

YÖKDİL KASIM
2019
FEN SORULARI

1. In regions with a relatively dry climate, intensive cultivation by farmers can have terrible -----, draining water sources, and causing soil erosion.

- A) consequences B) assumptions
C) functions D) distinctions
E) observation

2. The spectacular discoveries and ----- in molecular biology in the last fifty years have created a gene-based medical revolution.

- A) delays B) celebrations
C) difficulties D) achievements
E) imitations

3. In recent years ----- efforts have been made in introducing improved forest harvesting practices to tropical forests to support sustainable forest management.

- A) considerable B) deniable
C) vulnerable D) habitable
E) changeable

4. Asian sea bass, a fish species farmed in several Asian countries, feed ----- on small crustaceans (crab, shrimp, etc.) and later switch to fish as they grow up.

- A) openly B) firmly
C) initially D) mutually
E) virtually

5. Infectious microbes from animals can be ----- directly to humans through an animal bite, or indirectly through the bite of insects that feed on both animals and humans.

- A) sentenced B) designated
C) restricted D) transmitted
E) adjust

6. Known for their devoted parental care, treehopper mothers ----- their offspring until the young hoppers are old enough to fly away.

- A) bring about B) watch over
C) put on D) give up
E) keep off

7. Although smartphones ----- arguably the most popular gaming platform for the past couple of years, they do not have the ability ----- with desktop computers.

- A) have been / to complete
B) were / to be competing
C) could be / competing
D) are / to have completed
E) must have been / compete

8. E-mail advertising ----- a good reputation these days, as people realise that it ----- affordable and effective.

- A) gets / has to be
B) was getting / could be
C) has been getting / used to be
D) will get / should be
E) is getting / can be

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9. Temperament is an emotional trait that is relatively stable ----- the life span, and is at least ----- some degree, influenced by biology.

- A) over / to B) into / at
C) through / on D) with / of
E) about / from

10. ----- the 20th century, the discovery of extra-solar planets made a great contribution to the existing efforts in the search ----- extraterrestrial intelligence.

- A) over / at B) within / about
C) throughout / under D) during / for
E) with / above

11. The arrival of the printing press had a profound effect ----- Renaissance Europe and introduced an era of mass communication ----- many different languages.

- A) upon / at B) among / from
C) on / in D) by / with
E) to / through

12. ----- all greenhouse gas emissions were stopped tomorrow, the average global temperature would still keep rising for the next 30 years.

- A) In case B) Even if
C) Because D) Although
E) Once

13. Life expectancy at birth is the number of years a newborn infant would live ----- already existing patterns of mortality at the time of its birth were to stay the same throughout its life.

- A) if B) since
C) in case D) so that
E) although

14. Not much progress could be made in chemistry ----- chemists gained a better understanding of the materials they worked with.

- A) as B) until
C) only when D) as long as
E) if

15. Dog, which are highly responsive to sensory information, look and listen to interpret their surroundings, ----- humans do.

- A) although B) just as
C) only when D) unless
E) as long as

16. ----- the field of seismology can be divided into studies of the Earth's structure and of seismic sources (earthquakes, explosion, etc. they are not fully separable.

- A) As long as B) Because
C) Even though D) Unless
E) Once

19. To test pet's sensitivity to specific allergens, a veterinarian routinely exposes it to these allergens via ----- a Daily serum under the tongue ----- a shot everyone to two weeks.

- A) such / that B) so / that
C) the more / the more D) either / or
E) as / as

17. Today, people with rare conditions could be diagnosed quicker ----- the advances in technology including 3D facial analysis.

- A) except for B) despite
C) as well as D) thanks to
E) unlike

20. Making up the inner fifth of the Sun, the core is ----- nuclear fusion creates 99 percent of the Sun's energy.

- A) where B) that
C) who D) when
E) whose

18. ----- the advancements in Internet service and delivery, slow-loading web pages are still commonplace.

- A) By means of B) Instead of
C) Despite D) With the help of
E) As well as

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Overuse of insecticides in urban areas is risky for several reasons. It can be avoided if several other non-chemical controls **(21)** ----- . People, pets, wildlife, beneficial organisms, and other non-target organisms may be exposed to insecticides that have not been **(22)** ----- applied. Such exposure could cause acute or chronic health problems. Insecticides could leak **(23)** ----- the soil or enter groundwater and result in pollution. Frequent insecticide use against particular pests may result in resistant pest populations that are even harder to control. And, **(24)** ----- the harmful impact of insecticides on beneficial organisms, their use may also increase the risk of pest outbreaks. **(25)** -----, responsible insecticide use, in combination with other environmentally friendly pest management tactics, result in positive environmental consequences.

21.

- A) would implement B) are implemented
C) have implemented D) implemented
E) had been implemented

22.

