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İNGİLİZCE

FEN BİLİMLERİ TESTİ

2009-ÜDS İlkbahar / İNG-Fen Bil.

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

1. A team of scientists at the California Institute of Technology has developed a lensless microscope which is the size of a coin and can quickly and cheaply scan blood ---- for tumour cells and parasites.

- A) features
B) variations
C) maladies
D) samples
E) assessments

2. For the past 40 years, the ---- view about the formation of our universe has been that it began about 14 billion years ago in a cosmic fireball known as the "Big Bang."

- A) complete
B) common
C) profound
D) bearable
E) vulnerable

3. For those obsessed with punctuality, new-generation clocks, which tune into the nearest official time transmitter to keep time ----, have been developed.

- A) sensibly
B) accurately
C) adequately
D) irreversibly
E) inevitably

4. Studies of the negative effects of plastic on the human body show that the plastic products we use every day ---- with our hormone systems.

- A) restrict
B) associate
C) dismay
D) unite
E) interfere

5. A Japanese information technologies company has produced an amazing mirror that enables customers to ---- clothes that shops don't have in stock.

- A) hold onto
B) put out
C) try on
D) count on
E) draw out

6. The sun ---- electromagnetic radiation that ranges from infrared to ultraviolet.

- A) throws into
B) gives off
C) breaks down
D) brings up
E) makes up for

7. It is hoped that the construction of the world's tallest residential building, the Chicago Spire, which ---- at the end of last year, ---- by late 2010.

- A) was commenced / will have been completed
B) commences / will complete
C) has been commenced / would be completed
D) has commenced / has been completed
E) had commenced / is to be completed

8. Humanity ---- an unusual period of food surplus since the Green Revolution ---- in the mid-1960s.

- A) enjoyed / was beginning
B) was enjoying / had begun
C) has enjoyed / began
D) has been enjoying / has begun
E) is enjoying / would begin

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9. Scientists ---- the common cold as ---- by a family of over 200 viruses.

- A) were regarded / having been caused
- B) are regarded / having caused
- C) regard / being caused
- D) have regarded / to have caused
- E) regarded / to have been caused

10. If Australian conservationists ---- an extensive preservation campaign back in the 1960s, the population of saltwater crocodiles of the north ---- even less than the present number of 100.

- A) have not implemented / is
- B) would not implement / would have been
- C) weren't implementing / will have been
- D) weren't implemented / will be
- E) had not implemented / would be

11. Scientists are worried that the use of biofuels instead of fossil fuels ---- little to reduce carbon emissions, although this ---- a widespread assumption until quite recently.

- A) does / will be
- B) will do / was
- C) had done / has been
- D) will have done / had been
- E) would have done / would be

12. Today, spam mail constitutes more than 90 per cent ---- all e-mail traffic all ---- the world.

- A) with / through
- B) to / across
- C) at / around
- D) by / within
- E) of / over

13. Some types of microscopic organisms, called hyperthermophilic bacteria, can survive ---- extremely high temperatures, sometimes even ---- 100°C.

- A) under / for
- B) on / with
- C) in / by
- D) at / above
- E) within / as

14. In less-developed parts of the world, there are few modern urban water networks, ---- the people living in these areas do not have access to safe drinking water.

- A) so
- B) even if
- C) because
- D) while
- E) though

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15. Every year, more than 15,000 scuba dives are performed off the coral reefs of Cayman Islands, ---- these sites can actually support only 5,000 dives per year without any damage to the reefs.

A) since B) but C) if
D) just as E) in case

16. What you say about the problem may be true in theory, ---- in practice it does not contribute to the solution of the problem.

A) when B) so that
C) although D) for
E) because

17. Thanks to a newly developed battery-charging device called "the Chargepod," we will no longer have to use different chargers ---- recharge different mobile gadgets, like cell phones and iPods.

A) with reference to B) due to
C) in order to D) with regard to
E) according to

18. Scientists recently completed the largest-ever astronomical survey of the sky, during ---- they retained images that are expected to help them understand the origins of galaxies.

A) whose B) that C) when
D) whom E) which

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

Probably every literate person is familiar with the famous relativity equation: $E=mc^2$. (19) ---- by Albert Einstein in 1905, this equation has been used by many scientists. In fact, it is (20) ---- formula in modern physics. (21) ---- no new theory has as yet invalidated this fundamental equation, though physicists are (22) ---- testing its validity by means of experiments. The latest one of (23) ---- experiments was conducted last year at the Institut Laue-Langevin.

19.

A) To be formulated B) To formulate
C) Formulating D) Formulated
E) Having formulated

20.

A) more famous than B) the most famous
C) most famous D) more famous
E) famous

21.

A) However B) Although
C) Nevertheless D) Still
E) Moreover

22.

