

ÜDS FEN – Aralık 2005

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

1. Fossilized bones are fragile and can easily be damaged by ---- to the air.

- A) exposure
B) compression
C) resistance
D) appearance
E) restoration

2. High-energy cosmic rays, which are more -- -- in space than on Mars or Earth, could deliver dangerously high radiation doses.

- A) impressive
B) compulsive
C) fragile
D) innovative
E) prevalent

3. The point-and-click actions of the computer mouse have made it an ---- popular alternative to keyboard and text-based commands.

- A) increasingly
B) assertively
C) effortlessly
D) exactly
E) objectively

4. In years when nut and berry crops are poor, birds may be forced to ---- their territories and search for food elsewhere.

- A) locate
B) reach
C) abandon
D) reserve
E) exclude

5. This particular herbicide seems to be environmental-friendly, and they plan to ---- its effect on broad-leaved plants.

- A) cope with
B) hold up
C) run through
D) try out
E) break into

6. The moon maps are incomplete but it is hoped that the 2008 lunar orbiter will ---- the gaps for us.

- A) make up
B) fill in
C) lay out
D) put over
E) work out

7. On a broader scientific level, undersea mapping ---- fundamental knowledge about the Geological forces that ---- the ocean floor.

- A) will provide / would shape
B) had provided / had shaped
C) would provide / will shape
D) is providing / shape
E) provides / would have shaped

8. Wolfram's type of research ---- to practical developments, but it ---- 50 or 100 years before these developments appear.

- A) would have led / would be
B) has led / has been
C) can lead / could be
D) may lead / had been
E) leads / would have been

9. A good way ---- understanding of the geodynamo ---- to compare computer dynamos (which lack turbulence) with laboratory dynamos (which lack convection).

- A) to be improved / will be
B) to have improved / has been
C) having improved / could be
D) improving / could have been
E) to improve / would be

10. Geologists ---- that the Paleozoic sedimentary rocks of the Peruvian Andes are made of debris that ---- from a neighboring landmass.

- A) had found / should have eroded
B) have found / must have eroded
C) would find / could have been eroding
D) find / would be eroding
E) would have found / was eroding

11. Seahorses ---- too exotic for British waters, but a new study ---- that two species live and breed around Britain's shores.

- A) will seem / would find
B) seemed / had found
C) have seemed / may find
D) would seem / is finding
E) seem / has found

12. Last January, "Hygens", a space probe built by the European Space Agency, landed --- Titan, Saturn's largest moon, and began to deliver its data ---- waiting scientists.

- A) above / from
B) in / with
C) on / to
D) off / about
E) to / by

13. Such information is not being used in engineering applications ---- present, but it is ---- much importance to the food and beverage industry.

- A) at /of
C) by / to
E) from / for
- B) in / with
D) on / about

14. ---- jet engines, which are also reaction engines, modern rockets carry their own oxygen supply to burn their fuel and do not require any surrounding atmosphere.

- A) Instead of
C) Whereas
E) Whereby
- B) Even
D) Unlike

15. Most of us think that random events tend to be equally spread, ---- the contrary seems to be true: randomness tends to occur in clusters.

- A) as if
C) so
E) since
- B) but
D) moreover

16. Many basic issues, ---- the relationship between gravity and quantum physics, remain unsolved.

- A) except for
C) such as
E) instead of
- B) despite
D) in case of

17. A robot is ---- machine that can make decisions independent of human control.

- A) either
C) such
E) any
- B) some
D) both

18. Roentgen, which is the unit of radiation exposure, is defined ---- the number of ions produced in one cubic centimeter of air by the radiation.

- A) in view of
C) due to
E) on behalf of
- B) as well as
D) in terms of

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

Bozono, chief engineer of the Phoenix Bridge Company, was confident that he could build a bridge to span the Kinzua gorge; and he did **(19)** ----, in just 94 days. When it **(20)** ---- in 1882, the Kinzua Viaduct was the tallest bridge in the world. For more than 100 years, it carried trains across the Kinzua gorge, but in 2003 its service came to an **(21)** ---- end when it took a direct hit **(22)** ---- a tornado and 23 of its 41 spans **(23)** ---- in spectacular fashion in just 30 seconds.

19.

- A) as well
D) only
- B) so
E) both
- C) too

20.

- A) had been finished
C) was finished
E) finished
- B) has been finished
D) was to be finished

21.