- A) randomly B) commonly
C) actually D) properly
E) fortunately

23.

- A) by B) with
C) at D) for
E) into

24.

- A) in addition to B) in spite of
C) in place of D) unlike
E) regardless of

25.

- A) Moreover B) Otherwise
C) However D) Likewise
E) For example

When scientists first started to study nature, they concentrated on individual living things. They travelled the world, and samples of those living things to museums **(26)** ----- they were catalogued and identified there. Today, this work still **(27)** -----, but scientists also study the way living things interact with each other. This research is particularly important because it helps us to understand how the changes that humans bring, **(28)** -----pollution and deforestation, can affect the living world. Ecology is the study of these connections. It involves living things themselves, and the raw materials and nutrients **(29)** ----- by them. **(30)** ----- ecology, energy is important because it is the driving force that keeps living things alive.

26.

- A) just as
B) so that
C) instead
D) although
E) but

27.

- A) sets out
B) doubles up
C) falls down
D) goes on
E) breaks down

28.

- A) on behalf of
B) such as
C) according to
D) instead of
E) despite

29.

- A) used
B) having used
C) to have used
D) using
E) to have been used

30.

- A) Behind
B) On
C) At
D) Through
E) In

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31. As the human brain thinks, learns and remembers, -----

- A) people might be suffering from a limited perspective
- B) it creates consciousness consisting of thoughts and feelings
- C) some experts think it is possible to understand the brain simply through scanning
- D) how identical cells produce an immense complexity is becoming clear to many scientists
- E) information flow in the brains of some animals is also easy to determine

32. Since weather plays such an important role in our daily lives, -----

- A) weather conditions are a result of the atmosphere's attempt to gain a balance
- B) everyone is interested in the weather forecast to take precautions according to the seasonal conditions
- C) temperature and pressure are the most important parameters in meteorology
- D) people pay less attention to weather forecast on TV than on mobile apps
- E) changes in temperature have minimal impact on some people's moods

33. Although people had long tried to visualize certain oceanic features, ----- .

- A) by 1996, an updated map of the ocean floor based on data from orbiting satellites was created
- B) at first, scientists on ships tried to measure ocean depths and create ocean floor maps
- C) only 29% of the land surfaces on Earth is not submerged under the oceans
- D) it was not until technology improved that the first accurate maps of oceans could be drawn in the 20th century
- E) scientist have started to compile all the available data about the Atlantic Ocean

34. -----, but its increasing concentration is suspected of causing global warming.

- A) Carbon dioxide is a natural constituent of the atmosphere
- B) The burning of fossil fuels causes an increase in carbon dioxide levels and toxic chemicals
- C) High levels of carbon dioxide force governments to take precautions regarding the environment
- D) Like methane, carbon dioxide leads to an undesired change as a greenhouse gas
- E) Coal burning, which produces carbon dioxide, is a serious source of pollution

35. There have been many attempts to define the term 'planet' over the centuries, -----.

- A) because a planet refers to an object that is not a star and moves in an orbit
- B) as long as all planets must satisfy three criteria to be defined as a planet
- C) even though it is claimed that Pluto is not a planet
- D) but to date there is still no universally agreed-upon scientific definition of the term
- E) unless a planet is by far the largest object in its orbital neighborhood

36. Even though the term 'biodiversity' is relatively new, -----.

- A) for thousands of years philosophers and scientists have studied aspects of biodiversity
- B) biologists describe the diversity of organisms by comparing their anatomy and physiology
- C) biologists will need sophisticated techniques for their studies
- D) many of the people who have heard of the term still do not understand what it means
- E) scientists are not able to examine chromosomes and genes with more precision

37. Fossil fuels have traditionally been regarded as convenient sources of energy, -----.

- A) yet the burning of fossil fuels poses many serious environmental threats
- B) although fossil fuels such as petroleum, natural gas and coal are relatively plentiful in Earth's crust
- C) if they originate from ancient plants and animals which are non-renewable energy sources
- D) as they raise Earth's average temperature, worsening the effects of climate change
- E) therefore capturing a small fraction of sunlight could meet our energy needs several times

38. Digital libraries differ from traditional libraries -----.

- A) whereas the concept of digital libraries can be traced back to the 19th century
- B) in that they exist in the 'cyber world' of computers and the Internet rather than in physical buildings
- C) even if information on the Internet is chaotic and expanding quickly and remarkably
- D) although digital libraries have developed in parallel with the rapid growth of the Internet
- E) so that the digitisation of resources enables easy and rapid access to digital library content

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39. Mountains rarely occur as isolated individuals; -----.