A) effortlessly B) continually
C) recklessly D) fundamentally
E) strongly

23.

A) most B) any C) whose
D) such E) as such

Diğer sayfaya geçiniz.

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

24. **Though wind power certainly has the advantage of being a clean source of energy, ----.**

- A) it was increasingly used in many countries with relatively stable weather patterns
- B) it can hardly be a reliable one as weather conditions are so changeable
- C) many governments are investing in wind power projects in greater amounts
- D) wind turbines are not too costly to produce
- E) changes in weather can be predicted, which makes it possible to take timely precautions

25. **If the global desertification process continues at its current rate, ----.**

- A) the effects of the environmental changes of the past few decades have been dramatic
- B) more than 60,000 square kilometres of productive land is being lost every year
- C) the world will lose much of its arable land to barren desert
- D) 26% of the Earth's land surface is classified as severely degraded
- E) reforestation programs are being initiated by governments in a number of countries

26. **----, yet there are also rare penguin species that inhabit warmer regions of the Earth.**

- A) Most penguins are black on the back and white in front and seldom have any other colour
- B) Most penguins are flightless birds that live in the cold waters of the Southern Hemisphere
- C) Penguins live in crowded colonies with populations ranging from hundreds of thousands to several million
- D) In the 19th and 20th centuries, penguins were threatened by hunters and the penguin oil industry
- E) The features of the life cycle vary with the body size of the specific penguin species

27. **Whereas life forms in the world's cold and icy lands are scarce, ----.**

- A) the ice sheet of Antarctica contains about 30 million cubic kilometres of ice
- B) Antarctica supports only a few species of cold-adapted land plants and animals
- C) marine life in the seas surrounding Antarctica is rich and diverse
- D) Antarctica is fifth in size among the world's continents
- E) the geologic evolution of Antarctica has followed a course similar to those of the other southern continents

28. **Home to more than 400 types of coral, over 1,500 fish species, and 200 types of birds, ----.**

- A) they are known to constitute the fauna of the Great Barrier Reef of Australia
- B) climate change and environmental pollution pose a serious threat to the Great Barrier Reef
- C) the Australian government spends huge amounts of money on preserving the Great Barrier Reef
- D) oceanographers are still trying to map the currents in the Great Barrier Reef
- E) Australia's Great Barrier Reef accommodates an astonishing diversity of life

29. **----, but now scientists know that some cells in the eye can detect light even when the eyes are closed.**

- A) Until recently, little was known about why sleeping people feel alert in brightly-lit rooms
- B) Sleep has always been a mysterious state of mind for psychologists
- C) Hormonal imbalances are known to cause sleep disorders
- D) Light travels faster than sound in both the atmosphere and in water
- E) The eye is a complex structure enabling the organism to visually perceive its surroundings

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30. **Swedish researchers have found that most white horses, which are actually born coloured, carry a mutation called “greying with age,” ----.**
- A) despite the fact that their tendency to age more quickly is observable
 - B) as if the greying of these animals were similar to the greying of human hair
 - C) in case they are more prone to skin cancer than other horses
 - D) and this makes them rapidly turn grey and then completely white within eight years
 - E) so that the changes in colour do not always indicate poor health
31. ----, **it is believed that the effect is intensified artificially by the emission of greenhouse gases into the atmosphere as a result of human activity.**
- A) Although the greenhouse effect is a naturally occurring phenomenon
 - B) Since the atmosphere includes different types of gases
 - C) Despite the fact that human activity is one of the causes of global warming
 - D) Even if the Earth’s climate changes due to the high rate of greenhouse gas emissions
 - E) As the emission of carbon dioxide is partly related to the use of fossil fuels
32. **Climate change commands the most attention as the major factor causing the disintegration of the Earth’s ice shelves, ----.**
- A) since scientists are trying to find ways to control climate change
 - B) still, the other causes of the breaking up of the ice should not be ignored
 - C) for global warming is the major cause of a variety of environmental problems
 - D) in case the ecological balance of the planet has been disturbed by it
 - E) so climate change has been the result of a myriad of factors
33. **For centuries, mapmakers noted that the Earth’s continents seemed to fit together like giant puzzle pieces, ----.**
- A) and they were able to discover new continents
 - B) because they are far from one another
 - C) yet they explained in detail how continental movements occur
 - D) as if they had once been joined together
 - E) for they believed that continents could not move
34. **A laptop on board the International Space Station was infected last month with a virus that was later discovered to have been harmless, ----.**
- A) since cosmonauts did not know where the virus might have come from
 - B) if it had been quarantined instantly by the security software
 - C) unless they lose important data because of it
 - D) however, it was understood that cosmonauts had updated it recently
 - E) nevertheless, cosmonauts updated their virus protection systems immediately
35. **Weather patterns are notoriously complex, ----.**
- A) since there are currently over 150 weather modification projects
 - B) in place of which a broad range of instruments is used while studying them
 - C) which is why they are so hard to predict
 - D) so that new methods of predicting sudden changes can be developed
 - E) owing to the technological advances that have helped scientists to understand them

Diğer sayfaya geçiniz.

