

ÜDS FEN – Aralık 2010

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

1. Some temperate environments have mild winters with abundant ----, combined with extremely dry summers.

- A) heat
B) harvest
C) rainfall
D) supply
E) growth

2. The world's forests provide many ---- benefits, such as prevention of soil erosion, as well as commercially important timber.

- A) severe
B) dependent
C) extinct
D) desperate
E) valuable

3. Although most scientists agree that our planet will continue to warm, they disagree over how ---- the warming will proceed.

- A) hideously
B) suitably
C) profoundly
D) rapidly
E) decadently

4. Each species has the capacity to produce more offspring than will ---- to maturity.

- A) conform
B) present
C) recognize
D) suggest
E) survive

5. Since total sleeping time is likely to decrease with age, older people may find going to bed later or ---- earlier helpful.

- A) getting up
B) making out
C) breaking down
D) keeping off
E) taking away

6. Because chemistry ---- all materials, it is a subject of enormous importance.

- A) makes up
B) looks up
C) runs over
D) deals with
E) turns out

7. We ---- chemistry as the science of the composition and structure of materials and of the changes that materials ----.

- A) had defined / underwent
B) can define / undergo
C) have defined / had undergone
D) defined / will have undergone
E) define / would have undergone

8. For more than three thousand years, from the age of the pharaohs until the 1500s, people ---- that the sun, the stars, and the planets ---- around the earth.

- A) have believed / had moved
B) believe / have moved
C) had believed / move
D) were believing / could have moved
E) believed / moved

9. If we ---- the materials of technology, silicon ---- the first on that list.

- A) are listing / was
B) listed / had been
C) were to list / would be
D) had listed / is
E) are to list / has been

10. A battery cell that ---- popular during the nineteenth century ---- in 1836 by the English chemist John Frederick Daniell.

- A) had become / had been constructed
B) would have become / has been constructed
C) is to become / is constructed
D) became / was constructed
E) will become / may have been constructed

11. Cells that ---- the fastest, such as those in the blood-forming tissues in bone marrow, ---- most seriously by nuclear radiations.

- A) will divide / must have been affected
B) have divided / had been affected
C) divided / will be affected
D) had divided / have been affected
E) divide / are affected

12. The changes of energy in nuclear reactions are enormous ---- comparison ---- those in chemical reactions.

- A) above / over
B) in / for
C) beyond / to
D) by / with
E) of / after

13. ---- the fourteenth century, some architects broadened their studies ---- light and began to explore the science of optics.

- A) Over / over
B) During / of
C) Through / throughout
D) At / in
E) Among / under

14. ---- the source of energy for nuclear power plants and weapons can be the same, a typical nuclear power plant does not contain enough fissionable material in high enough concentration to produce a nuclear explosion.

- A) Although
C) If
E) In case
- B) When
D) Just as

15. Enormous underground beds of sodium and potassium compounds formed ---- lakes and seas became isolated by geological events.

- A) as long as
C) even if
E) when
- B) so that
D) unless

16. A mixture is a material ---- can be separated by physical means into two or more substances.

- A) whereas
C) whether
E) as
- B) whereby
D) that

17. With a nuclear weapon, the objective is to release the energy ---- rapidly ---- possible and produce a nuclear explosion.

- A) as / as
C) either / or
E) not only / but also
- B) both / and
D) so / that

18. Temperate rain forest, ---- occurs on the northwest coast of North America, receives high precipitation and is dominated by large conifers.

- A) as well as
C) such as
E) then
- B) more than
D) same as

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

Differences in temperature caused by variations in the (19) ---- of solar energy at different locations drive the circulation of the atmosphere. The warm surface (20) ---- the equator heats the air with which it comes into contact, causing this air to expand and rise. (21) ---- the warm air rises, it flows away from the equator, cools, and sinks again. (22) ---- of it recirculates back to the same areas which it originally (23) ----, but the remainder flows towards the poles, where eventually it is chilled. Similar upward movements of warm air and its subsequent flow towards the poles occur at higher altitudes.

19.

- A) pattern
C) influence
E) amount
- B) severity
D) pressure

20.

- A) until
C) through
E) within
- B) inside
D) near

21.

- A) As
C) Just as
E) Even if
- B) Although
D) As long as

22.

- A) Any
C) A few
E) Few
- B) Much
D) Many

23.

- A) is to leave
C) had left
E) left
- B) leaves
D) will leave

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

24. ---- as it extends outwards into space.

- A) Earth's rotation influences the direction that winds blow
- B) The atmosphere becomes less dense
- C) Without the sun, life on Earth would cease
- D) The nature of wind, with its turbulent gusts or lulls, is complex and difficult to understand
- E) Winds tend to blow from areas of high atmospheric pressure to areas of low pressure

25. ---- that consists of physically distinct parts, each with different properties.