- A) still, they generally have steep slopes and a relatively small summit area
- B) instead, they are usually found in circular groups
- C) yet, some mountains have been constructed upon the surface by eruptions of volcanic ash
- D) even so, their most perceived effects are related to the blocking of air flow
- E) conversely, their systems occur both on continent and in ocean basins

40. Ever since scientists discovered a large number of dinosaur fossils in the late 18th century, -----.

- A) we have wondered how a world of giant reptiles came to an end
- B) dinosaurs might not have become extinct due to a meteor crash
- C) lots of new research studies will have been conducted by the end of the 21st century
- D) many theories regarding the extinction of dinosaurs were confirmed in the 16th century
- E) it had been a big question mark whether we could discover some new species

41. Recent findings show that storm and hurricane intensity has grown around the world since 1970 due to rising ocean temperatures -----.

- A) though hurricanes are occurring in the northern hemisphere because of warmer ocean temperatures
- B) but global warming models predict that storms and hurricanes are about to become less intense soon
- C) as long as the number of tropical storms and hurricanes stays same over the next 40 years
- D) unless the bigger storms and hurricanes bring higher water levels, taller waves and more storm damage
- E) in case some storm-protection barriers might not be strong enough to protect against the hurricanes and storms

42. Although they have been searching for years, astronomers have yet to find anywhere in the universe that remotely resembles the Earth.

- A) Gökbilimcilerin yıllarca süren arayışına rağmen, evrende Dünya'ya az da olsa benzeyen bir yer henüz bulunamamıştır.
- B) Yıllarca araştırma yapan gökbilimciler, evrende Dünya'ya az da olsa benzeyen bir yer henüz bulamamışlardır.
- C) Yıllardır aramalarına rağmen gökbilimciler evrende Dünya'ya az da olsa benzeyen bir yer henüz bulamamışlardır.
- D) Yıllardır evrende Dünya'ya uzaktan da olsa benzeyen bir yer aramalarına rağmen, gökbilimciler henüz böyle bir yer bulamamışlardır.
- E) Yıllardır aranmasına rağmen, gökbilimciler tarafından evrende Dünya'ya uzaktan da olsa benzeyen herhangi bir yer henüz bulunamamıştır.

43. Not only the physical dangers, but also the fact that radiation puts astronauts at a higher risk of getting cancer makes space exploration a risky business.

- A) Sadece fiziksel tehlikeler değil, radyasyonun astronotların kansere yakalanma riskini artırdığı gerçeği de uzay araştırmalarını riskli bir iş hâline getirmektedir.
- B) Fiziksel tehlikelerle birlikte radyasyonun astronotları kansere yakalanma riskiyle daha fazla karşı karşıya getirmesi de uzay araştırmalarını riskli bir iş yapmaktır.
- C) Uzay araştırmaları, yalnızca fiziksel tehlikelerle değil, radyasyonun astronotların kansere daha fazla yakalanmalarına neden olmasıyla da riskli hâle gelmektedir.
- D) Fiziksel tehlikelerin yanı sıra radyasyonun astronotları kansere daha fazla yatkın hale getirme riski de uzay araştırmalarını tehlikeli bir çalışma yapmaktır.
- E) Uzay araştırmaları, fiziksel tehlikelerinin yanı sıra radyasyonun astronotların kansere yakalanma riskini artırması sebebiyle de riskli bir iş hâline gelmektedir.

44. Ecological restoration is practiced in all regions of the world, but what counts as restoration varies according to cultural perspective.

- A) Ekolojik restorasyon olarak neyin kabul edileceğinin kültürel bakış açısına göre değişkenlik göstermesinin sebebi, dünyanın tüm bölgelerinde restorasyonun uygulanmakta olmasıdır.
- B) Her ne kadar kültürel bakış açısına göre neyin restorasyon olarak kabul edildiği konusunda farklılıklar olsa da ekolojik restorasyon dünyanın tüm bölgelerinde uygulanmaktadır.
- C) Ekolojik restorasyon dünyanın tüm bölgelerinde yapılmaktadır, ancak kültürel bakış açısı neyin restorasyon olarak kabul edileceğini etkilemektedir.
- D) Dünya üzerinde tüm bölgelerde uygulanmakta olan ekolojik restorasyon, restorasyona ilişkin farklı kültürel bakış açılarından etkilenmektedir.
- E) Ekolojik restorasyon dünyanın tüm bölgelerinde yapılmaktadır, ancak neyin restorasyon olarak kabul edildiği kültürel bakış açısına göre değişmektedir.

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45. Mechanical clocks, in the West, were made at first for monasteries where prayers had to be said at set hours of the day and night.