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

36. According to some experts, rebuilding efforts commenced in southwestern China following the May 12 earthquake could damage the pandas' largest remaining natural habitat.

- A) Bazı uzmanlar, pandaların geriye kalan en geniş doğal yaşam alanının 12 Mayıs'ta güneybatı Çin'de meydana gelen depremin ardından başlayan yeniden inşa çalışmalarının sonucunda zarar görmesinden endişe duymaktadır.
- B) Bazı uzmanlar, güneybatı Çin'de 12 Mayıs'ta meydana gelen depremin ardından başlatılan yeniden inşa çalışmalarının pandaların kalan en geniş doğal yaşam alanının zarar görmesine sebep olabileceğini düşünmektedir.
- C) Güneybatı Çin'de 12 Mayıs depreminden bu yana sürdürülen yeniden inşa çalışmalarını gözlemleyen bazı uzmanlar, pandaların kalan en geniş doğal yaşam alanlarının bu yüzden zarar görmesinden endişe etmektedir.
- D) Güneybatı Çin'i 12 Mayıs'ta vuran depremin ardından başlatılan yeniden inşa çalışmaları bazı uzmanlara göre, pandaların kalan en geniş doğal yaşam alanlarını yok edebilirdi.
- E) Bazı uzmanlara göre, güneybatı Çin'de 12 Mayıs depreminin ardından başlatılan yeniden inşa çalışmaları pandaların geriye kalan en geniş doğal yaşam alanına zarar verebilir.

37. Human contamination of the atmosphere, which has been happening since mankind first began to use fire for heating and cooking, occurs in a variety of forms.

- A) İnsanoğlu ateşi ısınmak ve yemek pişirmek için kullanmaya başladığından beri atmosferin kirlenmesi farklı şekillerde devam etmektedir.
- B) İnsanoğlunun ateşi ısınmak ve yemek pişirmek için kullanmaya başlamasından bu yana süregelen bir durum olan atmosferin insan tarafından kirlenmesi, farklı şekillerde gerçekleşir.
- C) Atmosferin kirlenmesi, insanoğlunun ateşi ısınma ve yemek pişirme gibi farklı şekillerde kullanmasıyla başlamıştır.
- D) İnsanoğlu, ateşi ısınma ve yemek pişirme amacıyla kullanmaya başladığından beri atmosferi farklı şekillerde kirlenmiştir.
- E) Atmosferin insan tarafından kirlenmesi, insanoğlunun ateşi ısınma ve yemek pişirme gibi farklı amaçlarla kullanmaya başlamasından bu yana çeşitli şekillerde süregelen bir durumdur.

38. A significant outcome of air pollution is the high cost of pollution cleanup and prevention, an example of which is the global effort to control emissions of CO₂, a gas produced from the combustion of fossil fuels such as coal or oil, or of other organic materials like wood.

- A) Hava kirliliğinin önemli bir sonucu olan kirlilik giderme ve önlemenin yüksek maliyetini düşürmek için küresel çapta yapılan en önemli girişim, kömür ve petrol gibi fosil yakıtların veya odun gibi diğer organik maddelerin yanması sonucu ortaya çıkan CO₂ salımının kontrolünü sağlamaya yönelik çabadır.
- B) Kömür ve petrol gibi fosil yakıtların veya odun gibi diğer organik maddelerin yanması sonucu ortaya çıkan CO₂ salımının kontrolüne yönelik küresel girişim, hava kirliliğinin önemli bir sonucu olan kirlilik giderme ve önlemenin yüksek maliyetini düşürmeye yöneliktir.
- C) Hava kirliliğinin önemli bir sonucu kirlilik giderme ve önlemenin yüksek maliyetidir ki bunun örneklerinden biri kömür ve petrol gibi fosil yakıtların veya odun gibi diğer organik maddelerin yanması sonucu ortaya çıkan CO₂ salımının kontrolüne yönelik küresel girişimdir.
- D) CO₂ salımı kömür ve petrol gibi fosil yakıtların veya odun gibi diğer organik maddelerin yanması sonucu ortaya çıkmakta, bunun kontrolüne yönelik küresel girişim ise hava kirliliğinin önemli bir sonucu olan kirlilik giderme ve önlemenin yüksek maliyetini düşürmeye yönelik olarak yapılmaktadır.
- E) Kirlilik giderme ve önlemenin yüksek maliyeti hava kirliliğinin en önemli sonucu olup, bunu düşürmeye yönelik en önemli küresel girişim kömür ve petrol gibi fosil yakıtların veya odun gibi diğer organik maddelerin yanması sonucu ortaya çıkan CO₂ salımının kontrolünü sağlamaktır.

