre, atmosfere yayılmakta olan atık gazlar nedeniyle dünyadaki iklimler daha sıcak bir hale gelmiştir.

- A) Scientists claim that so much waste gas has been spread into the atmosphere that the climates in the world have become increasingly warm.
- B) As scientists have pointed out, due to waste gases that pollute the atmosphere, the world's climate has become much warmer.
- C) According to scientists, the climates in the world have become warmer because of waste gases that are spreading into the atmosphere.
- D) For scientists, the atmosphere has been so polluted by waste gases that the climates in the world have already become much warmer.
- E) As far as scientists are concerned, the world's climate has become extremely warm owing to waste gases in the atmosphere.

40. Evrenin sakinleri olarak, ışığın ilk kaynağının nasıl oluştuğunu, hayatın nasıl meydana geldiğini ve bu çok büyük boşlukta akıllı varlıklar olarak bizim yalnız olup olmadığımızı merak etmekten kendimizi alamayız.

- A) How the first light was formed, how life started, and whether we are the only intelligent beings in this huge emptiness are the questions that, as inhabitants of the universe, we cannot keep ourselves from asking.
- B) As inhabitants of the universe, we cannot help wondering how the first source of light formed, how life came into existence and whether we are alone as intelligent beings in this vast emptiness.
- C) As this universe's only intelligent inhabitants, it is up to us to ask questions such as how the first light source was formed, how life on Earth started, and how we came to inhabit a tiny planet in this vast emptiness.
- D) As inhabitants of this universe, we cannot help asking such pressing questions as how the first light source was formed, how life started, and whether there are other intelligent beings living in this vast emptiness.
- E) Being inhabitants of the vast emptiness that is our universe, we cannot help wondering how light was formed, how life started, and whether we are quite alone as intelligent beings in the universe.

41. ABD Ticaret Bakanlığı, hassas teknolojik bilgilere ulaşımı sınırlandırmaya ilişkin politikaların gözden geçirilmesi gerekıp gerekmediğini incelemek üzere bir grup uzmanı görevlendirmiştir.

- A) A group of experts commissioned by the US Department of Commerce are examining how the policies concerning limited access to sensitive technological information should be re-formulated.
- B) A group of experts have been appointed by the US Department of Commerce to review the policies that limit access to confidential technological information.
- C) The US Department of Commerce has recruited a group of experts to find out to what extent the policies for the limitation of access to delicate technological information can be revised.
- D) The US Department of Commerce has commissioned a group of experts to examine whether policies on limiting access to sensitive technological information should be reviewed.
- E) The policies on limited access to confidential technological information are being reviewed by a group of experts, appointed by the US Department of Commerce.

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

42. Engineers are hired by clients (and employers) specifically for their specialized expertise. ----. Therefore, engineers have ethical obligations to their clients, because the client often cannot assess the quality of the engineer's technical advice. These obligations are part of engineering ethics, the set of behavioural standards that all engineers are expected to follow.

- A) Civil engineering is generally considered the oldest engineering discipline
- B) Successful teamwork results in accomplishments larger than those that can be produced by individual team members
- C) Generally, the client knows less about the subject than the engineer
- D) Biochemical engineers combine biological processes with traditional chemical engineering to produce foods and pharmaceuticals and to treat wastes
- E) An engineer does not need to have a licence to practise engineering, but those who do may have more career opportunities

43. An athlete's body must be heavier for its height than a nonathlete's body because the athlete's bones and muscles are denser. ----. However, this is not true. Weight standards that may be appropriate for others are inappropriate for athletes. Therefore, measures such as fatfold tests yield more useful information about body composition.