- A) Manastırlarda duaların gündüz ve gece belirli saatlerde okunması gerektiğinden, Batı'daki ilk mekanik saatler onlar için yapılmıştır.
- B) Manastırlar, duaların gündüz ve gecenin belirli saatlerde okunma zorunluluğundan dolayı Batı'da yapılan ilk mekanik saatleri kullanmışlardır.
- C) Batı'da mekanik saatler, ilk önce duaların gündüz ve gecenin belirli saatlerinde okunmasının zorunlu olduğu manastırlar için yapılmıştır.
- D) Batı'da mekanik saatlerin ilk yapımı, duaların gündüz ve gecenin belirli saatlerinde okunma zorunluluğu nedeniyle manastırlar için gerçekleştirilmiştir.
- E) Batı'da kullanılan mekanik saatler, ilk olarak duaların gündüz ve gece belirli saatlerde okunduğu manastırlarda yapılmıştır.

46. Dopamine is one of the intriguing chemicals found in the brains of a broad spectrum of biological organisms, from insects to all the way to humans.

- A) Dopamin, böceklerden insanlara kadar geniş bir yelpazedeki biyolojik organizmaların beyinlerinde bulunan merak uyandırıcı kimyasallardan biridir.
- B) Dopamin, böceklerden insanlara kadar geniş bir yelpazedeki biyolojik organizmaların beyinlerinde bulunan kimyasallardan biri olduğu için ilgi çekicidir.
- C) Dopamin, merak uyandırıcı kimyasallardan biridir ve böceklerden insanlara kadar geniş bir yelpazedeki biyolojik organizmaların beyinlerinde bulunur.
- D) İlgici kimyasallardan biri olan dopamin, böcekleri ve insanları içeren geniş bir yelpazedeki biyolojik organizmaların beyinlerinde bulunur.
- E) Böceklerden insanlara kadar geniş bir yelpazedeki biyolojik organizmaların beyinlerinde bulunan dopamin, ilgi çekici bir kimyasaldır.

47. Bearing an incredibly rich diversity, coral reefs are the rain forests of the oceans, and provide shelter for numerous species.

- A) İnanılmaz bir çeşitlilik barındıran mercan kayalıkları, okyanusların yağmur ormanlarıdır ve sayısız canlı türüne koruma sağlar.
- B) İnanılmaz bir çeşitlilik barındıran mercan kayalıkları, sayısız canlı türüne koruma sağladığından okyanusların yağmur ormanlarıdır.
- C) İnanılmaz bir çeşitlilik barındıran mercan kayalıkları, okyanusların yağmur ormanları oldukları için sayısız canlı türüne koruma sağlar.
- D) Mercan kayalıkları, sahip oldukları inanılmaz çeşitlilikle birlikte pek çok canlı türüne koruma sağlayarak okyanusların yağmur ormanları olmuştur.
- E) Mercan kayalıkları inanılmaz bir çeşitlilik barındırmakla kalmayıp birçok canlı türüne koruma sağladığı için okyanusların yağmur ormanlarıdır.

48. Dünya'nın ve Venüs'ün atmosferlerindeki farklılıkların birçoğu, Venüs'ün yüzeyinde yok denecek kadar az su olmasına dayandırılabilir.

- A) Many of the differences between the atmospheres of Earth and Venus can be traced to near-total lack of water on the surface Venus.
- B) The near-total lack of water on the surface of Venus is attributed mostly to the differences in the atmospheres of Earth and Venus
- C) The atmospheres of Earth and Venus have a number of differences, which could be traced to the fact that there is almost no water on the surface of Venus.
- D) The fact that Venus has almost no water at all on its surface can be considered the main reason why there are many differences between the atmospheres of Earth and Venus.
- E) There are a number of differences between the atmospheres of Earth and Venus, and they can be attributed to the fact that there is virtually no water on the surface of Venus.

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49. Kuramsal hesaplamalara göre, Everest Dağı'nın kütlesine sahip bir kara deliğin Hawking radyasyonu nedeniyle bütün enerjisini kaybetmesi yaklaşık milyar yıl alabilir.

- A) Theoretical calculations show that a black hole which has the mass of Mount Everest can take about 20 billion years to lose all its energy because of Hawking radiation.
- B) According to theoretical calculations, it might take a black hole having the mass of Mount Everest about 20 billion years to lose all its energy due to Hawking radiation.
- C) A black hole which has almost the same amount of mass as Mount Everest may take approximately 20 billion years to consume all its energy due to Hawking radiation, as suggested by theoretical calculations.
- D) According to theoretical calculations, if a black hole has the mass of Mount Everest, it may lose all its energy due to Hawking radiation in almost 20 billion years.
- E) Whether a black hole has the mass of Mount Everest or not, it can lose all its energy in 20 billion years due to Hawking radiation, as shown by theoretical calculations.