- A) By the end of the eighteenth century Lavoisier and others had examined many compounds
- B) Millions of substances have been characterized by chemists
- C) The various materials we see around us are either substances or mixtures of substances
- D) A heterogeneous mixture is a mixture
- E) The word "matter" is the general term used to refer to the materials around us

26. ---- when the atoms in substances rearrange and combine into new substances.

- A) The speeds of molecules in a gas vary over a range of values
- B) Atomic theory is central to chemistry
- C) A chemical reaction occurs
- D) The first metals used by man were probably those that occurred naturally such as gold
- E) A metal ore contains varying quantities of economically worthless material

27. Although Dalton considered atoms to be the ultimate particles of matter, ----.

- A) we now know that atoms themselves have structures
- B) metallic elements and their compounds are obtained principally from the earth's crust
- C) silicon is a prominent and considerably useful material of technology
- D) ceramics have been extended to include materials other than fired clay and glass
- E) composites are constructed of two or more materials

28. ---- whether the universe will continue to expand forever.

- A) From the discussions at the conference it has been clear
- B) There is evidence for the growing view
- C) Many scientists have conclusively proved
- D) A recent analysis of some galaxies has shown
- E) One important question is

29. If there was a "Big Bang," that is, a huge explosion in space some 15 billion years ago, ----.

- A) there are two other ways to find out the age of the universe
- B) a great deal of evidence has been offered
- C) it must have occurred simultaneously at all points in the universe
- D) the ages of stars have been estimated to be about 10 to 15 billion years
- E) over 90 per cent of the universe may be non-luminous dark matter

30. Organisms depend on the atmosphere, ----.

- A) although the sun's energy is emitted into space in the form of electromagnetic radiation
- B) but they also maintain and, in certain instances, modify its composition
- C) since, without the sun's energy, all water on planet Earth would be frozen
- D) just as the persistent prevailing winds blowing over the oceans produce ocean currents
- E) if the position of land masses also affects oceanic circulation

31. Earth's temperature shows significant variations ----.

- A) because the sun's energy does not uniformly reach all places
- B) even though the atmosphere is an invisible layer of gases that envelops the Earth
- C) whether or not oxygen and nitrogen are the predominant gases in the atmosphere
- D) in case the atmosphere performs several ecologically important functions
- E) as deep ocean currents often travelled in different directions and at different speeds

32. In a natural ecosystem, the essential minerals removed from the soil by plants are returned ----.

- A) whereby many human activities generate soil problems, including mineral depletion
- B) since water, wind, ice, and other agents cause soil erosion
- C) while humans often accelerate soil erosion through poor soil management practices
- D) although soil is a valuable natural resource on which humans depend for food
- E) when the plants and the animals that eat them die and decompose

33. Many animals have a defined growth period ----.

- A) that terminates when a characteristic adult size is reached
- B) even when the living material within cells is in continuous motion
- C) although organisms move as they interact with the environment
- D) whether adaptations are traits that enable an organism to survive in a particular environment
- E) since Darwin did not know about DNA or understand the mechanisms of inheritance

34. ----, Earth's overall temperature increases.

- A) Because, during the past 1,000 years, forests in temperate areas were largely cleared
- B) Since subsistence agriculture accounts for 60 per cent of tropical deforestation
- C) As the atmosphere and the oceans warm
- D) Even though wildlife in tropical lands suffers due to deforestation
- E) While certain parts of the world are critically short of protected areas such as national parks

35. ----, the change in the length of a metal rod is generally too small to measure accurately for ordinary changes in temperature.

- A) When the first idea for a thermometer made use of the expansion of a gas
- B) Although metals expand with temperature
- C) Just as the most common scale today to measure temperature is the Celsius scale
- D) As long as the Fahrenheit scale is commonly used in the United States
- E) If different materials do not expand in quite the same way over a wide temperature range

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

36. The discovery of the electron in the 1890s might be said to mark the beginning of modern physics.

- A) 1890'larda elektronun keşfinin, modern fiziğin başlangıcını belirlediği söylenebilir.
- B) Denilebilir ki elektronun 1890'larda keşfi, modern fiziğin başlangıcını ifade eder.
- C) 1890'larda elektronun keşfi ile modern fizik başlamıştır denilebilir.
- D) Modern fiziğin, 1890'larda elektronun keşfi ile başladığı söylenebilir.
- E) Elektronun 1890'larda keşfi üzerine, modern fiziğin başladığı söylenebilir.

37. One of the most interesting applications of laser light is the production of three-dimensional images called "holograms."