- A) When athletes consult standard weight-for-height tables and see that they are on the heavy side, they may mistakenly believe that they are too fat
- B) The increasing incidence of abnormal eating habits among athletes, especially young women, is causing concern
- C) Athletes are particularly likely to develop eating disorders
- D) They fail to realize that the loss of lean tissue that accompanies energy restriction actually impairs their physical performance
- E) Male athletes, especially wrestlers and gymnasts, are affected by these disorders as well, but research shows that females have a greater tendency

44. Thanks to their status as one of the world's top predators, great whites are among the best known sharks on Earth, yet essentially nothing is known about their mating habits. That could soon change, as researchers have discovered a remote spot in the North Pacific Ocean that may be a mating ground for great whites, according to a recent study. ----. But, as scientists have explained, the theory that the area is a feeding ground for great whites may be incorrect.

- A) It's not an area that a shark would logically go to from California to find something to eat
- B) At first, scientists nicknamed the region, 1,553 miles west of the Baja Peninsula, the "great white café" because they suspected sharks could be going there to feed
- C) The sharks migrate long distances seasonally from the coast of California to Hawaii and to the offshore area
- D) On average, the sharks dive every 10 minutes, 325 metres down, perhaps to sniff for mates, whose scent could be detected at a certain level of depth
- E) Sharks gather at marine mammal habitats in California during autumn and winter months, feeding on the abundant elephant seals and other prey before migrating to the offshore waters

45. The dark side of nanotechnology is the nightmare possibility that "nano-robots" could be programmed to turn everything on Earth into more nano-robots. ----. Some researchers, however, say that while they also have some worries about nanotechnology, they don't want it banned because its benefits outweigh its risks.

- A) R. Smalley discovered the three-dimensional nanoscale carbon cages called fullerenes
- B) E. Drexler says he invented the word "nanotechnology"
- C) The inventors of nanotechnology were awarded a Nobel Prize
- D) In 1990, a team of scientists found they could use a scanning tunnelling microscope to drag individual atoms of xenon over the surface of a crystal of nickel
- E) There are other fears, such as nanoscale particles creating unforeseen toxic hazards

46. Seismologists have struggled for years to find a reliable earthquake predictor. Could balls of light in the sky preceding quakes hold the key? The US Federal Emergency Management Agency (FEMA) has begun asking that very question. ----. Thus, they have funded NASA to study earthquake lights using weather satellites and the MODIS research satellite during the past few years.

- A) In 1999, floating balls of light in the sky were broadcast on Turkish television, reportedly filmed the night before the earthquake in İzmit
- B) In 1968, the first photographs of "earthquake lights" were taken by Yutaka Yasui of the Kakioka Magnetic Observatory
- C) The main problem facing FEMA is that earthquake lights still don't have an accepted scientific explanation
- D) Most earthquakes occur at plate boundaries, where one plate slides beneath another hundreds of kilometres below the Earth's surface
- E) Mainstream geologists had dismissed these earlier claims as coincidental

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

47. Sarah :
- Have you ever thought about how paleontologists name the new fossils they find? They don't only give the fossils a boring, descriptive name in Latin.

Laura :

- ----

Sarah :

- Well, in this article it says that one paleontologist named a newly discovered type of dinosaur fossil *gojirasaurus* after the original Japanese name for Godzilla!

Laura :

- That's funny! I wonder if they'll name any fossils after King Kong.

- A) I have a cousin who's studying paleontology; why don't we ask him?
- B) Certainly. There are rules for how new species and fossils must be named.
- C) Well, they surely have a catalogue of names they can use for every fossil they discover.
- D) Oh, really? What kinds of names do they give them, then?
- E) Paleontologists have a sense of humour, too!

48. Lisa :
- What are you reading?

Andy :

- A book about caterpillars in the Costa Rican tropical forests. Did you know that there's one type of caterpillar that looks like a snake's head?

Lisa :

- ----

Andy :

- I should imagine, only to scare away predators.

- A) Looking at caterpillars always makes me feel like I've got one crawling up my arm!
- B) How strange. I wonder why?
- C) I don't know why this type of caterpillar lives in a tropical forest.
- D) How interesting. Does the book mention other types?
- E) Why did the writer choose to focus on only the forests in Costa Rica?