- A) insufficient
C) eager
E) insecure
- B) occasional
D) abrupt

22.

- A) from
D) over
- B) at
E) for
- C) with

23.

- A) violated
D) repaired
- B) reduced
E) collapsed
- C) reversed

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

24. Non-lethal weapons can offer the prospect of a less violent world ----.

- A) if the military forces themselves are unconvinced
- B) where lethal force is only a last resort
- C) when the advantages balanced the disadvantages
- D) though tear gas is less effective
- E) unless the alarm goes off accidentally

25. Engineers removed 70 tonnes of earth from the base of the Tower of Pisa ----.

- A) so the lean was reduced by 45 cm
- B) that the Tower's lean was increasing by 1.5 m every year
- C) but on one disastrous day it actually moved 2 mm
- D) if it would stand secure for another 200 years
- E) while it has been closed to visitors

26. The most south-westerly point on the Scandinavian peninsula is where you should go ----.

- A) while cloud and wind conditions were suitable
- B) if you want to watch migrating birds
- C) when migration reached its peak in September
- D) that birds of prey are on the increase
- E) before migrating birds had crossed the Baltic

27. The book tells the fascinating stories behind the great inventions ----.

- A) however unlikely they seemed to be
- B) since this covers new ground
- C) that have changed our lives
- D) which had gone unnoticed
- E) if they were worth recording

28. Chemists have taken a major step forward in the production of ammonia ----.

- A) because it may open up a faster synthesis of more complex nitrogen-containing molecules
- B) until they used a soluble complex made of two bulky hydrocarbon rings
- C) so it has meant heating nitrogen and hydrogen gases to a very high temperature
- D) but their methods will replace the Haber-Bosch process
- E) which is crucial for fertilizers and many other products

29. Asexual reproduction, ----, is a way of reproducing quickly, and with no risks entailed.

- A) whether it would be better in the case of shortlived organisms
- B) which is used by organisms such as the water flea
- C) for these are the common inhabitants of lakes and ponds
- D) that established a new population
- E) if it was observed in stable environments

30. Although NASA's budget has risen by 7% ever the past two years, ----.

- A) its responsibilities have grown much faster
- B) the space station programmes are not targets for cutting costs
- C) the programme of unmanned missions could have been discontinued
- D) Earth-observing satellites are of less importance
- E) in fact, the Voyager probes may be cancelled

31. ---- because it affects the average rate of material loss across a landscape.

- A) More moisture also promotes the growth of vegetation
- B) Wetter conditions favour faster rates of erosion
- C) Mountains in polar latitudes are the least vulnerable to erosion
- D) Climate is inextricably linked with erosion
- E) Mountain glaciers aggressively attack surface rock

32. ---- since Gutenberg invented the printing press in 1450.

- A) The Internet is the greatest advance in information technology
- B) The web offers information to everyone at all times
- C) To start with, the web was really only a handy aid for academics
- D) Information technology did not develop at a steady rate
- E) Information technology could not continue at the present rate

33. As the chess-playing computer *Deep Blue* can assess 36 billion moves in three minutes, ----.

- A) chess is far from being a game of chance
- B) the game had come to an end
- C) there was no room left for the human element
- D) no one has managed to defeat it
- E) the game would soon lose its appeal

34. When the comet fragments plunged into Jupiter's atmosphere, ----.

- A) it has a speed of over 200,000 kilometers per hour
- B) the same thing can happen to Earth
- C) they exploded, and released the energy of around 50,000 H bombs
- D) Jupiter has been struck at least four times over the past 100 years
- E) Earth must be guarded against a similar attack

35. As long as the world's economies are measured in purely monetary terms, ----.

- A) the effects of deforestation on water supplies would continue to be ignored
- B) loss of species is a natural phenomenon
- C) localized conservation projects have tackled local issues
- D) conservation efforts are moving far too slowly
- E) the true value of the environment will be grossly underestimated

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

36. The NASA geologists want to know how Mars became so dry and dusty, and whether the planet holds clues about Earth's own fate.