- A) "Hologram" denilen ve üç boyutlu olan görüntülerin üretilmesi, lazer ışığının en ilginç kullanımlarından bir tanesidir.
- B) Lazer ışığının en ilginç uygulamalarından biri, "hologram" adı verilen üç boyutlu görüntülerin üretilmesidir.
- C) "Hologram" olarak bilinen üç boyutlu görüntüler, lazer ışığının en ilginç bir şekilde kullanımı ile üretilmektedir.
- D) Lazer ışığının en ilginç bir başka kullanımı, "hologram" olarak tanımlanan üç boyutlu görüntü üretimidir.
- E) En ilginç bir uygulama ile, lazer ışığı, "hologram" denilen üç boyutlu görüntülerin üretiminde kullanılmaktadır.

38. Several problems have to be overcome to make any nuclear reactor function.

- A) Herhangi bir nükleer reaktörün çalışmasını sağlamak için, bir sürü sorunun çözülmesi şarttır.
- B) Bir nükleer reaktörün çalışması, pek çok sorunun üstesinden gelinmesine bağlıdır.
- C) Bir nükleer reaktörü çalıştırmak için, çeşitli sorunların aşılması gerekmektedir.
- D) Birçok sorunun çözülmesi, bir nükleer reaktörün çalışması için gereklidir.
- E) Bir nükleer reaktörün çalışması için, farklı pek çok sorunun çözümü gerekir.

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

39. 1930'ların ortalarına kadar, tüm atomların, nötronlar, protonlar ve elektronlardan oluştuğu kabul ediliyordu.

- A) Until the mid-1930s, it was admitted that all atoms were made up of neutrons, protons, and electrons.
B) Down to the middle of the 1930s, it was agreed that neutrons, protons, and electrons constituted atoms of all kinds.
C) By the middle of the 1930s, atoms of all kinds were believed to have neutrons, protons, and electrons in them.
D) It was about the mid-1930s that the basic constituents of all atoms were considered to be neutrons, protons, and electrons.
E) As far back as the mid-1930s, it was recognized that every atom had neutrons, protons, and electrons as its basic constituents.

40. Samanyolunun sayısız yıldızdan ibaret olduğunu ilk gözlemleyen, Galileo olmuştur.

- A) The Milky Way was first observed by Galileo who suggested that it consisted of innumerable stars.
B) It was Galileo who first observed that the Milky Way is comprised of countless stars.
C) Galileo was the first to observe the Milky Way, which is made up of an infinite number of stars.
D) For Galileo, who first made observations, an infinite number of stars constituted the Milky Way.
E) The Milky Way, which was first observed by Galileo, is constituted by a countless number of stars.

41. Aşağı yukarı 200 yıl öncesine kadar, bilimsel araştırmalarda ölçüm birimleri standart değildi ve bu standart eksikliği, bilimsel iletişimi zorlaştırıyordu.

- A) Since the units of measurement in scientific research had not been standardized before, there was much difficulty in scientific communication about 200 years ago.
B) Due to the lack of standards for the units of measurement in scientific research, scientific communication until about 200 years ago was very difficult.
C) It was about 200 years ago that, as there were no standards for the units of measurement in scientific research, it was extremely difficult to have any scientific communication.
D) It was very hard to have any scientific communication about 200 years ago because there was a serious lack of standards for the units of measurement in scientific research.
E) Until about 200 years ago, the units of measurement in scientific research were not standardized, and this lack of standards made scientific communication difficult.

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

42. Energy can be transformed from one form to another. A stone held high in the air has potential energy; as it falls, it loses potential energy, since its height above the ground decreases. At the same time, it gains in kinetic energy, since its velocity is increasing. Potential energy is being transformed into kinetic energy. ----. At the base of the dam, the kinetic energy of the water can be transferred into turbine blades and further transformed into electric energy.

A) As for potential energy, it is the energy associated with forces that depend on the position or configuration of a body or bodies and the surroundings.

B) The word "work" has a variety of meanings in everyday language, but in physics, work is given a very specific meaning to describe what is accomplished by the action of a force.

C) Similarly, water at the top of a dam has potential energy, which is transformed into kinetic energy as the water falls.

D) Besides the kinetic and potential energy of ordinary objects, there are other forms of energy, which include electric energy, nuclear energy, thermal energy, and chemical energy.

E) For instance, according to the atomic theory, thermal energy is interpreted as the kinetic energy of rapidly moving molecules.

43. Electronics and communications have been completely transformed by technological advances in materials. A good example is optical-fibre cables that have replaced long-distance telephone cables made of copper wire. Optical fibres are fine threads of extremely pure glass. ----. Not only are optical-fibre cables cheaper and less bulky than copper cables carrying the same information, but also by using different colours of light, optical-fibre cables can carry voice, data, and video information at the same time.

A) In fact, in view of staggering advances in scientific research and technological application, one can say that scientists continue to develop new materials and discover new properties of old ones.

B) Scientists have demonstrated that they can transform light pulses into electronic computer signals at the rate of 3 billion bits of information a second.