49. Kathy :

- I went to a lecture yesterday given by a microbiologist. He focused on bacteria caught in Antarctic ice millions of years ago, and stressed their importance in understanding how life on Earth works over long periods of time.

Bruce :

- ----

Kathy :

- He said that life on Earth consists mostly of microbes, and they can adapt to every possible environment.

Bruce :

- That sounds interesting. Did he suggest any reading material on the subject?

- A) What is the lecturer's special area of study within the field of microbiology?
- B) Did you ask him any questions after the lecture?
- C) I find microbiology incredibly interesting; don't you?
- D) Who else attended the lecture besides you?
- E) How can anything so tiny have an influence on the planet as a whole? Amazing. Anything else?

50. Terry :

- Did you know that scientists have found perfectly preserved comet dust in the ice in Antarctica?

Lynne :

- ----

Terry :

- Yes, it is. The samples found previously in Antarctica and in Greenland had been compacted and changed by the ice around them, but these new samples haven't.

Lynne :

- Then their larger size and good condition must make them easier to analyse.

- A) That's nothing new! Don't you think?
- B) Are the dust samples taken from a comet's tail by spacecraft similar to this?
- C) Where in Antarctica was the dust discovered?
- D) It must have been difficult for the scientists to locate the dust.
- E) That was Jean Duprat's study, wasn't it?

51. Keith :

- It looks like more and more countries in the EU are turning to wind power for their energy.

Cherie :

- ----

Keith :

- Actually it's not, because sometimes the wind turbines are built without proper planning, and this affects the surrounding environment negatively.

Cherie :

- Oh, I wasn't aware of that.

- A) I think a combination of wind and solar power would be best.
- B) I think that's very good. Yes?
- C) What's your opinion of wind power?
- D) I thought wind turbines couldn't generate enough power to make a difference.
- E) Do you think wind power will help reduce carbon emissions?

52. – 56. sorularda, cümleler sırasıyla okunduğunda parçanın anlam bütünlüğünü bozan cümleyi bulunuz.

52. (I) When their nuclear fuel is exhausted, stars die, and the residual iron core collapses on itself. (II) The outcome of a star's death depends on mass, however. (III) Stars with between 10 and 20 times the mass of the Sun collapse in a spectacular explosion known as a supernova, leaving behind a neutron star, whereas those larger than 20 solar masses implode to form black holes in a hypernova. (IV) In both cases, copious bursts of neutrinos are released along with optical, x-ray and gamma radiation. (V) Recent studies indicate that some massive stars may be rotating only slowly or not at all.

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

53. (I) Since the cloned-sheep Dolly's birth, researchers have cloned many other mammals, including mice, cats, horses, cows and pigs. (II) Such reproductive cloning has many potential applications. (III) Their most advanced embryo, however, had stopped growing at about six cells, and their intention was solely to harvest embryonic stem cells. (IV) By using genetically engineered donor nuclei, geneticists can study the effects of changing single genes or combinations of genes. (V) And in the future, biologists may routinely produce genetically identical animals for experimentation, a potential benefit to genetics research.

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

54. (I) The algal ancestors of plants may have carpeted moist fringes of lakes or coastal salt marshes over 500 million years ago. (II) Both groups have similar microscopic structures for making their cellulose cell walls and a similar mechanism for forming the cell plate that divides the cytoplasm during cell division. (III) These shallow-water habitats were subject to occasional drying, and natural selection would have favoured algae that could survive periodic droughts. (IV) Some species accumulated adaptations that enabled them to live permanently above the water line. (V) The modern-day green alga *Coleochaete* may resemble an early plant ancestor, and it grows at the edges of lakes as disk-like, multicellular colonies.