- A) NASA jeologları, Mars'ı bu kadar kuru ve tozlu hale getiren etkenleri ortaya çıkararak, Dünya'nın kaderine ilişkin ipuçlarına ulaşmak istiyorlar.
- B) NASA jeologları, yalnızca Mars'ın neden böylesine kuru ve tozlu olduğu konusunda değil, ayrıca Dünya'nın kaderine ilişkin ipuçları saklayıp saklamadığı konusunda da ilgilenmektedir.
- C) NASA jeologları, Mars'ın nasıl bu kadar kuru ve tozlu hale geldiğini ve bu gezegenin, Dünya'nın kendi kaderine ilişkin ipuçları taşıyıp taşımadığını bilmek istiyorlar.
- D) NASA jeologları bu kadar kuru ve tozlu olan Mars'ın, Dünya'nın kaderine ilişkin ne gibi ipuçları sakladığını bilmek istiyorlar.
- E) NASA jeologlarının bilmek istedikleri, Dünya'nın kaderine ilişkin ipuçları saklayan Mars'ın nasıl olup da bu kadar kuru ve tozlu olduğudur.

37. Quaoar, which is a spherical object half the size of Pluto on the edge of the solar system, is thought to consist of ice mixed with rock like a comet.

- A) Kuyruklu yıldızlar gibi, kayayla karışık buzdan oluştuğu sanılan Quaoar, güneş sisteminin kenarında, Plüton'un yarı büyüklüğünde küresel bir cisimdir.
- B) Güneş sisteminin kenarında, Plüton'un yarı büyüklüğünde küresel bir cisim olan Quaoar'm bir kuyruklu yıldız gibi, kayayla karışık buzdan oluştuğu düşünülmektedir.
- C) Plüton'un yarısı kadar olan ve bazı kuyruklu yıldızlar gibi kaya ve buz karışımından oluştuğu düşünülen Quaoar, güneş sisteminin kenarındaki, küreye benzer cisimlerden biridir.
- D) Kuyruklu yıldızlar gibi kayayla karışık buzdan oluşan Quaoar'm, güneş sisteminde Plüton'un yarı büyüklüğündeki küresel cisimlerden biri olduğu sanılmaktadır.
- E) Bir kuyruklu yıldız gibi buz ve kaya karışımından oluştuğu sanılan Quaoar'm güneş sisteminin kenarında, Plüton'un yarı büyüklüğünde küresel bir cisim olduğu düşünülmektedir.

38. When Marie Curie won the Nobel Prize in chemistry for the discovery of polonium and radium in 1911, she became the first scientist to receive a second Nobel Prize.

- A) 1911'de, Marie Curie Nobel ödülünü polonyum ve radyumun keşfi için alarak, ikinci kez ödül alan ilk bilim insanı unvanını kazandı.
- B) Marie Curie, 1911'de kimyada polonyum ve radyumun keşfi için Nobel ödülü aldı ve ayrıca ikinci Nobel ödülünü kazanan ilk bilim insanı oldu.
- C) 1911'de, Marie Curie'ye polonyum ve radyumun keşfi için kimya alanında Nobel ödülü verildiğinde, daha önce hiçbir bilim insanı iki defa Nobel ödülü almamıştı.
- D) Marie Curie, "polonyum ve radyumun keşfinden ötürü 1911'de kimyada Nobel ödülünü kazandığında, ikinci Nobel ödülünü alan ilk bilim insanı oldu.
- E) ikinci Nobel ödülünü alan ilk bilim insanı unvanı, Marie Curie'ye 1911'de polonyum ve radyumun keşfi için kimyada Nobel ödülü almasıyla verildi.

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

39. 1985'te İngiliz araştırmacılar, Antarktika'nın üzerindeki ozon tabakasının yıllardır her bahar hızla azaldığını ancak bir sonraki kış normale döndüğünü açıkladılar.

- A) In 1985, British researchers reported that the ozone layer over the Antarctic had, for years, decreased rapidly each spring but had returned to normal the following winter.
B) In a report by British researchers that appeared in 1985, it is pointed out that the ozone layer over the Antarctic had, on several occasions, decreased drastically in the spring but returned to normal in the following winter.
C) British research team reported in 1985 that the ozone layer over the Antarctic had, over a period of years, decreased to an alarming extent each spring but had returned to normal the following winter.
D) British researchers in 1985 established the fact that the ozone layer over the Antarctic had thinned out alarmingly each spring for a number of years, but returned to normal each winter.
E) By 1985 British researchers had confirmed the fact that the ozone layer over the Antarctic had decreased suddenly each spring, over several successive years, but returned to normal each winter.

40. Altın-gümüş alaşımları saf altından daha sert olmakla kalmayıp aynı zamanda daha düşük derecelerde erir ve bu yüzden daha kolay şekil alır.

