

ÜDS FEN - Aralık 2001

1.-21. sorularda, cümlede boş bırakılan yere uygun düşen kelime yada ifadeyi bulunuz.

1. Acetic acid is used as a food ---- and flavouring material, and also in the manufacture of white lead.

- A) preservative B) decay C) absorption
D) solution E) process

2. Atoms are ---- of electrons and a nucleus containing protons and neutrons.

- A) joined B) linked C) composed
D) kept E) completed

3. Visibility depends ---- upon the concentration of water or dust particles in the air.

- A) rapidly B) obstinately C) instantly
D) suitably E) chiefly

4. This magazine is designed to help satellite equipment buyers make more ---- purchasing decisions and keep ahead of new developments.

- A) representative B) obscure C) foreseen
D) informed E) indifferent

5. Science requires the testing of its ideas or theories to see if its predictions are ---- by experiment.

- A) made up B) borne out C) closed in
D) put off E) sorted out

6. The subject of the statistics is ---- the calculation of the forces acting on and within structures that are in equilibrium.

- A) taken care of B) turned up C) kept off
D) given rise to E) concerned with

7. Radioactivity was discovered in 1896 by Becquerel, who noticed that salts containing uranium ---- radiations.

- A) got off B) held up C) sent off
D) came up with E) turned away

8. ---- many diverse animal forms exist ---- exceptions can be found to almost any definition of an animal.

- A) So / as B) As / as
C) Whether / so D) So / that
E) Neither / nor

9. Products ---- diverse ---- rubber, tobacco, coffee, chocolate and aromatic oils for perfumes come from flowering plants.

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

10. Heat is transferred from ---- object ---- by conduction, convection and radiation.

- A) either / to other B) each / from the rest
C) any / with another D) some / through others
E) one / to another

11. Pile foundations are costly and normally economic only ---- commercial structures on valuable sites.

- A) in the manner of B) in the case of
C) in place of D) in fulfilment of
E) in accordance with

12. The South African government has committed a further sum of money to the Southern African Large Telescope (SLT), ---- enables the construction of this giant telescope to commence next year.

- A) which B) thus C) by which
D) whose E) for whom

13. The writers of this article seem to assume that nuclear plants conform with safety requirements ---- the fact that violations are constantly being reported.

- A) in case B) although C) against
D) concerning E) despite

14. Some scientists ---- us that the thermal blanket around the globe ---- the average temperature of the earth to rise.

- A) were warning / has caused
B) have been warning / was causing
C) have warned / may cause
D) had warned / caused
E) warn / will have caused

15. A theory ---- only when a hypothesis ---- by consistent results from many observations or experiment.

- A) may have been developed / was being supported
B) can be developed / has been supported
C) will be developed / was supported
D) has been developed / had been supported
E) had been developed / might have been supported

16. If transport costs ---- into consideration at the outset, the plant ---- far from its present site!

- A) will have taken / are being built
B) were taken / had been built
C) have been taken / have been built
D) were being taken / will be built
E) had been taken / would have been built

17. The first laser ---- in 1960 by Maiman almost half a century after the publication in 1916 of Einstein's theory of radiation which ---- the possibility of laser operation.

- A) has been demonstrated / had shown
B) had been demonstrated / showed
C) was demonstrated / showed
D) demonstrates / was shown
E) was being demonstrated / shows

18. The advent of nuclear power ---- the trend to use water-power on a large scale, and hydroelectric installations ---- in all industrial countries with power potential.

- A) has not halted / are being built
- B) did not halt / are built
- C) would not halt / will be built
- D) will not halt / were being built
- E) had not halted / would be built

19. Researchers disagree ---- whether a large ocean ever existed on Mars, but one thing is certain: Martian geology is turning ---- to be strange and complex.

- A) of / round
- B) in / over
- C) for / up
- D) on / out
- E) about / in

20. Species become endangered and even extinct ---- a variety of reasons, many of which are related ---- human activities.

- A) within / of
- B) for / to
- C) with / for
- D) in / with
- E) over / through

21. The advance of the steel industry has been marked ---- a progressive increase in the size and complexity of the plant used and a fall ---- labour costs.