50. Evcil kedi; erkeklerin yalnız, dişilerin ise nispeten daha sosyal olduğu tek türdür.

- A) The domestic cat is a species in which males are alone and females are generally more sociable.
- B) The domestic cat is one of the species in which males are solitary and females are relatively more sociable.
- C) The domestic cat is the only species in which males are solitary and females are relatively more sociable.
- D) Only in the domestic cat species are males solitary and females generally more sociable.
- E) In the domestic cat species, males are solitary while females are relatively more sociable.

51. Herhangi bir bilgisayar sisteminin başarısı, onu kullanması beklenen kişilerin iş akışına dahil edilmesine bağlıdır.

- A) A computer system owes its success to being integrated into the workflow of people who will use it.
- B) A computer system's integration into the workflow of people who are to use it determines its success.
- C) In order for any computer system to be successful, it is to be integrated into the workflow of people who will use it.
- D) In order to be successful, a computer system needs to be integrated into the workflow of people who will use it.
- E) The success of any computer system depends on its being integrated into the workflow of people who are to use it.

52. Küresel biyo çeşitliliğin en basit ölçüm aracı, şu anda canlı olan türlerin sayısı anlamına gelen 'tür zenginliğidir'.

- A) Referring to the number of species alive now, 'species richness' is one of the simplest measures of global biodiversity.
- B) The simplest measure of global biodiversity is 'species richness', which means the numbers of species alive now.
- C) 'Species richness' is the simplest tool in measuring global biodiversity, and it refers to the number of species alive now.
- D) The simplest definition of 'species richness' is the number of species alive now and it is used to measure global biodiversity.
- E) Used to measure global biodiversity in a simple way, 'species richness' accounts for the number of species alive now.

53. Charles Babbage çeşitli alanlara önemli katkılarda bulunmuştur, ancak en çok bilgisayarın temel öğelerini kavramlaştırması ile tanınır.

- A) Although Charles Babbage contributed significantly to various fields, he is mostly known for having conceptualized the basic elements of the computer.
- B) Charles Babbage contributed enormously to different fields, but his most widely-known contribution is the conceptualisation of the key elements of the computer.
- C) Charles Babbage made major contributions to a variety of fields, but he is best known for having conceptualised the key elements of the computer.
- D) A variety of fields have benefitted from Charles Babbage's major contributions while the conceptualisation of the key elements of the computer is his best acknowledged contribution.
- E) Among his significant contributions to various fields, Charles Babbage is best acknowledged for conceptualising the key elements of the computer.

54. Europa, one of the moons of Jupiter, appears to be no more than an airless world with an icy surface. ----- The Galileo spacecraft imaging also showed features in the ice consistent with a sub-surface ocean. In addition to that, the magnetometer indicated the presence of a global layer of slightly salty liquid water.

- A) For instance, there are many ecosystems on Earth that thrive and grown in water that is continuously covered by ice.
- B) However, theoretical calculations suggest that under the ice surface of Europa, there might be a layer of liquid water.
- C) It is possible that sunlight passes through the cracks in the ice of Europa.
- D) Europa has been the most extensively studied moon of the planet Jupiter.
- E) In polar oceans and some ice-covered lakes, photosynthesis is performed under the ice-cover.

55. ----- Planetary exploration has revealed that essentially every atmosphere starts at the bottom with a troposphere, where temperature decreases with height at a nearly constant rate. Each atmosphere has a stratosphere, where temperature usually increases with height or, in the case of Venus and Mars, decreases much less quickly than in the troposphere.

- A) Earth's unique atmosphere is what makes life on the planet possible.
- B) The global atmosphere rotates faster than the solid planet.
- C) Atmospheres are found on the Sun as well as 8 planets, and each has its own brand of weather and its unique chemistry.
- D) Earth may differ in many ways from the other planets, but not in the basic structure of its atmosphere.
- E) Earth has many planetary attributes that are important to the study of its atmosphere and oceans.

56. In some ways, diesel and petrol engines are constructed the same. Both are designed to convert the chemical energy of fuel into mechanical energy to power the car. ----- The biggest difference between the two engines is the way in which the explosions take place. In a petrol engine, fuel is mixed with air, compressed, and ignited by a sparking plug, while a diesel engine has no sparking plug.

- A) The conversation takes place via a series of small explosions.
- B) The pressure is lower in petrol engines unlike diesel engines.
- C) The diesel engine has changed very little since its invention in 1897.
- D) The introduction of petrol engines changed the world in various ways.
- E) The diesel engine was designed to make as much use of the fuel as possible.

57. Millions of years ago, the remains of plants and animals decayed and built up in thick layers. This decayed matter from plants and animals is called organic material; it was once alive. ----- Pressure and heat changed some of this organic material into coal, some into oil, and some into natural gas.