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

39. Her ne kadar 43 000 yıllık Neandertal fosillerinden elde edilen DNA örneklerinin modern insanların ile aynı mutasyonlara sahip olduğu bulunmuş olsa da, bu atalarımızın konuşabildiği anlamına gelmemektedir.

- A) DNA samples from 43,000-year-old Neanderthal fossils are found to have had the same mutations as those of modern humans, but no one can claim that our ancestors could talk.
- B) No matter how similar DNA samples from 43,000-year-old Neanderthal fossils and modern humans are in terms of mutations, this does not mean that our ancestors could talk.
- C) Despite mutational similarities between DNA samples from 43,000-year-old Neanderthal fossils and those of modern humans, our forefathers cannot be said to have had the ability to talk.
- D) Although DNA samples from 43,000-year-old Neanderthal fossils are found to have had the same mutations as those of modern humans, this does not mean that our forefathers were able to talk.
- E) While DNA samples from 43,000-year-old Neanderthal fossils suggest that they had the same mutations as those of modern humans, this is not an indication of their ability to talk.

40. İnsan vücudundaki en sert madde olan diş minesi kayba uğradığında yenilenemez.

- A) Tooth enamel, which is the hardest substance in the human body, cannot be replaced if lost.
- B) If it is lost, tooth enamel cannot be replaced as it is the hardest substance in the human body.
- C) Tooth enamel, which cannot be replaced if lost, is the hardest substance in the human body.
- D) Tooth enamel is the hardest substance in the human body and it cannot be replaced if it is lost.
- E) In the human body, tooth enamel is the hardest substance and it cannot be replaced if it is lost.

41. Astronotlara daha rahat bir uçuş sağlamak için NASA'nın yeni nesil roketleri şok emicilere sahip olacak.

- A) In NASA's new-generation rockets, shock absorbers have ensured a more comfortable flight for the astronauts.
- B) NASA has used more shock absorbers in its new-generation rockets so as to provide astronauts with a comfortable flight.
- C) In order to ensure a more comfortable flight for the astronauts, NASA's new-generation rockets will have shock absorbers.
- D) To ensure that astronauts have a comfortable flight, NASA will fit its new-generation rockets with shock absorbers.
- E) In NASA's new-generation rockets, shock absorbers have been used with the purpose of providing astronauts with a more comfortable flight.

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

42. In physics, a force is a push or pull on an object. There are four fundamental forces, three of which are involved in keeping stable atoms in one piece and determining how unstable atoms will decay. ----. The electromagnetic force keeps electrons attached to their atom; the strong force holds the protons and the neutrons together in the nucleus; and the weak force governs how atoms decay when they have too many protons or neutrons. The fourth fundamental force, gravity, only becomes apparent with objects much larger than subatomic particles.

- A) These are the electromagnetic force, the strong force, and the weak force
- B) There is a fourth fundamental force, which scientists have not yet been able to identify
- C) Decay of unstable atoms is a phenomenon that has been discovered recently
- D) To describe in detail how atoms behave, scientists have developed the quantum theory
- E) Under certain conditions, unstable atoms are affected by other forces

43. The Internet is a computer-based global information system. ----. Each of these networks may link tens, hundreds, or even thousands of computers, enabling them to share information with one another. The Internet, in this sense, has made it possible for people all over the world to communicate with one another effectively and inexpensively.

- A) It does not have a centralized distribution system as do radio and television
- B) It is composed of many interconnected computer networks
- C) It has become increasingly common, especially over the past two decades
- D) Anyone who has access to the Internet can reach a vast source of information
- E) Many individuals use the Internet for communication and research

44. Astronomy is the study of the universe and the celestial bodies, gas, and dust within it. Astronomy includes observations and theories about the solar system, the stars, the galaxies, and the general structure of space. People who study astronomy are called astronomers. ----. These methods usually involve ideas related to the laws of physics, so most astronomers are, at the same time, astrophysicists.

- A) A wide range of astronomical objects are accessible to astronomers
- B) Astronomy is the oldest science, dating back thousands of years
- C) Using a variety of equipment, they analyze the objects in the sky
- D) They use a wide variety of methods while performing their research
- E) The astronomers' field of study is distinct from that of the astrophysicists

45. Geneticists seek to understand how the information encoded in genes is used and controlled by cells, and how the smallest differences in genes can disrupt an organism's development. Increasingly, modern genetics involves genetic engineering, a technique used by scientists to manipulate genes. Genetic engineering has led to many advances in medicine and industry. ----.