- A) Gold-silver alloys are not only preferable to pure gold on account of their hardness but also because they are easy to cast as they melt at lower temperatures.
B) Since gold-silver alloys are much harder than pure gold and melt at lower temperatures, they are easier to cast.
C) Gold-silver alloys, which are harder than pure gold, are easier to cast as they melt at lower temperatures.
D) It is easy to cast gold-silver alloys as, unlike; pure gold, they are hard and melt at low temperatures.
E) Gold-silver alloys are not only harder than pure gold, but they also melt at lower temperatures and are therefore easier to cast

41. Yerkabuğunun derinliklerinde oluşan magma yükselir ve daha önceki şiddetli bir fıçırma sırasında oluşan mevcut bir çöküntünün altındaki haznede toplanır.

- A) During really violent eruptions, calderas are formed and magma generated in the depths of Earth's mantle, rises and accumulates in reservoirs under them.
B) The magma that has been generated deep in the Earth's mantle rises and collects in a reservoir immediately below an existing caldera formed during earlier eruptions.
C) Once the magma generated below the Earth's mantle has risen, it accumulates in a reservoir just below a caldera formed during an even more violent eruption.
D) Magma generated deep in the Earth's mantle rises and accumulates in a reservoir beneath an existing caldera formed during a previous violent eruption.
E) Once it has been generated deep in the Earth's mantle, the magma rises and accumulates in a reservoir immediately below an existing caldera formed during a violent eruption.

42. – 46. sorularda cümleler sırasıyla okunduğunda parçanın anlam bütünlüğünü bozan cümleyi bulunuz.

42. For decades, earthquake experts had hopes of being able to predict the time and place of the world's next disastrous shock. ----. So complex indeed, that they concluded that the planet's largest tremors are isolated, random and utterly unpredictable.

- A) By the early 1990s, however, scientists began to realize that the behaviour of quake-prone faults was extremely complex
B) The stress-triggering hypothesis continues to gain credibility, and offers hope of being able to predict quakes accurately
C) Faults are unexpectedly responsive to subtle stresses they acquire as neighbouring faults shake
D) Once more, there is hope that more accurate warnings will be forthcoming
E) Historical records confirm that about one-third of the world's recorded tremors cluster in time and space

43. The author of the book is an assistant professor of physics and an amateur icehockey player. ----. He supports his idea with reference to thermodynamics, molecular physics, fluid dynamics and the physics of collisions, and presents his material clearly and convincingly.

- A) It's an informative study and certainly original
- B) He claims that ice-hockey involves more physics than any other sport
- C) He wonders whether shooting, like skating, makes use of a great deal of mechanics
- D) Air drag and ice friction are fully discussed
- E) There is no advice on how to avoid collisions

44. Cappadocia's extraordinary landscape is partly the result of erosion by water, wind and changes in temperature. ----. In winter, extreme temperature changes cause the rocks to expand and contract and eventually to disintegrate.

- A) Volcanic activity in central Anatolia is a product of the region's position
- B) Around 30 million years ago, erupting volcanoes blanketed the region with ash
- C) The region is famous for its bewitching natural formations
- D) Over time, this tuff was worn away, creating distinctive formations
- E) Rainfall and rivers wear down the tuff and, like the wind, carry away loose materials

45. Polish is made of wax. ----. And, each of them has its own melting point. The low-melting-point wax makes it easier to apply the polish, whereas the high-melting-point wax helps the polish to stay in place.

- A) But, unlike candles, which are also made of wax, it is a blend of different waxes
- B) Nobody seems to have done any systematic research into the chemical components of wax
- C) On a microscopic level, the surface you are polishing is rough, and when you apply the polish, it looks dull at first
- D) This is the same basic concept as that of a steamroller on hot tarmac
- E) Any oil in the boot has to be burned off and then layers of polish and beeswax are applied with a very soft cloth

46. Scientists generally agree that there are 35 to 40 species of seahorse in the world. Though they resemble miniature horses, they actually belong to the fish family "syngnathidae". They are monogamous. ----. This unique trait has led people to believe, for some strange reason, that seahorses have curative powers, and 20 million seahorses are exported annually for use in traditional Chinese medicines.

- A) The Victorians named seahorses "hippocampus", which means "horse caterpillar"
- B) Intriguingly, they are the only animal in which the male becomes pregnant and gives birth to live young
- C) Consequently, fishermen have reported a minimum 50 per cent decline in wild stocks of seahorses in the past five years
- D) Their genetic structure has not yet been identified
- E) The distribution of spiny and short-snouted seahorses is thought to extend from Britain across the Mediterranean to the Black Sea

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

47.