- A) off / through
- B) with / from
- C) up / with
- D) by / in
- E) in / of

22.-31. sorularda, verilen cümleyi uygun şekilde tamamlayan ifadeyi bulunuz.

22. In many industrial processes, human operators can be replaced by control systems ----.

- A) which can be used, for instance, to monitor and control pressure, temperature and motor speed
- B) that the error sensor is a basic component
- C) that they have the ability to control physical variables
- D) by whom the difference between the actual and desired value can be reduced to zero
- E) which had been capable of fulfilling a number of functions

23. The old system of flood irrigation has fallen into disrepute ----.

- A) unless short canals could have enabled the compartments to be filled in an orderly fashion
- B) though the flood waters has been controlled to cover so much land
- C) as the height of the flood was variable so was the area flooded
- D) after several weeks the water would be drained back into the river
- E) because it only produces one crop a year

24. Insect-eating plants have devices ----.

- A) from which stickiness an insect can never make its escape
- B) so that they are able to live in most parts of the world but chiefly in warm regions
- C) if their prey is to be enticed into a trap
- D) which enable them to catch insects and digest them with the aid of enzymes
- E) of which the pitcher plant that produces pepsin is an example

25. For a small planet, the Earth is extremely heavy ----.

- A) whether the liquid iron creates a powerful magnetic field
- B) that two-thirds of it are covered with ocean
- C) since its iron core is very large
- D) that the atmosphere screens the sun's radiation
- E) if the atmosphere were not rich with oxygen

26. Helium, the lightest of the inert gases, was discovered in 1868 ----.

- A) until its importance was recognised in scientific research at low temperature
- B) as liquid helium has many remarkable qualities which are only imperfectly understood
- C) when spectrographic investigations disclosed an unknown yellow line in the chromospheres of the sun
- D) before studies into atomic structure would be realised
- E) though two of its stable isotopes exist as liquids right down to the absolute zero

27. As soon as slender steel column began to replace massive piers in building construction ----.

- A) inflammable materials would not be used again in high-rise buildings
- B) a new school of architecture could never have developed without the challenge of these and other new building materials
- C) this new group of promising architects had as yet attracted very little attention
- D) new conceptions of both the practical and aesthetic use of space came into being
- E) their ideas indicated a rejection of machine production

28. ----, where the gas is ionize and, in consequence, electrically conducting.

- A) In 1924, direct measurements of the height and density of the ionosphere were first made in Britain
- B) The ionization is almost entirely produced by ultraviolet light and X-radiation
- C) The ionization density had already increased to maximum at a height of around 150 miles
- D) In 1880, the existence of a conducting layer in the high atmosphere had not been postulated
- E) The ionosphere is the upper region of the earth's atmosphere

29. ----, we cannot infer from this that extraterrestrial civilisations do not exist.

- A) Though researches have made no positive detections of extraterrestrial signals
- B) Until radio transmissions from other civilisations were picked up
- C) Since a number of sophisticated searches are presently underway at the Radio Astronomy Observatory
- D) Whenever the possibility of extraterrestrial civilisations comes to the fore
- E) After they began to search for extraterrestrial civilisations by means of radio astronomy

30. Until science develops ways of predicting natural disasters earlier and more accurately, ----.

- A) prevention, unfortunately, usually eludes us
- B) flooding regularly takes a heavy toll of human life
- C) modern technology cannot shield us from the destructive force of a hurricane
- D) they will continue to cause untold suffering throughout the world
- E) the lethal release of natural carbon dioxide is entirely preventable

31. ---- when heat resistant materials are required.

- A) Engineers often use ceramics
- B) There are two main types of metal; ferrous and nonferrous
- C) With the addition of chromium, the steel's ability to resist corrosion was increased
- D) Both bronze and brass have been used ornamentally
- E) Cutting tools are made from high-speed steels

32.-36. sorularda, verilen İngilizce cümlenin Türkçe dengini bulunuz.