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

55. (I) Humans have a long history of studying, appreciating, and using animal diversity, but classifying a new animal isn't always easy. (II) Imagine you were the first European zoologist to encounter a strange animal in Australia that has the following physical features. (III) It has a bill and webbed feet similar to a duck's, but the rest of its furry body looks very much like that of a muskrat or other aquatic rodent, and it lays eggs. (IV) Unlike the rest of the world, Australia has relatively few placental mammals. (V) How would you classify it?

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

56. (I) Reefs are under attack from all sides. (II) Coral reefs are one of the oldest and most diverse ecosystems on Earth. (III) Hurricanes and tsunamis can cause injuries that take decades for a reef to repair naturally. (IV) Meanwhile, destructive fishing practices, pollution, ships running aground and climate change pose an even more serious threat. (V) A report issued by the UN Environment Programme warned that 30 per cent of the world's coral reefs are either already dead or seriously damaged.

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

57. – 60. soruları aşağıdaki parçaya göre cevaplayınız.

Robots make unlikely green warriors, but they could soon be doing their bit for the environment. Trials of a Danish robot that maps the position of weeds growing among crops suggest that herbicide use could be reduced by 70 per cent if farmers used it to adopt more selective spraying techniques. Actually, the robot drives across fields scanning the ground for any weeds and noting their positions. A later version will be able to kill the weeds too by applying a few drops of herbicide. But the longer-term goal is to avoid herbicides altogether by having the robot pluck the weeds out of the ground rather than poisoning them. Although weedkilling robots have already been put to work in the United States, they cannot be used for agricultural purposes because they do not distinguish between plant species and tend to treat anything green as a weed. Instead, they are used to clear unwanted plants from railways and airport runways.

57. As one understands from the passage, when the ultimate version of the weedkilling robot comes into use, ----.

- A) there will be no need for the use of herbicides since weeds will simply be pulled out by the robot
- B) herbicides will no longer be used anywhere in the world
- C) the American type of weedkilling robots will still be used since they are very efficient
- D) farmers will be able to upgrade their spraying techniques in order to kill the weeds among their crops
- E) many of the environmental problems farmers face will be solved much more efficiently

58. It is clear from the passage that robots used in the United States for weedkilling ----.

- A) are a technological challenge that farmers in Denmark and the United States face
- B) were first invented and widely used by farmers in the United States
- C) will never be useful for improving traditional spraying techniques
- D) are convenient for use only on railways and airport runways rather than in farming areas
- E) are being developed and tested in Denmark

59. It is implied in the passage that herbicides used for weedkilling ----.

- A) have certainly done much damage to the environment in Denmark
- B) can be most effective if they are sprayed along with fertilizer
- C) are more commonly preferred in the United States than in Denmark
- D) cause no environmental damage if applied only in small amounts
- E) are poisonous and, therefore, threaten the environment

60. As is clear from the passage, the type of robot currently under trial in Denmark ----.

- A) is actually adaptable to all kinds of agricultural purposes
- B) has been regarded by farmers as a major step forward in agricultural technology
- C) identifies the weeds among crops but does not pluck them
- D) has been copied from the type which is used in the United States and is far more efficient
- E) is not able to tell the difference between different plant species

61. – 64. soruları aşağıdaki parçaya göre cevaplayınız.

The first documented scheme for in-flight refuelling came from a young Russian aviator named Alexander de Seversky. His father owned a plane and taught him to fly when he was in his early teens. In 1917, when he was 23, Seversky proposed a method for extending flight: One plane could carry extra fuel and deliver it to another through a hose. After the Russian Revolution, Russia's new Bolshevik government sent him to the United States to study aircraft design, and he stayed there when political developments made his return to Russia dangerous. He got a job as an aeronautical engineer for the US War Department and was awarded the world's first patent for air-to-air refuelling, in which large fuel tankers would supply fuel to fighter aircraft while in flight. Seversky went on to a distinguished career in airplane design and achieved perhaps his greatest fame as the author of the influential 1942 book *Victory through Air Power*. He never put his refuelling plan into action, though, and other aviators later came up with ideas of their own.