- A) Seismic surveys use echoes from a vibration source at the earth's surface.
- B) Oil was formed from the remains of animals and plants that lived millions of years ago.
- C) The search for natural gas begins with geologists locating the types of rock.
- D) Over time, the mud and soil changed to rock, covered the organic material and trapped it beneath the rock.
- E) Scientists and engineers explore a chosen area by studying rock samples from the earth.

58. The products of systematic study are used in biology in a few ways. ----- For example, do the specimens studied represent one species or several species? If several, what are their identities? And then, the same biologist might want to know the relationships among these entities in order to fully understand the comparative data he/she has collected. For example, are the similarities in the ecology of two species the result of convergence in a similar environment or common history?

- A) Systematists who publish species descriptions are expected to observe good taxonomic scholarship.
- B) First, a biologist may need some knowledge of species and their populations in order to conduct research.
- C) Systematics is the study of the diversity of organisms and the relationships among these organisms.
- D) Biology is one of the oldest scientific disciplines, with roots in antiquity and a formal scientific literature.
- E) Comparative sciences such as systematics use the similarities and differences among the the subjects studied.

59. Seen through a microscope, protozoans often look like tiny animals living at great speed. But protozoans are not animals, and they do not have eyes, mouths or even brains. Instead, they are microorganisms with just a single cell. ----- Many are active predators, hunting for food, while others stay in one place and feed on anything edible that drifts nearby. And there are some others that form partnerships with much larger living things to survive.

- A) These protozoans can be incredibly abundant, for example, an elephant can have billions of them living in its gigantic gut.
- B) Most protozoans live in water, but some are found inside other living things, and this offers them certain advantages.
- C) One of the fastest protozoans of all is *Paramecium*, a slipper-shaped organisms covered with fur.
- D) Unlike many other microorganisms, protozoans need to eat, and they get their food in different ways.
- E) Some microorganisms that live in the intestines of plant-eating animals may cause dangerous diseases.

60. (I) A very effective antibiotic has just been produced thanks to the recent developments in biotechnology. (II) The term 'biotechnology' was coined in 1919 by Hungarian scientist Karl Ereky to mean 'any product produced from raw materials with the aid of living organisms'. (III) But in its broadest sense, the practice of biotechnology dates to ancient times. (IV) In approximately 6000 BC, the Sumerians and Babylonians discovered the use of yeast. (V) And in about 4000 BC, the Egyptians employed yeast to make bread and the Chinese bacteria to make yogurt.

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

61. (I) We know dirty air is bad for our bodies, causing the equivalent of millions of deaths worldwide every year, making it a bigger killer than smoking. (II) Air pollution leads to a number of problems for many species. (III) But could air pollution be bad for our minds too? (IV) A study has found that psychotic experiences, which can involve hearing or seeing something that others do not, are more common among teenagers in the UK's most polluted areas. (V) However, the association does not mean that breathing in air pollution leads to psychosis in teenagers since there could be other explanations.

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

62. (I) Ants are the 'superweight lifters' of the animal kingdom. (II) They are often confused with termites despite many obvious physical differences between them. (III) They are strong in relation to their size and can carry objects 10 to 20 times their own weight – some species can carry objects up to 50 times their own weight. (IV) Ants are able to carry these objects great distances and even climb trees while carrying them. (V) This is comparable to a 50-kilogram person picking up a small car, carrying it 3 or 4 kilometres on his back and then climbing the tallest mountain while still carrying the car.

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

63. (I) The mixture of gases that surrounds the solid earth is called the atmosphere. (II) Although it represents a very small fraction of the weight of the earth, it is very important because it contains gases essential to life. (III) Carbon dioxide plays an important role by trapping heat, causing the greenhouse effect, which keeps the earth warm and liveable, for the most part. (IV) Among these gases, nitrogen, oxygen and argon dominate the atmosphere. (V) But carbon dioxide, which is vital to life on Earth, makes up only 0.32 percent of atmosphere.

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

64. (I) All human activities generate some form of waste, and some of them are called 'hazardous waste'. (II) In its most general sense, the term 'hazardous waste' comprises toxic chemicals, radioactive materials, and biological or infectious waste. (III) Hazardous waste poses a threat to workers through occupational exposure and to the public through exposure in homes, communities and the general environment. (IV) Technical and regulatory efforts have been made to reduce gas from motor vehicles. (V) The exposure may occur near the site of generation, along transportation corridors, and near the ultimate disposal sites.

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

65. (I) Every year, 8 million tonnes of plastic end up in the oceans. (II) Ocean currents trap a major portion of this plastic in an area of the North Pacific three times the size of France. (III) The German Parliament has recently introduced a law to reduce the effects of air pollution caused by plastic materials. (IV) A Dutch project called Ocean Cleanup has placed a 600-m-long floating, U-shaped barrier there, which is carried forward by currents, waves, and wind, collecting the waste, so it can be pumped up by ships. (V) A total of 60 barriers will be launched with the hope of collecting half of this ocean plastic by 2025.