- A) Nevertheless, there has been less misconduct than was once predicted
- B) For instance, there are controversies over the possible unethical use of this technique
- C) In fact, much of the controversy over the use of genetic engineering has nothing to do with recreating life
- D) As a result, there has been much unethical use of genetic engineering
- E) However, the potential for abuse of this technique has also provoked many ethical and legal controversies

46. Weather forecasting involves predicting how the present state of the atmosphere will change. Present weather conditions are obtained by ground observations, observations from sea and aircraft, Doppler radars, and satellites. ----. These charts, maps, and graphs are then sent electronically to forecast offices, where local and regional weather forecasts are made. In addition, these offices prepare weather advisories and warnings of severe weather.

- A) Electronically transmitted observations are generally used instead of charts, maps, and graphs
- B) Forecast offices send charts, maps, and graphs to satellites and other sources of information
- C) This information is sent to meteorological centres, where data are collected, analyzed, and made into charts, maps, and graphs
- D) Such equipment is controlled electronically by charts, maps, and graphs in forecast offices
- E) Weather advisories and warnings of severe weather help meteorologists to prepare charts, maps, and graphs

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

47. Jerry :
- **Have you heard that South Korean scientists recently cloned a pit bull terrier for its American owner?**

Sarah :
- **Yes, and the owner paid \$25,000 for five genetically identical copies.**

Jerry :
- ----

Sarah :
- **Never, even if it were for free!**

- A) Would you be willing to pay that much money for cloned copies of your pet?
B) Have you ever seen a cloned animal?
C) Would you consider having your cat cloned, if you had the chance?
D) Have you ever thought about the ethical implications of cloning animals?
E) Do you regard the cloning of animals for research purposes as acceptable?

48. Harry :
- **The government may soon be able to access everyone's phone calls and e-mails.**

Sally :
- ----

Harry :
- **Yes, and that is the main concern about it. But the purpose of the proposed regulation is to counteract terrorism.**

Sally :
- **Still, officials should make sure that civil liberties are not infringed.**

- A) It could be an effective way of preventing terrorism.
B) Wouldn't that be a violation of privacy?
C) Has the government approved of the proposed regulation?
D) Are you concerned about its implications?
E) Would you want your communications to be accessed by the government?

49. Peter :
- **Are you still using the old version of your Internet browser?**

Susan :
- **Yes, and I'm quite happy with it.**

Peter :
- ----

Susan :
- **Oh, I didn't know about that. I'll take your advice, for I really don't want to be hacked.**

- A) Do you know the cost of updating your browser?
B) I've been attacked by hackers myself!
C) When was the last time you updated that browser?
D) You should have had your computer upgraded a long time ago; then you wouldn't have lost all your important data.
E) You should use the new version, which was developed after a major security vulnerability was discovered in the old one.

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50. Brenda :
- **I want to buy a good telescope for my son. Do you have any suggestions?**
- Shop Assistant :
- **You should check out this new amateur device. It is handheld, so there is no need for a tripod, it is easy to use, and it is quite inexpensive.**
- Brenda :
- ----
- Shop Assistant :
- **Then you should be prepared to spend a little more.**
- A) But he already has something amateurish. I want to get him something more sophisticated.
B) The price tag on it confirms that.
C) I want my son to decide which to get.
D) I heard that not all expensive telescopes are necessarily good in performance and quality.
E) I can't afford to get a professional instrument, and this handheld one seems quite convenient.

51. Sharon :
- **I need a memory card that is compatible with my laptop.**
- Shop Assistant :
- ----
- Sharon :
- **I think two gigabytes will be enough to store all my files.**
- Shop Assistant :
- **Then I suggest this one. It has the memory volume you want, and it is quite user-friendly.**
- A) Do you have enough money for a two-gigabyte card?
B) What is the operating system on your laptop?
C) How much memory capacity do you need?
D) Where do you store your files?
E) What do you think about this memory card?

Diğer sayfaya geçiniz.

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

52. (I) Volcanic eruptions in populated regions are a significant threat to people, property, and agriculture. (II) Most volcanoes have steep sides, but some can be gently sloping mountains or even flat tablelands, plateaus, or plains. (III) The volcanoes above sea level are the best known, but the vast majority of the world's volcanoes lie beneath the sea, formed along the global oceanic ridge systems. (IV) More than 1,500 above-sea volcanoes have been active during the past 10,000 years, 539 of them erupting one or more times in recorded history. (V) On average, 50 to 60 above-sea volcanoes worldwide are active in any given year; about half of these are continuations of eruptions from previous years, and the rest are new.