61. One understands from the passage that although Alexander de Seversky was the owner of the first patent for in-flight refuelling ----.

- A) the US War Department was uninterested in his plans
- B) his true passion was always flying, which he learned as a teenager
- C) Russia's Bolshevik government did not support his schemes
- D) his plans were never implemented
- E) other inventors made use of his ideas on aircraft design

62. We see from the passage that Seversky's 1942 book *Victory through Air Power* ----.

- A) made him more famous than his ideas for in-flight refuelling
- B) was extremely unpopular in Bolshevik Russia
- C) was used as a training manual by the US War Department
- D) extensively detailed his plans for in-flight refuelling
- E) remained unpublished at the time of his death

63. According to the passage, Seversky was unable to return to Russia due to ----.

- A) his employment as an aeronautical engineer for the US War Department
- B) the dangers of international travel at the time
- C) changes in the political situation there
- D) the fact that he was an extremely popular aircraft designer
- E) the political nature of the book he published in 1942

64. It is clear from the passage that Seversky's original plan for in-flight refuelling ----.

- A) was perceived as a threat by the Russian government
- B) involved the transfer of fuel from one airborne aircraft to another by means of a hose
- C) gave him a clear advantage when he was applying for work in the United States
- D) was inspired by his aeronautical studies in America
- E) was completely revised, following suggestions from the US War Department

65. – 68. soruları aşağıdaki parçaya göre cevaplayınız.

One of the most pressing international priorities is to control the dissemination of nuclear materials that could be used in attacks by terrorists or rogue states. Nuclear materials contain unstable isotopes, which emit x-rays and gamma rays. The characteristic energies of these photons provide a fingerprint revealing which radioactive isotopes are present. Unfortunately, some isotopes that occur in benign applications emit gamma rays with energies that are very similar to those emitted by materials used in weapons, which leads to ambiguous identifications and false alarms. This problem has been worrying the United States, which is installing thousands of radiation portal monitors to detect the gamma rays emitted by nuclear materials carried by vehicles crossing the Canadian and Mexican borders. One of the worst fears of the authorities is that terrorists might smuggle highly-enriched uranium into the country to build a crude Hiroshima-style atomic bomb.

65. The point is made in the passage that an issue of extremely compelling urgency in the world ----.

- A) is to ensure that nuclear materials are used not in weapons but in benign applications
- B) has been the international threat posed against the United States by terrorists and rogue states
- C) is to make sure that nuclear energy facilities are much safer and more reliable than ever
- D) has been to find out how rogue states have come to possess highly-enriched uranium
- E) is the prevention of the spread of nuclear materials, serving the aims of terrorists and rogue states

66. It is clearly pointed out in the passage that it is very hard to ----.

- A) reach an international understanding that the dissemination of nuclear materials must be fully controlled
- B) trace how highly-enriched uranium can be smuggled and marketed internationally
- C) distinguish between gamma rays emitted by nuclear materials used for constructive or destructive purposes
- D) force rogue states to give up their efforts to develop nuclear weapons
- E) identify all radioactive isotopes that emit x-rays and gamma rays

67. As pointed out in the passage, the United States ----.

- A) is so worried about the dissemination of nuclear materials that it is making every effort to isolate rogue states
- B) has started taking technological precautions along its Canadian and Mexican borders to control the entry of nuclear materials into the country
- C) is confident that the only type of atomic bomb terrorists or rogue states can build will be no better than a Hiroshima-style one
- D) strongly maintains that nuclear materials should be used only in useful and benign applications
- E) claims that the nuclear materials used in weapons are controlled strictly to prevent any leakage

68. As one understands from the passage, the kind of radioactive isotopes present in nuclear materials are ----.

- A) more useful for weapons than for any other purpose
- B) only revealed when they are activated for any use
- C) those which mostly emit a large amount of gamma rays
- D) identified by the energies typical of their nature
- E) those that emit far more energy if uranium is highly enriched

69. – 72. soruları aşağıdaki parçaya göre cevaplayınız.