32. Asteroids are relatively small objects, which move in orbits mainly between the orbits of Mars and Jupiter.

- A) Asteroitler, yörüngeleri genellikle Mars ve Jüpiter'in yörüngeleri arasına sığacak kadar küçük olan nesnelere dir.
- B) Asteroitler, genellikle Mars ve Jüpiter'in yörüngeleri arasında yer alan yörüngelerde hareket eden nispeten küçük nesnelere dir.
- C) Oldukça küçük nesnelere olan asteroitler, çoğunlukla Mars ve Jüpiter arasındaki yörüngelerde hareket ederler.
- D) Nispeten küçük nesnelere olan asteroitlerin çoğunun yörüngesi Mars ve Jüpiter'in yörüngeleri arasındadır.
- E) Sürekli olarak Mars ve Jüpiter'in yörüngeleri arasındaki boşlukta hareket eden asteroitler, aslında son derece küçük nesnelere dir.

33. One of the important consequences of the theory of relativity is that time is no longer regarded as an absolute quantity.

- A) Görecelik kuramı, zamanın artık mutlak bir nicelik olarak kabul edilmemesi gerektiğini kesin olarak göstermektedir.
- B) Görecelik kuramının en önemli iddiası, zamanın tartışmasız bir nicelik olma özelliğini kaybetmesidir.
- C) Görecelik kuramının önemli sonuçlarından biri, zamanın artık mutlak bir nicelik olarak görülmemesidir.
- D) Zamanın artık mutlak niceliklerden biri olarak kabul edilmemesi görecelik kuramıyla ortaya çıkan önemli gelişmeler arasındadır.
- E) Görecelik kuramının önemli sonuçları, zamanın tartışmasız bir nicelik sayılmamasını gerektirmektedir.

34. Acid rain can mark fruit and leaves, and adversely affect soil, but its main effect is on the ecosystems especially in regions with thin soils and granite rocks.

- A) Asit yağmuru meyve ve yapraklarda leke yapabilir ve toprağa çok zarar verebilir, ancak asıl etkisi, ince toprak ve granit kayalardan oluşan bölgelerin ekosistemleri üzerinde gözlemlenebilir.
- B) Meyve ve yapraklarda leke yapan asit yağmuru, asıl etkisini toprakta, özellikle de ince toprak ve granit kaya tabakalar ile kaplı bölgelerin ekosistemleri üzerinde gösterir.
- C) Toprakta önemli tahribat yapan ve meyvelerde yapraklar üzerinde leke bırakan asit yağmuru, özellikle, ince toprak ve granit kayalarla kaplı bölgelerin ekosistemlerini etkiler.
- D) Asıl etkisini ince topraklı ve granit kayalı bölgelerin ekosistemleri üzerinde gösteren asit yağmuru, meyve ve yapraklarda leke yapmakla kalmaz, toprakta da büyük tahribata yol açar.
- E) Asit yağmuru meyve ve yapraklarda leke yapabilir ve toprağı olumsuz olarak etkileyebilir, ancak asıl etkisi, özellikle ince topraklı ve granit kayalı bölgelerdeki ekosistemler üzerindedir.

35. The diagnostic use of ultrasound in medicine is a complicated and very interesting application of physical principles.

- A) Fizik ilkelerinin oldukça karmaşık ve çok ilginç bir uygulaması olan ultrason, tıpta tanı amacıyla kullanılmaktadır.
- B) Ultrasonun tıpta tanı için kullanımı, fizik ilkelerinin karmaşık ve çok ilginç bir uygulamasıdır.
- C) Tıpta tanı amacıyla kullanılan ultrason, karmaşık fizik ilkelerinin oldukça ilginç bir uygulamasıdır.
- D) Karmaşık fizik ilkelerinin tıptaki ilginç uygulamalarından biri de tanı için kullanılan ultrasondur.
- E) Oldukça karmaşık ve son derece ilginç fizik ilkelerini uygulayan ultrason, tıpta teşhis aracı olarak kullanılır.

36. Many plants, particularly those in arid regions, possess storage roots adapted to store water.

- A) Birçok bitki özellikle de kurak bölgelerdekiler, su depolamaya uyum sağlamış depo köklere sahiptir.
- B) Özellikle kurak bölgelerde bulunan pek çok bitkinin, su depolamaya uygun kökleri vardır.
- C) Su depolamaya uygun köklere sahip olan bitkilerin çoğu kurak bölgelerde bulunur.
- D) Kurak bölgelerdeki bitkilerin çoğu, su depolamaya uyum sağlamış yapılara, özellikle de depo köklere sahiptir.
- E) Birçok bitkinin, özellikle de kurak bölgedekilerin kökleri, aynı zamanda birer su deposu görevi görebilir.