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

53. (I) We benefit from the results of mathematical research every day. (II) The fibre-optic network carrying our telephone conversations, for example, was designed with the help of mathematical research. (III) Our computers are the result of millions of hours of mathematical analysis. (IV) Mathematics is a basic component of the primary and secondary education curricula. (V) Weather prediction, the design of fuel-efficient automobiles and airplanes, traffic control, and medical imaging all depend upon mathematical analysis.

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

54. (I) Any given place may have several different ecosystems that vary in size and complexity. (II) Humans benefit from these smoothly-functioning ecosystems in many ways. (III) A tropical island, for example, may have a rain forest ecosystem that covers hundreds of square miles, a swamp ecosystem along the coast, and an underwater coral reef ecosystem. (IV) No matter how the size or complexity of an ecosystem is characterized, all ecosystems exhibit a constant exchange of matter and energy between the living and non-living elements. (V) This constant exchange between these elements makes ecosystems highly interconnected.

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

55. (I) Photosynthesis is a very complex process that plant biologists divide into two stages. (II) In the first stage, the light-dependent reaction, the chloroplast traps light energy and converts it into chemical energy. (III) In the second stage, called the light-independent reaction, glucose is formed and synthesized. (IV) These two stages reflect the literal meaning of the term photosynthesis, to build with light. (V) Most plants, therefore, produce more glucose than they use during photosynthesis.

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

56. (I) There are two main categories of polluting materials, or pollutants. (II) Biodegradable pollutants are materials, such as sewage, that rapidly decompose by natural processes. (III) Pollution has a dramatic effect on natural resources. (IV) These pollutants become a problem when added to the environment faster than they can decompose. (V) Nondegradable pollutants are materials that either do not decompose or decompose slowly in the natural environment, and when these pollutants contaminate the environment, it is difficult or impossible to remove them.

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

57. – 60. soruları aşağıdaki parçaya göre cevaplayınız.

Artificial Intelligence (AI) is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience. Since the development of the digital computer in the 1940s, it has been demonstrated that computers can be programmed to perform very complex tasks, such as discovering proofs for mathematical theorems or playing chess, with great proficiency. Still, although there are continuing advances in computer-processing speed and memory capacity, there are as yet no programs that can match human flexibility over wider domains or in tasks requiring much everyday knowledge. On the other hand, some extraordinary programs have attained performance levels beyond those of human experts and professionals engaged in certain specific tasks. AI, in this limited sense, is used efficiently and found in applications as diverse as medical diagnosis, computer search engines, and voice or handwriting recognition.

57. It can be understood from the passage that some programs equipped with AI ----.

- A) perform certain tasks much better than humans
- B) have very limited memory capacity
- C) successfully make use of much everyday knowledge
- D) have far more flexibility than is found in human beings
- E) are very limited in scope

58. According to the passage, AI ----.

- A) matches human flexibility over domains wider than ever before
- B) is a term used to refer to certain human-like features associated with intelligence in man-made machines
- C) refers to tasks associated with such intelligent beings as humans
- D) is used to describe humans' ability to reason, discover meaning, generalize, or learn from past experience
- E) has caused a decline in the overall performance of humans with difficult tasks

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

- A) the flexibility and efficiency of AI has matched and even surpassed that of humans
- B) developing a system that has human-like features will obviously remain an impossibility
- C) humans are still better than computers in such tasks as proving mathematical theorems
- D) despite the continuing advances, computer technology cannot be used efficiently in fields such as voice or handwriting recognition
- E) although a lot has been achieved, AI is as yet in its infancy particularly when there is a need for everyday knowledge

60. According to the passage, some outstanding AI applications ----.

- A) are fully-developed in terms of processing speed and memory capacity
- B) are not as efficient as desired in a number of fields, including medical diagnosis
- C) are soon to be employed in the development of new and diverse systems that reach beyond human flexibility
- D) have surpassed the performance levels of human experts
- E) are still at the stage of safety testing before they can be used in such fields as medicine and computer sciences

61. – 64. soruları aşağıdaki parçaya göre cevaplayınız.

According to a recent study by the University of Alberta, parasitic sea lice are killing a population of young wild pink salmon along Canada's west coast in alarming numbers. The authors of the study say that the entire wild population may be gone within eight years. With their protective scales, adult salmon can safely harbour the lice, but young salmon do not yet have the protective scales, leaving them prone to deep, infection-prone wounds left by the lice. Juveniles live in coastal waters, which are normally far from parasite-carrying adults living farther out to sea. Now, however, aqua farms are often located in these same waters, destroying the young salmon's safe haven. Scientists argue that fish farms must be relocated or reduced, but so far, no government regulations have been launched to this end.