The world now recycles just over 50 per cent of the paper it uses. Reprocessing plants are being established in most countries. However, trees will never be fully spared because of the use of wood fibres themselves. Pure pulp is rich in water, which provides for ample hydrogen bonding that holds fibres together when made into paper. But each time a fibre is cleaned, de-inked and dried in a reprocessing plant, only 80 per cent of the bonds are recovered. After four or five recyclings, a fibre can no longer make strong enough bonds. Engineers can do little that is economically viable to overcome this physical limitation, so they focus on reducing the cost of reprocessing fresher fibres. One main challenge is finding a better way to neutralize “stickies”, which is the mess of adhesives from stamps, labels, seals, tape, magazine spines and various other sources, that jam the machinery. The industry has been working for a decade to find a chemical process that will break down stickies, but no full solution has been found yet.

69. According to the passage, in the recycling of waste paper, ----.

- A) engineers have developed a chemical process to get rid of adhesives
- B) it is essential that, among other chemical procedures, de-inking is first to be completed to enable fibres to bond strongly
- C) there is actually no need to depend on pure pulp since the fibres are adequately bonded
- D) various countries have developed new techniques except for an effective solution for the removal of “stickies”
- E) one serious and costly handicap is the problem of adhesives that get stuck in the machines

70. It is maintained in the passage that although more than 50 per cent of paper used is recycled ----.

- A) there is still much dependence in the paper industry on the use of wood pulp
- B) the world's paper industry is still in its early stages and needs to upgrade itself in terms of efficiency and cost
- C) most countries regard this as minimal and, therefore, encourage the establishment of more paper plants
- D) this is not enough to save forests from total destruction due to widespread exploitation
- E) engineers are working hard to develop new technologies in order to increase the amount to 80 per cent

71. It is pointed out in the passage that as the number of recyclings increases ----.

- A) the dependence on wood fibres will no longer be necessary
- B) less and less pure pulp will be used in the paper industry
- C) the problem of adhesives becomes less and less serious and urgent
- D) the cost of reprocessing is reduced to a viable level
- E) the ability of a fibre to make strong bonds decreases

72. It is pointed out in the passage that engineers in the paper industry ----.

- A) do not regard “stickies” in waste paper as a serious challenge
- B) have made a breakthrough in strengthening the bonding capacity of recycled fibres
- C) are mostly interested in reducing the cost of reprocessing the fresher fibres found in waste paper
- D) do not consider the recycling of waste paper to be a viable way of making profit
- E) maintain that wood fibres make better paper although it can cost much more

73. – 76. soruları aşağıdaki parçaya göre cevaplayınız.

Mount Everest is the highest mountain on Earth above sea level, but it is not the world's tallest. That honour goes to the Hawaiian volcano Mauna Kea. When measured from its base on the Pacific Ocean floor, it is about 1,000 metres taller than Mount Everest. Mauna Kea is part of a 5,600-kilometre-long chain of volcanoes stretching westward from the main Hawaiian island. This volcanic chain is formed by small convection streams called "hot spots", just below the Earth's crust, where magma rises from the hotter parts of the mantle, the region between the crust and the core of the earth. These hot spots melt sections of the tectonic plates moving above them, causing magma and bits of the molten plate to erupt onto the sea floor. Over time, the lava accumulates, forming a mountain that rises above sea level. The moving tectonic plates carry the newly-formed mountain away from its original location, as newer volcanoes continue to form in the same spot.