Michael: - **How much freedom do you think the architect should have in the design of a building?**

Dan: - **Well, I'm all for user participation in the planning and design process.**

Michael: - ----

Dan: - **Or in a factory or a laboratory.**

- A) It's the contractor that he really needs to work with!
- B) Yes, of course. But some buildings, office blocks for instance, are quite straightforward.
- C) So am I. The architect doesn't know what's needed, for instance, in a school.
- D) The quality of the materials used is equally important.
- E) Yes; but within reason. The architect can't please everyone.

48.

George: - **Brian is working very hard to discover a new species of mammal.**

Patrick: - **Good luck to him! But he's not likely to do so.**

George: - ----

Patrick: - **Because nearly 80% of the mammal species known today were discovered before 1900.**

- A) Why do you say that?
- B) But he's good at his job and very determined.
- C) I suppose not. Even though there must be plenty of unknown species.
- D) Stop being pessimistic! It shouldn't be so difficult, should it?
- E) Given a bit of luck, he could.

49.

Harry: - **Have you understood how they've managed to make copper that is both strong and pliable?**

Lee: - ----

Harry: - **But doesn't that mean the copper is terribly brittle, and so breaks easily?**

Lee: - **It would. But that's not the end of the process. About a quarter of the grains are then allowed to grow coarse thus making the copper pliable.**

- A) If they could, it would be excellent for various biomedical devices.
- B) No. But by all accounts it seems they have managed to do so.
- C) I only know they start by cooling the copper down with liquid nitrogen.
- D) In theory, yes. They're creating an ultra fine grain structure for strength.
- E) Small grains make for strength; large ones for pliability.

50.

Reg: - **Why are police so keen to collect bullets after a shooting incident?**

Matthew: - ----

Reg: - **Really? How do they do that?**

Matthew: - **Every gun marks the bullets that pass through it in an individual manner, so they can be sure about which bullets come from which gun.**

- A) There is a spiral of raised lands and shallow, grooves along the barrel.
- B) The diameter of a bullet tells one quite a lot.
- C) There are standard models and longer than standard.
- D) They used a comparison microscope to inspect, side by side, marks left on bullets and cartridges.
- E) They aid firearms identification.

51.

Andy: - **In the wild, monkeys spend something like 90% of the day in search of food.**

Clare: - **Yes, I can believe that. But what are you trying to tell me?**

Andy: - ----

Clare: - **Yes, indeed. I'd never thought about that. It must make life very dull.**

- A) Think how bored they must be in a zoo where food appears at regular intervals.
- B) Do you think animals enjoy hunting for their food?
- C) Animals, like people, need to eat a varied diet.
- D) In some of the big zoos they actually hide the food and the animals go in search of it.
- E) The search for food means the animals get plenty of exercise and it keeps them happily occupied.

52. – 56. sorularda, boş bırakılan yere, parçanın anlam bütünlüğünü sağlamak için getirilebilecek cümleyi bulunuz.

52. (I) IRAS was one of the most productive satellites in the history of astronomy. (II) Though functional for only 10 months in 1983, the observations it performed continue to be a major source of information for astronomers. (III) The satellite undertook a complete survey of the sky in mid- and far-infrared light, with wavelengths between 12 and 100 microns. (IV) The spectrum also reveals the geometry of the dust. (V) This part of the spectrum is difficult or impossible to detect from the ground so the survey was of immense importance.

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

53. (I) Australia is home to marsupials like kangaroos and koalas. (II) The ability to generate body heat is what enables mammals to survive in so many different climates. (III) These are animals that give birth to underdeveloped young who crawl into the mother's pouch. (IV) There they develop further until they can live in the outside world. (V) The way of rearing the babies is unusual but they are fed in the usual way, on mother's milk.

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

54. (I) Egypt is restricted in the amount of water it is allowed to take each year from the Nile. **(II)** Although its population is increasing, the amount of available water remains the same. **(III)** Wealthy investors and poor farmers alike used the water to grow crops. **(IV)** Moreover, much water is lost through evaporation from the surface of Lake Nasser and from old, inefficient irrigation systems, **(V)** So Egypt is building a giant canal which will take water from Lake Nasser's overflow basin and carry it to new irrigation systems in the desert.