C) Marconi (1874-1937) invented and developed the wireless telegraph, which could send messages hundreds of kilometres at the speed of light without the use of wires.

D) Because of their purity, these fibres can transmit laser light pulses for miles compared with only a few inches in ordinary glass.

E) Moreover, chemists could correlate molecular structure with the characteristics of materials and so begin to fashion materials with special characteristics.

44. One characteristic property of a gas is its compressibility, that is, its ability to be squeezed into a smaller volume by the application of pressure. By comparison, liquids and solids are relatively incompressible. The compressibility of gases was first studied quantitatively by Robert Boyle in 1661. When he poured mercury into the open end of a J-shaped tube, the volume of the enclosed gas decreased. Each addition of mercury increased the pressure on the gas, decreasing its volume. ----.

A) It is true that gases are composed of molecules whose size is negligible compared with the average distance between them.

B) While studying the composition of air, John Dalton concluded in 1801 that each gas in a mixture of unreactive gases acts as though it were the only gas in the mixture.

C) According to Newton, the pressure of a gas was due to the mutual repulsions of the gas particles, that is, gas molecules.

D) The Swiss mathematician and physicist Daniel Bernoulli suggested in 1738 that molecules of gases move faster at higher temperatures.

E) From such experiments, he formulated the law now known by his name and called "Boyle's law."

45. Sometimes organisms modify their own microclimate. For instance, trees modify the local climate within a forest so that in summer the temperature is usually lower, and the relative humidity greater, than outside the forest. The temperature and humidity beneath the litter of the forest floor differ still more; in the summer this area is considerably cooler and moister than the surrounding forest. ----. The cooler daytime microclimate in their burrows permits them to survive until night, when the surface cools off and they can come out to forage or hunt.

- A) As another example, many desert-dwelling animals burrow to avoid surface climatic conditions that would kill them in minutes.
B) An area's climate comprises the average weather conditions that occur there over a period of years.
C) One of the most important climatic factors is temperature, which comprises both average temperature and temperature extremes.
D) Precipitation is greatest where warm air passes over the ocean, absorbing moisture, and is then cooled, such as when humid air is forced upwards by mountains.
E) Actually the tropics are hotter and less variable in climate than are temperate and polar areas.

46. Fires were a part of the natural environment long before humans appeared, and many terrestrial ecosystems have adapted to it. African savana, North American grasslands, and pine forests of the southern United States are some of the fire-adapted ecosystems. For example, fire helps maintain grasses as the dominant vegetation in grasslands by removing fire-sensitive hardwood trees. The influence of fire on plants became even more evident once humans appeared. ----. Indeed, humans set fires for many reasons, such as for agricultural exploitation and urban development.

- A) Humans also try to prevent fires, and sometimes this effort can have disastrous consequences.
B) Because humans deliberately and accidentally set fires, fire became a more common occurrence.
C) When fire is excluded from a fire-adapted ecosystem, organic litter accumulates.
D) The deadly fire in Colorado during the summer of 1994 claimed the lives of 14 firefighters.
E) Controlled burns are used to suppress fire-sensitive trees, thereby maintaining the natural fire-adapted ecosystem.

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

47. Edward:
- **Recently I've been reading about the Gaia hypothesis. Although some scientists are reluctant to accept it, I am for it.**

Tina:

- **Yes, I know there has been much debate recently on this hypothesis. But what is the hypothesis about exactly?**

Edward:

- ----

Tina:

- **I see. Surely, planet Earth is alive in the sense that it is capable of self-maintenance.**

- A) As far as I am concerned, the hypothesis is not based on verifiable scientific evidence.
B) I am afraid I can't explain it to you in detail, but it is something to do with the earth.
C) You should know about it better than I do because you have written a lot about it.
D) I can see you are one of the scientists who are strongly opposed to it.
E) Well, according to the Gaia hypothesis, Earth can be viewed as a single living organism.

48. Tom:

- **By the way, let me ask you a simple question: how do you explain the wide variety of organisms on Earth?**

Philip:

- **I don't think it is a simple question with a simple answer. A lot can be said in answer to this question.**

Tom:

- ----

Philip:

- **Alright. One major explanation is that, since Earth has many different climates, ranging from cold, snow-covered polar climates to hot tropical climates where it rains almost every day, each climate has its own organisms which have adapted to it and differ widely from the organisms of other climates.**

- A) I thought I would get the right answer only from you, but you have disappointed me.
B) Are you in fact saying that you can't answer my question accurately?
C) I am sure of it. However, you can at least tell me in general terms why this is so.
D) Do you mean that scientific matters are very complex and have no right answers?
E) I agree with you. So complicated a question as this one cannot be answered right away.