73. One understands from the passage that, as much of Mauna Kea is below sea level, ----.

- A) nobody knows how high it actually is since it cannot be measured precisely
- B) it looks lower than Mount Everest, but in fact, it is not when measured from its bottom
- C) its volcanic activity is actually much more extensive than is generally thought
- D) the process of its geological formation is only now being revealed scientifically
- E) the so-called "hot spots" on the ocean floor continue to add lava to its base

74. It is clear from the passage that the tectonic plates in the Pacific Ocean ----.

- A) move constantly and, thus, undermine the formation of a volcanic chain in the region
- B) prevent the formation of convection streams that cause eruptions on the ocean floor
- C) are so thick that the so-called "hot spots" have no physical effect on them
- D) play a part in the formation of volcanic chains on the ocean floor
- E) cover the mantle so well that no eruption of magma can take place on the ocean floor

75. According to the passage, the lava which erupts onto the Pacific Ocean floor ----.

- A) mainly consists of magma but also includes small pieces of the molten tectonic plate
- B) is constantly dispersed in all directions because of the movements of the tectonic plates
- C) soon forms a chain of mountains that are relatively high but hardly rise above sea level
- D) flows from newly-formed mountains such as the Hawaiian volcano Mauna Kea
- E) can cover a very large area that may extend for thousands of kilometres in all directions

76. In this passage, the writer ----.

- A) gives an account of the benefits that convection streams provide to the Hawaiian Islands
- B) describes in detail the movements and effects of the tectonic plates under the Pacific Ocean
- C) gives information about how Mount Everest was formed
- D) explains how the volcanic chain extending across the Pacific Ocean was formed
- E) states that different types of volcanoes will continue to form across the Pacific Ocean

77. – 80. soruları aşağıdaki parçaya göre cevaplayınız.

Meteorites offer glimpses of the earliest stages of planetary formation. Stony-iron meteorites come in two main classes: *pallasites* and *mesosiderites*, and it was previously thought they may have had similar origins. A new study, however, has revealed that their oxygen isotope properties differ and that they come from distinct places. Accordingly, the characteristics of mesosiderites suggest they came from the third largest asteroid, Vesta, which is the target of the NASA Dawn Mission. On the other hand, pallasites are made of mixed core-mantle material from a disrupted asteroid, indicating that extensive asteroid deformation was an integral part of planetary enlargement in the early solar system.

77. According to the passage, while scientists think they know the asteroid from which mesosiderites came, ----.

- A) its oxygen isotope properties need to be fully studied and explained
- B) the original asteroid with which pallasites are associated is not named
- C) its characteristics are only now being revealed in a series of new studies
- D) there are conflicting views among scientists as regards pallasites
- E) the NASA Dawn Mission has not yet established its position in the solar system

78. As one understands from the passage, meteorites ----.

- A) are scientifically useful because through them is partially revealed the very early development of planets
- B) have been the major target of the NASA Dawn Mission, which is primarily concerned with planetary formation
- C) are made up of the material that has come from disrupted asteroids such as the asteroid called Vesta
- D) are known as either pallasites or mesosiderites, both of which have the same physical properties
- E) clearly show that, in the early solar system, every asteroid underwent a process of structural disruption

79. As is pointed out in the passage, the growth of planets in the early solar system ----.

- A) can only be understood through a close study of mesosiderites rather than pallasites
- B) was mainly due to the oxygen isotope properties of certain meteorites
- C) depended on mixed core-mantle material from disrupted asteroids
- D) was essentially influenced by Vesta, which is the third largest asteroid
- E) was closely connected with the large-scale deformation of asteroids

80. As one learns from the passage, pallasites and mesosiderites ----.

- A) have their origins in various disrupted asteroids including the asteroid Vesta
- B) provide us full knowledge of how planets were formed in the early solar system
- C) are the two major groups of meteorites that have a stony-iron nature
- D) played a formative role in planetary enlargement in the early solar system
- E) have always remained a scientific mystery, which NASA is trying to unravel

TEST BİTTİ.

CEVAPLARINIZI KONTROL EDİNİZ.