37. - 41. sorularda, verilen Türkçe cümlenin anlamına en yakın İngilizce cümleyi bulunuz.

37. Birinci Dünya Savaşının sonlarına doğru, bombardıman uçakları daha ihtisaslaşmış duruma gelmekteydi ve hafif ve ağır olmak üzere iki alt sınıfa ayrılmıştı.

- A) The subclasses, heavy and light, were only introduced for bombing aircraft towards the end of World War I when they had become more specialized.
- B) As World War I was drawing to a close, bombing aircraft had become so specialized that they had to be divided into two new subclasses, heavy and light.
- C) Bombing aircraft had become so much more specialized by the end of World War I that two new subclasses were recognized, light and heavy.
- D) Towards the end of World War I, bombing aircraft were becoming more specialized and were divided into two subclasses, light and heavy.
- E) As bombing aircraft were becoming more specialized towards the end of World War I, they had to be divided into two subclasses, heavy and light.

38. Kuş davranışının en büyüleyici yanlarından biri, pekçok türün yaptığı yıllık göçtür.

- A) Bird behaviour is quite fascinating, especially the annual migration of many of the species.
- B) One of the most fascinating aspects of bird behaviour is the annual migration made by many species.
- C) The annual migration of many species of birds is just one of the fascinating aspects of their behaviour.
- D) Many species of birds have fascinating behaviour patterns, particularly as regards annual migration.
- E) In relation to their annual migration, the behaviour patterns of many bird species are quite fascinating.

39. Sünger çok hücreli olmasına karşın, hücreleri birbirine gevşek bir şekilde bağlıdır ve belirgin doku oluşturmaz.

- A) The cells of the multicellular sponge are so loosely connected that they do not form definite tissues.
- B) The sponge is obviously multicellular, but the cells are clearly too loosely connected to form tissues.
- C) Although the sponge is multicellular, its cells are loosely connected and do not form specific tissues.
- D) Because the cells of the multicellular sponge are loosely connected, they do not form specific tissues.
- E) The tissues of the multicellular sponge definitely evolve from the loosely connected cells.

40. Hava taşımacılığı, temelde ulusal itibar, ticaret ve savunma nedenleriyle, ilk günlerinden beri hükümetler için yakın ilgi konusu olmuştur.

- A) Since its earliest days, air transport has been a matter of close concern to governments, primarily for reasons of national prestige trade and defence.
- B) Right from the beginning, governments have recognized the importance of air transport largely for reasons of national prestige, trade and defence.
- C) Even at the start, air transport has been closely supported by governments as it affects a country's prestige, trade and defence.
- D) Governments were immediately aware of the importance of air transport largely on account of its affect on a country's prestige trade and security.
- E) It is primarily because air transport can affect a country's prestige, trade and security that governments everywhere have started to treat it seriously.

41. Çöl toprağı, bitki örtüsünün seyrek oluşunun bir sonucu olarak organik madde bakımından fakirdir; fakat buna karşın, çoğu kez mineral bakımından zengindir.

- A) The lack of humus in desert soil, which is the result of the meagre vegetation, is offset by the rich mineral deposits.
- B) Desert soil is poor in organic material because there is little vegetation, but there is usually an abundance of minerals.
- C) Owing to the lack of vegetation, desert soil has virtually no humus, but it does have vast mineral deposits.
- D) As a result of sparse vegetation, desert soil is poor in organic material but, nevertheless, it is often rich in minerals.
- E) Though desert soil has rich mineral deposits, the meagre vegetation means it is completely lacking in organic material.

42.-46. sorularda karşılıklı konuşmanın boş bırakılan kısmında söylenmiş olabilecek sözü bulunuz.