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

YÖKDİL KASIM 2019 FEN SORULARI

Just like in the well-known fable *Little Red Riding Hood*, wolves are traditionally described as villains and portrayed as evil and horrible. Now, thanks to the latest research, this picture of wolves is changing. New studies and evidence give an intriguing insight into a sophisticated social structure centred around wolf family life. At the root of this is a complex level of communication built partly on facial expressions that reflect a wolf's feelings. In effect, wolves 'talk' by making faces at each other. Researchers believe wolves may have used these communication skills to build bridges with hunter-gatherer people in a journey that finally led to the domestic dogs we know today. "Most people think of wolves an unpleasant creatures but this is nonsense," says Elana Hobkirk of Durham University. "They are in fact animals which are capable of joy and friendliness as well as anger."

66. According to the passage, wolves -----.

- A) are undeniably the villains of the social structure around them
- B) are being given a new image thanks to the recent studies about them
- C) are usually illustrated as friendly and adorable in literary works
- D) are often the main characters of fables and fairy tales
- E) are described in *Little Red Riding Hood* in terms of their family life

67. According to the passage, how do wolves reveal their feelings?

- A) They interact with their own relatives by making loud noises.
- B) They communicate through some techniques that human s find unpleasant.
- C) They have to make more efforts than the dogs we know today.
- D) They use their faces as a medium of communication.
- E) They utilise a technique which can only be understood by hunter-gatherers.

68. What is main purpose of author?

- A) To criticise traditional story-telling about wolves
- B) To inform readers about the family structure of wolves
- C) To compare today's dogs and wolves in terms of their behaviour
- D) To give information about new studies related to the nature of wolves
- E) To explain how wolves communicate with humans

Compared with other bodily fluids, tears are vastly understudied. Collecting that salty drops is tedious – weepy donors are rare, men hardly ever sign up and tears must be ‘fresh’ for their make-up to be properly analysed. As a result, researchers lack a consensus about the purpose of a basic human behaviour. Is crying a primal way to communicate that many species share, as some chemists hypothesise? Or is it, as psychologists have put forward, a uniquely human key to social bonding? Neurobiologist Noam Sobel has a plan to advance the field: He has perfected a way to flash-freeze tears and is now working to create a ‘tear bank’ for researchers around the world. Sobel hopes interested researchers will eventually be able to select tears by age and gender from tear bank. This customized access could be of great help to experiments dealing with many unanswered questions about the chemistry of crying: Do tears of men and women differ? Do the tears affect mood or appetite? How do emotional and non-emotional tears – from, say, cutting onions – compare? For Sobel, the more people who cry their eyes out, the better for the tear bank.

69. According to the passage, research about tears is rarely carried out due to the -----,

- A) lack of consensus about its purpose
- B) questions that remain unanswered
- C) scarcity of the samples needed
- D) complicated nature of topic
- E) unique chemistry of the fluid

70. What is the passage mainly about?

- A) Questions that are commonly asked about the way women and men cry
- B) Different studies seeking to determine how tears relate to social bonding
- C) Emotions that are conveyed during many different stages of crying
- D) Gender differences when expressing feelings through crying
- E) The challenges involved in studying why humans cry and a possible solution to them

71. Sobel thinks that the more people cry, the more -----.

- A) tear samples there will be
- B) relief they will receive
- C) emotional they will get
- D) questions there will be
- E) unhealthy eyes they will have

YÖKDİL KASIM 2019 FEN SORULARI

The effects of air pollution have been divided into several categories so that better analyses of pollutants can be conducted. Effects include aesthetic losses, economic losses, safety hazards, personal discomfort, and health effects. Aesthetic effects include any changes caused by air pollution that result in the loss of visually pleasing scenery. Economic losses include the loss of vegetation and livestock due to massive exposure to the gaseous air pollution. These particles can kill or sicken commercial crops and livestock. Other losses may occur as people's possessions are damaged as a result of the pollution, which can cause the build-up of dirt or dust particles. An additional effect of air pollution is personal discomfort and health hazards. Eye irritation, asthma, bronchitis, and sinusitis are a few of the health risks caused by air pollution. However, these are some minor risks of air pollution that are usually curable.