49. Jack:

- **As a scientist, can you tell me the relationship between a hypothesis and a theory?**

Samuel:

- **Sure I can. Why do you ask? It is a very technical question.**

Jack:

- ----

Samuel:

- **Well, in that case, I can tell you that, if a hypothesis successfully passes many tests, it becomes known as a theory.**

A) I know it is. Recently I've been interested in scientific terms and issues. So I wanted to take your view on this matter.

B) Don't you think explanations help us organize knowledge and predict future events?

C) I've always believed that, as the two aspects of science, experiment and explanation are closely related.

D) After a series of experiments, a researcher can see some relationship or regularity in the results.

E) Clearly, the design of experiments and the explanation of results draw on the creativity of a researcher.

50. Franklin:

- **Did you know that aluminium is the most important commercial metal after iron?**

Robin:

- **Yes, of course. It is a metal with a very wide range of use in daily life.**

Franklin:

- ----

Robin:

- **Yes, true. But, with the addition of other metals, such as copper and magnesium, hard and corrosion-resistant alloys are produced, and it is these alloys that are widely used in structures, containers, packaging and other sectors.**

A) Exactly so. Aluminium cans are an environmental problem because they remain intact for decades.

B) Yet, not so much as pure aluminium, which is very soft and chemically reactive.

C) We need to recycle aluminium cans and, thus, save on the energy required in the electrolytic production of the metal.

D) Do you accept the view that it is the third most abundant element in the earth's crust?

E) Moreover, the principal ore of aluminium is bauxite, which is particularly common in tropical and subtropical regions.

51. Steven:

- **Wasn't it the American astronomer Edwin Hubble who first put forth the idea that the universe is expanding?**

Larry:

- **Yes, it was him. He did much of his observational work in the 1920s on Mt. Wilson near Los Angeles.**

Steven:

- ----

Larry:

- **Yes; and that makes his work all the more remarkable.**

A) Well, his idea seems to imply that, before the creation of the galaxies, there must have been a great explosion in space.

B) Thus, it becomes clear why the space telescope used by NASA today is called "the Hubble Space Telescope."

C) So, in the early twentieth century, he made a bold suggestion which yet needed to be proved.

D) Can he be regarded as the most important pioneer of the space exploration that has gained momentum since the 1950s?

E) So, the technology he had at his disposal for his observations, must have been rather primitive.

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

52. (I) The atmosphere has three prevailing winds that blow more or less continually. **(II)** The solar energy that reaches polar regions is less concentrated and produces lower temperatures. **(III)** Prevailing winds that blow from the northeast near the North Pole or the southeast near the South Pole are called "polar easterlies." **(IV)** Winds that blow in the mid-latitudes from the southwest in the Northern Hemisphere or the northwest in the Southern Hemisphere are "westerlies". **(V)** Tropical winds that blow from the northeast in the Northern Hemisphere or the southeast in the Southern Hemisphere are referred to as "trade winds."

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

53. (I) Many different conditions exist along the length of a river or stream. **(II)** The nature of a flowing-water ecosystem changes greatly from its source, where it begins, to its mouth, where it empties into another body of water. **(III)** For example, headwater streams are usually shallow, cold, swiftly flowing. **(IV)** In contrast, rivers downstream from the headwaters are wider and deeper, less cold and slower-flowing. **(V)** Unless strong conservation measures are initiated soon, human population growth and industrialization in tropical countries will spell the end of tropical rain forests by the middle of the century.

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

54. (I) Lake and ocean shores have extensive sand dunes, which are deposited by wind and water. **(II)** At first these dunes are blown about by the wind. **(III)** The sand dune environment is severe, with high temperatures during the day and low temperatures at night. **(IV)** If ozone disappeared from the stratosphere, Earth would become unlivable for most forms of life. **(V)** Also, sand dunes are deficient in certain mineral nutrients needed by plants.

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

55. (I) In his theory of the universe Newton assumed the universe was static. **(II)** Galaxies tend to be grouped in galaxy clusters, with anywhere from a few to many thousands of galaxies in each cluster. **(III)** In other words, Newton believed that no large-scale changes would occur over time. **(IV)** He recognized the difficulties in imagining a universe either as finite or as infinite. **(V)** If it is finite and has a boundary, then the question would be "What is beyond the boundary?"

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

56. (I) It is clear that nuclear power presents many risks. **(II)** Other large-scale energy-conversion methods, such as conventional coal-burning steam plants, also present health and environmental hazards. **(III)** When we speak of a vibration or an oscillation, we mean the motion of an object that regularly repeats itself, back and forth, over the same path. **(IV)** These include air pollution, oil spills, and the release of carbon dioxide. **(V)** In fact, while trying to meet the world's needs for energy, we must find ways to overcome all these environmental hazards.

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

57. – 60. soruları aşağıdaki parçaya göre cevaplayınız.