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

55. (I) Amphibians are in decline, and the causes remain controversial. **(II)** Among the earliest suspected culprits were pesticides. **(III)** Only a very few reports, however, have linked amphibian declines to pesticides in a convincing manner. **(IV)** Even DDT's role in wildlife problems took years to decipher. **(V)** And even in those few studies, the pesticide concentrations appear to be too low to kill amphibians.

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

56. (I) The Museum of the History of Science occupies the building that was originally the Ashmolean Museum. **(II)** Here, from the 17th century onwards, there was a programme of experimentation and discovery. **(III)** Recent building work at the Museum has unearthed insights into the nature of this work and afforded new items for display. **(IV)** These range from scientific apparatus to fragments of everyday life such as specimen labels. **(V)** Actually, in some science museums one can even watch scientists at work on their experiments.

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

57.– 60. soruları aşağıdaki parçaya göre cevaplayınız.

There have been stories in the press about mobile phones sparking explosions at petrol stations. But according to the GSM Association, a worldwide body for mobile phone makers, none of these reports has ever been traced back to a real event. But there is a real safety concern, and it's not about radio emissions from mobiles as you might have thought. Instead, the GSM Association says there is a theoretical risk that if a hand-held phone is dropped and the battery separates from the phone, it could cause a spark across the contacts. This is equally true of other battery-powered devices such as torches, Walkmans and CD players. But it's far more likely that mobile phones cause a hazard at petrol stations by distracting their users while they're operating a petrol pump.

57. We understand from the passage that explosions at petrol stations ----.

- A) are extremely rare since so many precautions are taken to prevent them
- B) have always been accurately reported by the press
- C) have never been precisely traced to mobile phones
- D) are so rare that no further precautions are considered necessary
- E) are theoretically unlikely, due to the introduction of serious safety measures

58. According to the passage, a mobile phone ----.

- A) could be the cause of an explosion at a petrol station, but not on account of its radio emissions
- B) has to bear the stamp of the GSM Association before it goes into use
- C) occasionally emits sparks that are normally harmless, but not on all occasions
- D) is less likely to cause an explosion than a CD player or a torch is
- E) should be switched off on arrival at a petrol station

59. It is pointed out in the passage that any batterypowered device ----.

- A) is sure to emit sparks if dropped
- B) is potentially dangerous at a petrol station
- C) that is dropped will be permanently damaged
- D) has to be approved by the GSM Association
- E) can distract a person's attention and cause accidents

60. It is clear from the passage that much adverse publicity ----.

- A) in the press concerning mobile phone users has had far-reaching effects
- B) has undermined the authority of the GSM Association
- C) has reduced the popularity of all battery-powered devices
- D) has been aimed at mobile phones for causing explosions at petrol stations
- E) of petrol stations, on account of their lack of safety precautions, has appeared in the press

61. – 65. soruları aşağıdaki parçaya göre cevaplayınız.

All multi-engined aircraft are designed to keep flying in the event of engine failure. Losing thrust from one "side of an aircraft unbalances it and causes the nose of the aircraft to turn in the direction of the failed engine. Aircraft have a vertical stabilizer (the upright at the back) to keep the aircraft's nose into the wind, with a rudder attached to it for fine tuning. Moving the rudder into the airflow creates a sideways force, which turns the aircraft around its vertical axis. When this is applied in the direction of the failed engine, the force created by the rudder will counteract the turn induced by the uneven engine thrust. The vertical stabilizer and rudder are sized to control the uneven thrust caused by an engine failure at the most demanding limits or the flight envelope, as they must be capable of generating powerful turning forces.

61. According to the passage, when one of the engines in a multi-engined aircraft falls, ----.

- A) the other engines enable the aircraft to continue on safely
- B) there is apparently no change in the functioning of the aircraft
- C) the thrust remains unchanged
- D) the aircraft immediately begins to tilt upwards
- E) the other engines begin to generate more power

62. We understand from the passage that, in the case of an engine failure, ----.

- A) the direction of the aircraft cannot be controlled
- B) the balance of the aircraft is maintained through the vertical stabilizer and the rudder
- C) the resulting sideways force can only be controlled by the stabilizer
- D) the nose of the aircraft is pushed down by the wind
- E) the function of stabilizer and rudder are reduced

63. We understand from the passage that the normal function of the rudder in an aircraft is to ----.

- A) counteract engine thrust
- B) balance the thrust generated by all the engines
- C) control the airflow as it passes the stabilizer
- D) lift it and keep it in the air
- E) work with the stabilizer to control the direction of the aircraft

64. It's clear from the passage that, in the event of an engine failure, ----.

- A) rudder and stabilizer will automatically separate
- B) there is no way in which an aircraft can be controlled
- C) a multi-engined aircraft remains unaffected
- D) the stabilizer and rudder are used to counterbalance the unequal thrust that results
- E) the aircraft starts to turn away from the failed engine and move in ever-widening circles

65. – 68. soruları aşağıdaki parçaya göre cevaplayınız.