72. According to the passage, why are the effects of air pollution categorised?

- A) To cope with its economic consequences
- B) To increase awareness about its harmful effects
- C) To carry out analyses of the pollutants more effectively
- D) To prevent the risks of air pollution
- E) To list the changes among the categories

73. It can be inferred from the passage that aesthetic effects of air pollution -----.

- A) are the most common type
- B) make an area seem unattractive
- C) can increase the risk of asthma
- D) are within the minor risk group
- E) can result in an economic loss

74. Which of the following is true according to the passage?

- A) Most people pay more attention to aesthetic effects of air pollution than its health effects.
- B) Eye irritation and asthma resulting from air pollution can often be cured.
- C) Loss of vegetation can occur because of large groups of livestock.
- D) Governments are talking precautions to avoid gaseous air pollution.
- E) Economic and aesthetic effects of air pollution are closely related.

All forms of life on Earth require water to function. Life has been found in all kinds of extreme environments, operating at the limits of heat and cold and even without air. But every type of life we have discovered contains biological cells that require water in their operating environment. Cells simply could not function without it. It is not just a matter of keeping them inflated and moving chemicals around – living, cells are full of tiny complex mechanisms. Many of these mechanisms rely on different sections of molecules either working well with water, or not mixing with it. Proteins, for example, are the key worker molecules in living organisms. Proteins have to fold into particular shapes to carry out their roles, and it is the interaction between water and various parts of a protein molecule that tells it how to fold. Water is not just a solvent, a substance that dissolves other substances, but it also plays an important role in the functioning of our cells.

75. According to the passage; -----.

- A) life can be found even in environments where there is no air
- B) it is difficult to find life in extreme environments
- C) certain types of life do not need water to operate
- D) biological cells cannot operate at high temperatures
- E) air keeps cells inflated and moves chemicals around

76. The author gives the protein example in order to -----.

- A) show that protein is the main element in a living
- B) explain how important water is for protein molecules to function
- C) emphasise the fact that protein can survive in extreme environments
- D) compare the functions of tiny complex molecules
- E) indicate that there are some molecules which do not need air to function

77. It is clear from the passage that -----.

- A) both water and heat are essential elements for a cell
- B) water plays a fundamental role in the functioning of living cells
- C) how a protein folds depends on the amount of water available
- D) every cell has complex mechanisms that can survive without water
- E) biological cells contain a high percentage of water in order to survive

YÖKDİL KASIM 2019 FEN SORULARI

The red handfish, found off the southeast coast of Tasmania, Australia, uses its 'hands', which are modified fins, to crawl across the bottom of the seafloor. It does not travel very far or fast, which restricts populations to small areas. Classed as critically endangered, it faces threats from habitat degradation and low reproductive rates. Often called the world's rarest fish, scientists only knew of the one population, numbering between 20 and 40 fish, until divers discovered a second population in earlier 2018. "Finding this second population is a big relief as it essentially doubles the number of individuals we thought were left on Earth, but the danger is still on," says diver Antonia Cooper. "It provides hope that other small populations may still exist and allows scientists to start discussing conservation options such as habitat protection and viability of a captive breeding programme."

78. Why is the red handfish called 'the world's rarest fish'?

- A) This type of fish has the unique colour of red which can hardly be found in the ocean.
- B) The 'hands' of the red handfish might disappear as the habitat degrades.
- C) The modified fins of the red handfish travel slowly in small areas.
- D) This type of fish only exists around the the bottom of the seafloor.
- E) Only a handful of red handfish were known until recently.

79. It is clearly stated in the passage that -----.

- A) unfavourable environmental factors and a low number of offspring are threats for the red handfish
- B) with the new discovery of the second population, the red handfish is not endangered now
- C) the divers will start a habitat programme for the newly discovered population of the red handfish
- D) there were more than two populations of the red handfish in the past
- E) the red handfish may travel to the north coast of Australia during the year

80. What is the passage mainly about?

- A) How the red handfish uses its 'hands'
- B) The reasons why the red handfish population has decreased
- C) An exciting new discovery about the red handfish
- D) Why the red handfish lives off the southeast coast of Tasmania
- E) How to protect endangered marine species

YÖKDİL FEN 2019 KASIM
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1) A	2) D	3) A	4) C	5) D	6) B	7) A	8) E	9) A	10) D
11) C	12) B	13) A	14) B	15) B	16) C	17) D	18) C	19) D	20) A
21) B	22) D	23) E	24) A	25) C	26) B	27) D	28) B	29) A	30) E
31) B	32) B	33) D	34) A	35) D	36) A	37) A	38) B	39) B	40) A
41) B	42) C	43) A	44) E	45) C	46) A	47) A	48) A	49) B	50) C
51) E	52) B	53) C	54) B	55) D	56) A	57) D	58) B	59) D	60) A
61) B	62) B	63) C	64) D	65) C	66) B	67) D	68) D	69) C	70) E
71) A	72) C	73) B	74) B	75) A	76) B	77) B	78) E	79) A	80) C