Wildfires are an important environmental hazard in many geographical areas. Those areas most prone to wildfires have wet seasons followed by dry seasons. Vegetation that grows and accumulates during the wet season dries out enough during the dry season to burn easily. When lightning hits the ground, it ignites the dry organic material, and a fire spreads through the area. Actually fires have several effects on the environment. First, burning frees the minerals that are locked in organic matter. The ashes remaining after a fire are rich in potassium, phosphorus, calcium, and other minerals essential for plant growth. Thus, vegetation flourishes following a fire. Second, fire removes plant cover and exposes the soil, which stimulates the germination of seeds requiring bare soil, and encourages the growth of shade-intolerant plants. Third, fire can cause increased soil erosion because it removes plant cover, leaving the soil more vulnerable to wind and water.

57. According to the passage, soil erosion ----.

- A) is undoubtedly the most adverse effect that wildfires have on areas where plant cover is thick due to heavy vegetation
- B) can happen in an area which, due to wildfires, has lost its plant cover, whereby the soil has become exposed to wind and water
- C) can be prevented in areas prone to wildfires just as strict measures are taken to maintain adequate plant cover
- D) extensively undermines environmental sustainability because it not only removes plant cover, but also prevents plant growth
- E) is mainly caused by wind and water, which destroy the plant cover of an area and turn the area into an arid land

58. It is clear from the passage that the areas with vegetation, where a wet season is followed by a dry season, ----.

- A) are most suitable for the germination of plant seeds
- B) usually have a vast range of environmental diversity
- C) maintain their plant cover and, therefore, are much prone to soil erosion
- D) are usually rich in various minerals that are essential for plant growth
- E) are most vulnerable to wildfires

59. As one learns from the passage, the reason why a wildfire is followed by vegetation growth is that ----.

- A) the minerals in the soil, especially potassium, phosphorus, and calcium, are preserved perfectly
- B) soil erosion takes a long time and, therefore, plants have time to grow up
- C) plant seeds in the soil are unaffected by the fire and begin to germinate in the wet season
- D) the ashes of the burnt organic matter contain many minerals indispensable for plants
- E) the area where the fires have taken place becomes suitable for shade-intolerant plants

60. One understands from the passage that, while the wet season is favourable for vegetation, ----.

- A) the dry season ushers in the danger of fire
- B) it causes a great deal of soil erosion
- C) it leads to the depletion of minerals in the soil
- D) the dry season stimulates the germination of seeds
- E) the growth of plants largely depends on the condition of the soil

61. – 64. soruları aşağıdaki parçaya göre cevaplayınız.

Moisture is removed from humid air by mountains, which force the air to rise. As it gains altitude, the air cools, clouds form, and precipitation occurs, primarily on the windward slopes of the mountains. As the air mass moves down on the other side of the mountain, it is warmed, thereby lessening the chance of precipitation of any remaining moisture. This situation exists on the west coast of North America, where precipitation falls on the western slopes of mountains that are close to the coast. The dry lands on the sides of the mountains away from the prevailing wind are called "rain shadows." Generally, differences in elevation, in the steepness and direction of slopes, and in exposure to sunlight and prevailing winds may produce local variations in climate known as "microclimates," which can be quite different from their overall surroundings. For an organism, the microclimate of its habitat is of primary importance, because that is the climate an organism actually experiences and knows how to cope with.

61. As pointed out in the passage, microclimates ----.

- A) can best be observed along the west coast of America where precipitation is high
- B) occur as a result of differences in the geographical features and conditions of an area
- C) show a great deal of variety in the North American dry lands known as "rain shadows"
- D) create a secure environment for organisms that prefer to live in areas with adequate precipitation
- E) are not affected by prevailing winds because of the steepness and direction of mountain slopes

62. It is clear from the passage that mountains ----.

- A) with steep slopes are most suitable for the formation of rain shadows
- B) do not receive any amount of precipitation on their windward slopes
- C) form an obstacle for prevailing winds to cause local variations in climate
- D) always provide a large variety of habitat for all kinds of organisms
- E) play an important role in the change of moist air into precipitation

63. It is pointed out in the passage that all organisms ----.

- A) know exactly how mountain slopes provide the best conditions for survival
- B) usually have their habitat in places where there isn't much exposure to sunlight
- C) are affected most adversely when the climate of their environment keeps on changing
- D) fully adapt to the conditions of the microclimate in which they live
- E) are perfectly able to cope with the physical conditions of an arid geography

64. It is explained in the passage that the rain shadows of mountains are dry because ----.

- A) the air mass that moves over them is warm and has almost no moisture for precipitation
- B) they differ enormously from each other in terms of elevation and steepness
- C) they are fully exposed to prevailing winds and, therefore, have no chance of precipitation
- D) their microclimatic conditions vary enormously and are therefore not suitable for rainfall
- E) they are far from any coast that would provide them with moisture and cool air

65. – 68. soruları aşağıdaki parçaya göre cevaplayınız.