61. According to the passage, adult pink salmon ----.

- A) live in harbours and coastal waters
- B) often carry parasites, but are not affected by them
- C) suffer greatly from infections caused by sea lice
- D) protect their young from parasites with their scales
- E) become more prone to infection as they grow bigger

62. The researchers at the University of Alberta believe that ----.

- A) pink salmon may not be able to find lice to feed on within eight years
- B) Canada's west coast has not been protected well for eight years
- C) the wild pink salmon population could disappear within eight years
- D) the rate of increase of the pink salmon population is alarming
- E) it takes about eight years for the pink salmon to grow into adults

63. It can be understood from the passage that ----.

- A) parasitic life forms cannot survive in open sea
- B) the left side of the young pink salmon is more prone to infection
- C) adult pink salmon start to lose their scales after eight years
- D) wild pink salmon are used to cleanse the water of sea lice
- E) aqua farms are a threat to the young pink salmon

64. The young pink salmon ----.

- A) destroy the safe haven of other types of salmon
- B) are bred in aqua farms
- C) live closer to the coast than do the adults
- D) have recently been relocated for safety
- E) are a type of fish protected by law

65. – 68. soruları aşağıdaki parçaya göre cevaplayınız.

Much has been said and written about the declining numbers of and disappointing lack of diversity among college students majoring in engineering. Among the factors cited to explain this paucity are the lack of exposure of high school students to the very idea of engineering and the fact that many have insufficient mathematics and science background to gain entrance to engineering school, even if they identify the profession as a possible career. This is unfortunate, for the ideas of engineering should be integrated into the curricula not only of high schools but also of middle and primary schools. By not being exposed properly throughout their education to engineering activities, children are being done a disservice. After all, even preschool children have the necessary conditions in their play for appreciating exactly what engineering is: design. Indeed, design is practised throughout their school day, even in their before- and after-school activities. It only should be pointed out to them that they are designing something, and, therefore, are future engineers in the making.

65. The writer believes that ----.

- A) it is unfair to children not to familiarize them with engineering
- B) not all children should participate in engineering activities
- C) it is inappropriate to include engineering in the curricula of middle and primary schools
- D) integrating engineering into the curricula is unfortunate
- E) involving children in engineering activities is a disservice to them

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

- A) the idea of engineering seems disappointing to most college students
- B) most schoolchildren do not enjoy the learning activities provided at school
- C) the factors causing the decline in interest in engineering are insufficient
- D) children are not aware that they are actually designing things
- E) engineering students do not write much about how they feel about their field

67. The author explains the decrease in the number of engineering students in colleges by calling attention to ----.

- A) the diversity among college students majoring in engineering
- B) the insufficient mathematics and science backgrounds of many college candidates
- C) the importance of gaining entrance to engineering schools
- D) the enthusiasm for integrating ideas of engineering into the curricula
- E) the identification of engineering as a possible career for college-bound youth

68. It can be understood from the text that ----.

- A) most children are naturally drawn to activities related to design
- B) a school day is not long enough to get children to practice what they learn
- C) the ability to design is a rare skill among pre-school and schoolchildren
- D) it is too early to include engineering activities in primary and middle schools
- E) only specially-talented children are exposed to actual engineering activities

69. – 72. soruları aşağıdaki parçaya göre cevaplayınız.

The magnets that are used most commonly, such as the ones on compasses, those used for fridge decorations, and in many other everyday tools, are called permanent magnets. This type of magnet produces an external magnetic field that attracts or repels iron, and it may lose its strength when mistreated. Inside a magnet are groups of atoms called domains. The magnetizing process, which exposes a material to increasingly strong magnetic fields, aligns these domains in a single direction, where they become locked in a crystalline structure. High heat, radiation, strong electrical currents, or other nearby magnets, though, can damage that structure, nudging the domains out of alignment and diminishing the attractive force. Electromagnets, or non-permanent magnets, a less familiar type, have magnetic fields that rely on an electric current. They, thus, do not lose their strength; instead, the strength of the field can be varied as needed. This makes them appropriate for various applications, such as telephone receivers.

69. Non-permanent magnets are appropriate for a variety of applications ----.

- A) even if they rely on an electric current
- B) although they lose their strength when exposed to high heat or electric current
- C) because the strength of their magnetic fields can be varied
- D) excluding communication devices
- E) and, indeed, are far more versatile than are permanent magnets

70. It can be understood from the passage that permanent magnets ----.

- A) have magnetic fields that can be varied as needed
- B) are not suitable for use in our ordinary, everyday lives
- C) perform better when exposed to radiation or high temperatures
- D) form domains when they are found in groups
- E) may, in certain circumstances, become weakened

71. According to the passage, electromagnets ----.

- A) have magnetic fields that function in accord with an electric current
- B) are more commonly found than permanent magnets
- C) lose their strength when their domains are nudged out of alignment
- D) may damage the structure of such instruments as telephone receivers
- E) have domains that are usually out of alignment

72. It can be understood from the passage that domains in permanent magnets ----.

- A) become stronger in higher levels of heat or radiation
- B) cannot produce a magnetic field when they are locked in a crystalline structure
- C) align the magnetic fields in a single direction
- D) are what give these magnets their attractive force
- E) cannot be altered by outward circumstances

73. – 76. soruları aşağıdaki parçaya göre cevaplayınız.