42. Mark: - **The new developments in advertising techniques are really very interesting.**

Peter: - ----

Mark: - **Well, here's one of the big petrol companies flaunting its commitment to environmental considerations.**

Peter: - **Yes, that certainly is a new approach.**

- A) Give me an example.
- B) I make a point of never believing an advertisement.
- C) The techniques may have changed, but have the aims?
- D) The aim of every advertisement is to deceive!
- E) Perhaps. But how much are they costing us?

43. Chris: - **You know I'd love to spend a holiday in the Arctic.**

Brian: - ----

Chris: - **No, certainly not I'd go in the summer season. And I'm sure there would be lots to see.**

Brian: - **True. But I prefer to see it all on the TV.**

- A) Actually. I would, too. If only to see the flora.
- B) Whatever for? Just to be doing something different?
- C) So would I. We see the polar bears and the seals on TV, but it would be marvellous to see them in reality.
- D) Well, yes if it weren't for the cold!
- E) I couldn't afford it, And I'll be surprised if you can

44. James: - **What do you know about the uses of hydrogen peroxide?**

Gary: - **It's a bleach, isn't it? And rather a harsh one at that.**

James: - ----

Gary: - **Oh! I certainly didn't know all that!**

- A) That's right. It is incompatible with most common metals and so is usually stored in aluminium containers.
- B) But it has a great many other uses. Would you like me to list them all for you?
- C) Some say the Germans used it in the jet propulsion unit of the M.E. 163 plane.
- D) Strengths higher than 90% are obtained by refrigeration techniques.
- E) Yes. But it has a lot more uses. For instance, it's used in anti-shrink treatments in textiles and as a germicide in cosmetic preparations.

45. Peter: - **I can't understand why aluminium is so important in industry. It's so light.**

Robert: - **But that's one of its great advantages.**

Peter: - ----

Robert: - **It's resistant to corrosion by, among other things, chemicals and foodstuffs.**

- A) What are some of its uses?
- B) But why is it an advantage?
- C) But is it strong enough?
- D) Really? What's another?
- E) Costwise, is it economical?

46. Mrs Fenton: - **The sewing machine needs oiling. Will any oil do?**

Mr Fenton: - **No. Any oil will not do.**

Mrs Fenton: - ----

Mr Fenton: - **You are quite wrong. The selection of the correct lubricant is extremely important and depends on many factors.**

- A) I used the baby's oil last time, too.
- B) Well, you'd better do the job yourself.
- C) People are always talking about them, but do they do any good?
- D) So what oil will do?
- E) But why not? Surely oil is oil!

47.-51. sorularda, parçada boş bırakılan yere uygun düşen ifadeyi bulunuz.

47. **The object of the air traffic control officers is to achieve the highest densities in all parts of the controlled air space that is consistent with safety and the elimination of collision risk ----. The amounts of the separation are partly dependent upon the means available for determining accurately the position and course of the various aircraft.**

- A) For purposes of air traffic control, air space is divided and then subdivided
- B) Military aviation originally held itself outside any air traffic control but for a long time now this has not been practicable
- C) They, therefore, direct the captains of aircraft so as to maintain adequate vertical and horizontal separation between aircraft
- D) As these are within controlled air space a pilot intending to fly along them must file a flight plan.
- E) The "flight progress strip" gives an indication of what is happening to any aircraft in the area

48. **The Wankel engine has many advantages over the reciprocating piston engine. Fewer moving parts are necessary because it produces a rotary movement without using a connecting rod and a crankshaft. ----. In addition, it has no valves and it is smaller and lighter than conventional engines of the same power.**

- A) Though there are advantages, there are also disadvantages
- B) Because of this rotary, movement it has no vibration
- C) A fresh charge is then induced into the cylinder
- D) The Wankel piston is triangular with curved sides
- E) Fuel enters the cylinder through the inlet port

49. Thermal insulation is concerned with the problem of reducing the transfer of heat from one place to another and depends upon the thermal resistance of the insulating medium.----. However, this is not very satisfactory in an ordinary air space because radiation is also involved in the transfer of heat

- A) Since air is a very poor conductor, an air gap, narrow enough to minimize convection, may be used for insulation
- B) Thermal conductivity is a term that is only strictly applicable to homogeneous materials
- C) In general, the lighter the material per unit volume, the greater its insulating value per unit thickness
- D) The vertical air spaces used in insulating buildings are actually only about one third as thick
- E) The optimum thickness must also be chosen to avoid condensation of moisture inside the walls

50. Germination is the initiation of growth in a newly formed plant-structure, or the resumption of growth after a period of rest, as in fungus and bacterial spores, but exemplified most vividly in seeds. ----. Growth is stopped and respiration is extremely slow. At germination, development is resumed and there is a spectacular acceleration of function.