Gamma-ray bursts (GRBs) are among the most intense areas of research in high-energy astrophysics, and they represent the largest known explosions in the universe. Last year, NASA launched the Swift satellite to rapidly locate and observe GRBs and their afterglows at x-ray, ultraviolet and optical wavelengths. These afterglow observations are particularly important for the understanding of these enormous explosions that occur at cosmological distances near the edge of the observable universe. Amateur astronomers, due to their large numbers, their ability to respond quickly to the randomly located GRBs and the availability of highly sensitive CCD cameras, have been able to provide important, early data on the optical afterglows of GRBs in the past few years. Indeed, at least one optical afterglow from a GRB was discovered by an amateur astronomer. Observations can be done with even a modest-size telescope, provided the observations are made quickly enough.

65. It is clear from the passage that our knowledge of GRBs ----.

- A) is partly the result of the work of nonprofessional astronomers
- B) has progressed very little over the past few years
- C) is confined to their positions in the universe
- D) has been hindered by the enormous distances involved
- E) depends solely on x-ray analysis of their nature

66. It is understood from the passage that information concerning GRB afterglows ----.

- A) can be used to measure cosmological distances
- B) can be obtained and recorded by readily available optical instruments
- C) is rarely obtained from the satellite Swift
- D) is of marginal importance to high energy astrophysicists
- E) can only be obtained by means of specially designed satellites

67. We understand from the passage that GRBs ----.

- A) have not aroused much scientific interest except among amateur astronomers
- B) have only been discovered by NASA in recent years
- C) are explosions that happen in the farthest regions of the known universe
- D) produce afterglows that can only be observed on a single wavelength
- E) leave behind afterglows that last a very long time

68. According to the passage, we can gain some understanding of the nature of GRBs ----.

- A) so long as amateur astronomers are willing to share their data
- B) only with the assistance of the Swift satellite
- C) once the Swift satellite starts sending data back to earth
- D) even by means of ordinary cameras
- E) through a close observation of their afterglows

69. – 72. soruları aşağıdaki parçaya göre cevaplayınız.

Formerly, potatoes were grown on unirrigated land, which often meant they were small and probably misshapen. Now, however, farmers routinely irrigate their lands to produce products acceptable to the fast-food industry for its French fries. But in Minnesota the groundwater that farmers pump for potatoes has turned out to be the same water that helps to sustain the Straight River, a major trout fishery. Even modest pumping for potatoes, a federal study eventually concluded, had the potential to reduce the river's flow by one third during the irrigation season, with adverse impact on the brown trout. For now, the trout are not in danger, but that could change if Minnesota were to approve applications from farmers still eager to see potato planting and irrigation widen.

69. According to the passage, small, badly-shaped potatoes ----.

- A) bring in very little money
- B) make excellent French fries
- C) are often the result of inadequate irrigation
- D) are a poor strain of potato that is being replaced by better strains
- E) have led to a drop in the sale of French fries

70. It is clear from the passage that the fast-food industry ----.

- A) is keen to help solve environmental problems
- B) has made large, well-shaped potatoes the ideal
- C) is not in the least interested in the size of the potatoes it buys
- D) plays a major role in the development of irrigation systems
- E) agreed to buy smaller potatoes when it became clear that irrigation systems were a threat to the brown trout

71. We understand from the passage that the groundwater Minnesota farmers use for irrigation purposes ----.

- A) could significantly reduce the level of the Straight River during the irrigation season
- B) has reduced the numbers of fish in the Straight River by one third
- C) is quickly replaced once the rainy season commences
- D) has had no obvious effect on the environment
- E) is no longer available for irrigation purposes

72. It is implied in the passage that Minnesota farmers ----.

- A) have agreed to stop irrigating their fields
- B) might resist efforts to cut down on irrigation
- C) will change to crops that require less water than potatoes
- D) have done their best to save the trout fishery of the Straight River
- E) have failed to give the fast-food companies the type of potato they want

73. – 76. soruları aşağıdaki parçaya göre cevaplayınız.