Glucose, nature's most abundant sugar, may soon be petroleum's fiercest rival. Chemists have long searched for cheap, renewable, and non-polluting alternatives to the 245 million tonnes of petroleum-based plastics produced annually. For years, they have been able to convert sugars into the chemical hydroxymethylfurfural (HMF), which can be used to make plastic. But the process, which used acid catalysts to break the sugars down, was costly and complicated by impurities and low yields. Researchers at the Pacific Northwest National Laboratory (PNLL) in Washington replaced the acid catalyst with a metal catalyst, chromium chloride, and used it to break down glucose, a sugar found in plant starches and cellulose. The result: HMF yields increased 10 to 70 percent over the old processes and impurities were eliminated. The next step to replacing petroleum is to find a low-impact renewable source for the glucose. Scientists hope to soon obtain glucose from cellulose rather than from plant starches. Cellulose is found in straw and sawdust, two waste products from the agricultural and wood industries that do not require precious farmland to be taken away from food crops.

73. It can be understood from the passage that cellulose ----.

- A) requires an extensive use of farmland
- B) is generally extracted from plant starches
- C) can be derived from any kind of agricultural waste product
- D) is not the first choice of the researchers at PNLL
- E) is a more environmentally friendly option than are plant starches

74. According to the passage, scientists have, for years, used acid catalysts to ----.

- A) get rid of impurities in plastics
- B) convert sugar into HMF
- C) increase yields
- D) extract cellulose from plants
- E) make plastics from petroleum

75. We can understand from the passage that the use of metal catalysts ----.

- A) caused a decline in yield, and an increase in cost
- B) is more expensive than using acid catalysts
- C) is a more efficient way of breaking down glucose than is the use of acid catalysts
- D) resulted in impurities in plastics
- E) involves the use of HMF

76. The passage mainly deals with ----.

- A) a new and efficient way of producing plastic from petroleum
- B) different types of catalysts used in the production of plastics
- C) the environmental advantages of using plastics made from glucose
- D) ways of increasing yield in the production of plastics
- E) a new alternative to petroleum in plastic production

77. – 80. soruları aşağıdaki parçaya göre cevaplayınız.

Contrary to popular belief, underground fires are a surprisingly frequent phenomenon, the fuel being coal and the fire travelling along the seams, or the thin layers of rock or mineral. Such fires travel slowly due to the limited supply of oxygen, but can burn for a very long time: the underground fire at Burning Mountain Nature Reserve in Australia is thought to have been continuing for the past 5,500 years. The number of such subterranean fires worldwide is countless. According to one study, subterranean fires in China alone are consuming some 200 million tonnes of coal a year and pumping into the air as many pollutants as all the cars in the United States. Along with numerous human-related factors, such fires are also contributing substantially to global warming.

77. It can be understood from the passage that underground fires ----.

- A) are a direct result of human activities
- B) are a rare phenomenon that is observed solely in Australia and China
- C) play an important role in the process of global warming
- D) could contribute to efforts to prevent climate change resulting from global warming
- E) have not been witnessed for the past 5,500 years

78. According to the passage, one misconception about underground fires is that they ----.

- A) are not common
- B) don't last for a very long time
- C) don't have a limited supply of oxygen
- D) travel fast
- E) contradict the laws of nature

79. Underground fires in China ----.

- A) release about 200 tonnes of pollutants into the air every year
- B) cause as much air pollution as do all the vehicles in the United States
- C) have been burning for more than five millennia
- D) consume as much energy as do all the cars in the United States
- E) are most frequently the result of industrial activity

80. According to the passage, the limited supply of oxygen underground ----.

- A) travels along the thin layers of rock or mineral
- B) is a very frequent phenomenon in Australia and China
- C) prevents underground fires from burning for any length of time
- D) slows down the speed at which underground fires travel
- E) has been contributing to global warming for the past 5,500 years

TEST BİTTİ.

CEVAPLARINIZI KONTROL EDİNİZ.

ÜNİVERSİTELERARASI KURUL YABANCI DİL SINAVI (ÜDS)

22 MART 2009

İNGİLİZCE

FEN BİLİMLERİ TESTİ CEVAP ANAHTARI

A KİTAPÇIĞI

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