- A) The essential point about germination is the sudden change from a resting state to one of intense activity
- B) The development of the new plant starts at fertilization
- C) Before full physiological activity can be resumed, the dehydrated tissues must become fully turgid with water
- D) As the embryo swells it ruptures the seed coat
- E) In the resting condition, the life processes are slowed down to a minimum

51. Improved efficiency of the use of fuel is a theme to which more attention has been given as the cost of fuel has increased. ---- . The processing of raw fuel into the form in which it is to be used is another.

- A) The efficient and economical use of fuels is indeed one of the chief aspects of the work of the fuel technologist
- B) Each type of fuel and each process naturally has its own problems
- C) There is a staff to advise on methods of increasing the efficiency of the use of fuel in industry
- D) It is well known that the probable resources of coal are very extensive
- E) Fuel technology is now a recognized and even an essential profession

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

52. (I) Industrialization came late to Italy. **(II)** Most of the industry is in the north along the Po Valley and particularly around Turin, Genoa and Milan. **(III)** This was partly due to political reasons and partly to the lack of basic raw materials. **(IV)** It was the availability of hydroelectric power and a labour force capable of acquiring the necessary skills, which together brought about the rapid development in the 20th century. **(V)** Indeed, the industrial progress in Italy during the 1950s has been described as "miraculous"

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

53. (I) The simplest type of engine classification is doubtless by reference to the kind of fuel used. **(II)** Nevertheless, reciprocating engines may be divided more fundamentally into those running on the Otto cycle (spark ignition) and those running on Akrody's and Diesel's cycles (compression ignition). **(III)** The former are usually used for small scale power generation. **(IV)** The latter, which burn heavy oil are of two types, slow speed for ships and high speed for motor vehicles. **(V)** Subsequently, improvements in engine design appeared at an amazing speed.

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

54. (I) The industrial revolution should be seen as a still continuing process. **(II)** It has now, however, taken a new turn. **(III)** It used to be concerned largely with the making of machines to replace human labour. **(IV)** The underlying mathematical theory for the handling of information is "information theory." **(V)** The emphasis now is on developing machines and instruments to take over certain mental tasks, in particular, the handling of all forms of data.

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

55. (I) Most of our knowledge regarding the structure of the earth has been from the study of rocks. **(II)** Nevertheless, the deeper parts of the earth's crust have a higher temperature than the surface. **(III)** Surface rocks have been studied as have those which can be reached in mines and through borings. **(IV)** Recent techniques have made it possible to carry bore-holes down to depths of several miles. **(V)** In general, however, these borings only reveal rocks comparable in age and character to those found at the surface of the ground.

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

56. (I) It is hard to imagine a better means of preservation than entombment in amber. **(II)** Indeed, amber or hardened tree resin has preserved organisms ranging from bacteria to mammals for millions of years. **(III)** It is clear that spiders, for instance, had their fair share of specialized enemies then as now. **(IV)** It surpassed even the finest grain sediments in its ability to retain details. **(V)** Deposits are found round the world, but amber from Hispaniola is especially fossil-rich.

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

57.-59. soruları, aşağıdaki parçaya göre cevaplayınız.

The Royal Society is the national academy of science for Great Britain and Northern Ireland but, unlike other national academies, is and always has been independent of state control; it is not maintained by grants from public funds and manages its own affairs. Since its foundation, however, kings, statesmen and government departments have regularly sought its advice on scientific matters; it has never hesitated to assist governments when convinced that the national interest called for scientific action. Within ten years of its foundation the society, at the invitation of Charles II and his ministers, grappled with problems of national food supply, arboriculture, naval architecture and navigation. Throughout the 18th century it worked with the admiralty on what was then called "the problem of the longitude" in the solution of which are associated the names of the astronomers Edmond Halley and Nevil Maskelyne, the chronometer maker John Harrison and the navigator James Cook. It found a cure for jail-fever and advised on the protection of ships of war against lightning; it organized a geodetic survey of the British Isles and appointed scientific personnel to several Arctic and Antarctic expedition.