Today scientists draw attention to some of the potential consequences of global warming on wildlife. They point out that each species reacts to changes in temperature differently. Some species will undoubtedly become extinct, particularly those with narrow temperature requirements, those confined to small reserves or parks, and those living in fragile ecosystems, whereas other species may survive in greatly reduced numbers and ranges. Ecosystems considered most vulnerable to species loss in the short term are polar seas, coral reefs, mountains, coastal wetlands, tundra, taiga, and temperate forests. On the other hand, some species may be able to migrate to new environments or adapt themselves to the changing conditions in their present habitats. Also, some species may be unaffected by global warming, whereas others may emerge from it as winners, with greatly expanded numbers and ranges. Those considered most likely to prosper include weeds, pests, and disease-carrying organisms that are already common in many different environments.

65. It is clear from the passage that global warming ----.

- A) has caused much decline in the number of many rare species
- B) is particularly harmful to coastal wetlands and coral reefs
- C) has increased dangerously and extensively throughout the world
- D) has already forced many species to migrate to new environments
- E) does not have the same impact on all species

66. The passage gives a brief account of ----.

- A) the precautions that need to be taken to prevent the extinction of certain species
- B) the possible adverse effects that global warming will, in the future, have on different species
- C) how different ecosystems react to the increase of the numbers of species
- D) why certain species can always survive in many different environments
- E) the vital importance that wildlife has particularly for fragile ecosystems

67. According to the passage, some species ----.

- A) are very sensitive to the environments with narrow temperature requirements and, therefore, would have their habitats elsewhere
- B) are so adaptable to different environments that they keep on migrating from one environment to another
- C) prefer to have their habitats not only in places such as mountains and wetlands, but also in tundra, taiga, and temperate forests
- D) will be positively affected by global warming and, consequently, will increase in number and range
- E) such as weeds and pests would survive only in one kind of ecosystem even though they react to changes in temperature

68. It is stressed in the passage that, due to global warming, ----.

- A) scientists have focused their efforts on the conservation of rare species
- B) many organisms have already changed their habitats
- C) species living in temperate forests will have to migrate to a new environment
- D) there has been a sharp increase in the variety and number of pests
- E) for some species, extinction is inevitable

69. – 72. soruları aşağıdaki parçaya göre cevaplayınız.

Commercial logging, mostly for export abroad, accounts for 21% of tropical deforestation. Most tropical countries allow commercial logging to proceed at a much faster rate than is sustainable. For example, in parts of Malaysia, current logging practices remove the forest almost twice as fast as the sustainable rate. If this continues, Malaysia will soon experience shortages of timber and will have to start importing logs. When that happens, Malaysia will have lost future revenues, both from logging and from harvesting other forest products, from its newly vanished forests. Moreover, in addition to commercial logging, cattle-ranching also causes deforestation. In fact, approximately 12% of tropical rainforest destruction is done to provide open rangeland for cattle. After the forests are cleared, cattle can be raised on the land for six to ten years, after which time shrubby plants take over the range. Much of the beef raised on these ranches, which are often owned by foreign companies, is exported to fast-food restaurants.

69. It is made clear in the passage that tropical deforestation ----.

- A) is mainly caused by commercial logging and cattle ranching
- B) should be carried out at a sustainable rate in countries like Malaysia
- C) has not yet become an environmental concern in developed countries
- D) is unavoidable since many countries including Malaysia encourage it
- E) is now so well controlled that it has ceased to be a problem

70. In the passage, attention is drawn to the fact that Malaysia's logging practices ----.

- A) have given the country a leading position in forest products
- B) enable the country to earn enormous revenues
- C) are carried out at a remarkably sustainable rate
- D) provide a much higher income than cattle ranching
- E) will be very damaging to its economy in the long run

71. It is pointed out in the passage that a cattle rangeland carved out of a tropical forest ----.

- A) is certainly more suitable for ranching than other kinds of ranges
- B) is actually far more profitable and environmentally harmless than commercial logging
- C) is more feasible in tropical countries than anywhere else in the world
- D) can be viable up to ten years and, then, is overgrown with shrubby plants
- E) brings in more income than other kinds of rangeland outside tropical forests

72. A point made in the passage is that tropical cattle ranches ----.

- A) in Malaysia are mostly owned by international companies
- B) provide most of the beef needed by fast-food restaurants
- C) are growing much faster than the sustainable rate for forests
- D) are a major source of income for many countries in the West
- E) produce so much beef that much of it is exported to other countries

73. – 76. soruları aşağıdaki parçaya göre cevaplayınız.