If engineers waited for the development of scientific knowledge to use and organize into technological achievements, ours would be a very different world from what we know. In engineering, it is not so much science as it is ingenuity that is applied to solve problems and satisfy needs and wants. If this were not so, the steam engine would never have been invented in the absence of thermodynamics. The Wright Brothers would not have flown since they had no aerodynamics textbooks. The astronauts would never have landed on the Moon nor the rovers on Mars without firm geological knowledge of their surfaces. Rather than following scientific theories and discoveries, engineering leads them. Operating steam engines prompted the development of thermodynamics, actual powered flight drove aerodynamics, and Moon and Mars missions brought back samples and sent back data that led to increased scientific knowledge about those extraterrestrial bodies.

73. The main point made in this passage is that ----.

- A) engineers rely on theoretical science for the solution of technical problems
- B) theoretical science and technological achievement have always gone hand-in-hand
- C) engineering is very often a step ahead of the pure sciences
- D) all scientists show equal ingenuity
- E) the steam engine was the greatest invention of all time

74. As it is pointed out in the passage, it was only after the steam engine had come into being that ----.

- A) anyone could envisage traveling into space
- B) people understood what engineering could achieve
- C) people began to value scientific theory
- D) aerodynamics attracted any serious attention
- E) the science of thermodynamics really began to develop

75. We understand from the passage that the technological achievements of engineers are ----.

- A) frequently the result of inventiveness and creativity
- B) based on a profound knowledge of several scientific fields
- C) best exemplified in the missions to Mars
- D) often disappointing as they aim to achieve too much
- E) no longer as impressive as formerly

76. One point made in the passage is that inventions ----.

- A) relate more to physics than to chemistry
- B) are made in response to the recognition of a need
- C) are almost always based on some degree of scientific knowledge
- D) are valued more than new scientific theories
- E) do not usually relate to our ordinary everyday life

77. – 80. soruları aşağıdaki parçaya göre cevaplayınız.

The people of Blaenavon in South Wales were understandably worried. The opencast mine only 1 kilometer north of their town had served the great Blaenavon ironworks when they opened in the late 18th century. But it had been lying derelict for decades and now British Coal Opencast wanted to mine the remaining 320,000 tonnes of coal. At opencast sites, for every tonne of coal recovered, up to 40 tonnes of rock has to be extracted. So, in the case of Blaenavon, unless precautionary measures were taken, the air in the town was going to be thick with dust. Precautionary measures were taken, based on well-tried techniques. For instance, tall spray masts were erected around dumps to provide a curtain of rain to entrap and wash out dust from the air, and the wheels of every vehicle leaving the site were washed. Further, reclaimed areas were planted with trees and grass from day one. With these and other measures this turned out to be a success story for all concerned. In fact, during the entire mining and reclamation project not a single complaint about nuisance dust was made to the local authority.

77. It is clear from the passage that the events described in the passage amount to a "success story" ----.

- A) even though very little coal was mined
- B) as new methods of dust control were developed and tried out
- C) because the coal was mined without the nearby town suffering from dust
- D) since no one regretted the closing-down of the mine
- E) though the task of controlling the dust had proved expensive and time-consuming

78. We learn from the passage that, with opencast mining, ----.

- A) dust control is almost impossible
- B) the coal is generally of a very poor quality
- C) miners work in better conditions than in underground mines
- D) once the coal has been extracted, grass and trees have to be planted immediately
- E) a huge amount of rock has to be removed in order to get a relatively small amount of coal

79. According to the passage, the opencast mine near Blaenavon ----.

- A) had always given employment to the men in the town
- B) had been in constant use since the late 18th century
- C) had never been mined economically
- D) had been neglected for years and fallen into a state of decay
- E) filled the town with dust even when coal was not being mined there

80. It is clear from the passage that the measures employed at the site of the mine to control dust ----.

- A) relied, to a large extent, on the use of water
- B) were not adequate enough
- C) were just ordinary, routine measures
- D) were devised and implemented by the people in the local town
- E) were set up in a careless half-hearted manner

**TEST BİTTİ.
CEVAPLARINIZI KONTROL EDİNİZ.**

CEVAP ANAHTARI

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