In the early part of the twentieth century, the experiments carried out by Ernest Rutherford and his colleagues led to the idea that at the centre of an atom there is a tiny but massive nucleus. At the same time that the quantum theory was being developed and that scientists were attempting to understand the structure of the atom and its electrons, investigations into the nucleus itself had also begun. An important question to physicists was whether the nucleus had a structure, and what that structure might be. In fact, it has so far turned out that the nucleus is a complicated entity, and even today, it is not fully understood. However, by the early 1930s, a model of the nucleus had been developed that is still useful. According to this model, a nucleus is considered as an aggregate of two types of particles: protons and neutrons. A proton is the nucleus of the simplest atom which is hydrogen. The neutron, whose existence was ascertained only in 1932 by the English physicist James Chadwick, is electrically neutral as its name implies. These two constituents of a nucleus, neutrons and protons, are referred to collectively as "nucleons."

73. One understands from the passage that one of the serious questions with which physicists in the early twentieth century was concerned was ----.

- A) to what extent the quantum theory might transform classical physics
- B) whether the neutron provided energy for the nucleus
- C) what structure the nucleus might have
- D) whether the nucleus of hydrogen contained the nucleons
- E) why Rutherford and his colleagues were indifferent to the quantum theory

74. It is clear from the passage that the presence of a nucleus in an atom ----.

- A) had always been a controversial issue among physicists until the early 1930s
- B) was understood as a result of the experiments undertaken by Rutherford and his colleagues
- C) had been known for a long time before Rutherford and his colleagues clearly defined its structure
- D) was revealed only after Chadwick discovered and defined the neutron
- E) is still a major question for physicists since the nature of the nucleons needs to be fully described

75. According to the passage, in the early twentieth century, physicists ----.

- A) were so divided among themselves that they were unable to undertake any research in order to reveal the structure of the nucleus
- B) were greatly inspired by the research activities which the English physicist James Chadwick was involved in
- C) were so encouraged by the discovery of the nucleons that they were able finally to understand the true nature of the atom
- D) were engaged in the development of the quantum theory while they were also focusing on the study of the nucleus
- E) were all seriously interested in the quantum theory as a new scientific development and solely focused on it

76. It is clear from the passage that Chadwick's work as regards the neutron ----.

- A) was duly taken into account by all the physicists in their research on electrons
- B) had a great deal of influence on Rutherford and his colleagues
- C) was undoubtedly a significant contribution to the study of the nucleus
- D) was originally inspired by the quantum theory which he knew so well
- E) brought him much fame not only in England but elsewhere also

77. – 80. soruları aşağıdaki parçaya göre cevaplayınız.

Earth and Venus, being roughly the same size and distance from the sun, are often regarded as twin planets. So it is natural to wonder how the crust of Venus compares with that of our own world. Although centuries of telescopic observations from Earth could give no insight, beginning in 1990 the Magellan space probe's orbiting radar penetrated the thick clouds that enshroud Venus and revealed its surface with stunning clarity. From the detailed images of landforms, planetary scientists can surmise the type of rock that covers Venus. It seems that our sister planet is completely covered by rocks of basaltic composition, which are very much like the dark, fine-grained rocks that line the ocean basins of Earth. Magellan's mapping, however, failed to find extensive areas comparable to Earth's continental crust.

77. It is stressed in the passage that, in view of its largeness as well as remoteness from the sun, Venus ----.

- A) is far different from Earth
- B) is very much like our own planet
- C) is incomparable with any other planet
- D) still seems to be incomprehensible
- E) has always been a favourite for telescopic observations

78. According to the passage, Magellan's exploration of Venus ----.

- A) was largely prevented by the planet's thick clouds and turned into a total failure
- B) benefited a great deal from the data obtained through centuries of telescopic observations
- C) has revealed a kind of rock composition which resembles the rocks in Earth's ocean basins
- D) have enabled planetary scientists to explain why the planet is enshrouded in thick clouds
- E) not only showed clearly the size of the planet but also how its thick clouds were formed

79. The passage draws attention to the fact that, despite centuries of telescopic observations, ----.

- A) planetary scientists have failed to understand the geological composition of Venus' rocks
- B) there has been no information available about the surface of Venus
- C) extensive areas of Venus have yet to be observed
- D) the clouds that surround Venus have only once been penetrated
- E) planetary scientists were not aware of the fact that Venus and Earth were twin planets

80. The passage is mainly concerned with ----.

- A) the Magellan space probe's findings about Venus
- B) the major question of why the surface of Venus is covered by rocks
- C) Venus' cloud formations, which is an issue still debated by scientists
- D) planetary scientists' ongoing research into Earth's continental crust
- E) a scientific analysis of the pictures sent by the Magellan space probe

**TEST BİTTİ.
CEVAPLARINIZI KONTROL EDİNİZ.**

CEVAP ANAHTARI

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