57. According to the passage the Royal Society, though it is a national academy, ----.

- A) is not dependent on the state for funds and so is free to act independently
- B) is only partly financed by grants from public funds
- C) has never worked directly for kings or government departments
- D) is mainly concerned with navigation and indeed all naval matters
- E) has often refused to act for the government in an advisory capacity

58. It is clear from the passage that, as in the case of "the problem of longitude", the Royal Society ----.

- A) was obliged to advise the admiralty on procedures for the tests it was making
- B) can command specific knowledge from a variety of fields to assist in the solution of multidisciplinary problems
- C) often failed to come up with a solution to a specific problem
- D) would only accept short-term commissions as it felt that long-term ones threatened its independence
- E) avoided, whenever it was at all possible to do so involvement in schemes of national importance

59. We understand from the passage that a great many of the activities of the Royal Society ----.

- A) are money-making schemes so that it can maintain its independence
- B) are purely theoretical and have no practical application
- C) are actually forced upon it by king or parliament though the members themselves do not like to admit this
- D) are truly national in character, being designed to benefit the people whether directly or indirectly
- E) amount to nothing more than recommending suitable people for specific situations

60. - 62. soruların, aşağıdaki parçaya göre cevaplayınız.

The first flight by a power driven manned aeroplane took place in 1903 and its subsequent development as a military weapon was so rapid that all the belligerents entered World War I totally unprepared to defend themselves against it. The first bombing raids, however, compelled the consideration of anti-aircraft measures, and Britain, in particular, attacked by Zeppelin airships and Gotha aircraft was forced to develop a range of specialized anti-aircraft equipment which came to include guns, searchlights, sound-locators and predictors, giving it a qualitative ascendancy in this field retained until the end of World War II. Indeed the first night attack on London caused such public consternation that its gun defences had to be doubled within forty-eight hours and, though they hit few planes, their presence was of great psychological value.

60. We understand from the passage that the development of aircraft as a weapon of war was so rapid that at the start of World War I ----.

- A) most cities had already been equipped with searchlights
- B) anti-aircraft procedures had already been formulated
- C) no country had prepared itself to combat an air attack
- D) Britain had enough specialized anti-aircraft equipment to see her through to the end of the war
- E) it was only in Germany that measures had been taken to combat air attacks

61. It's clear from the passage that one reason why Britain grew so competent in anti-aircraft tactics was ----.

- A) the fact that, prior to the war, she already had the ascendancy in this field
- B) the absolute necessity of defending herself from bombing raids
- C) because scientists realized that they had to keep ahead in this field or the country's moral would drop
- D) that a great deal of research into predictors had already been carried out
- E) that the noise made by the German Zeppelins was easy to recognize and locate

62. The passage emphasizes that, after the first night attack on London, ----.

- A) enemy aircraft were continually being shot down
- B) the moral of the people there remained high
- C) the value of manned aircraft in time of war was finally admitted
- D) the city's defence system was increased twofold within a couple of days
- E) it became increasingly difficult for enemy bombers to reach their targets

63.- 65. soruları, aşağıdaki parçaya göre cevaplayınız.

Scientists can now speed up the process of genetic change through biotechnology. Farmers need no longer wait patiently for breeding to yield improved crops and animals, nor must they even respect natural lines of reproduction among species. Laboratory scientists can now select desirable traits from any of a number of species and insert those traits into the genetic material of crops and animals. Among the new products of biotechnology are tomatoes that stay fresh much longer than the usual ones and so promise less waste and higher profits. Normally, tomatoes produce a protein that softens them after they have been picked. Scientists introduce into a tomato plant a gene that is a mirror image of the one that codes for the "softening" enzyme. This gene fastens itself to the RNA of the native gene and blocks its action. A vine-ripe tomato with this special gene rots more slowly than a normal tomato, allowing growers to harvest at the most flavourful and nutritious red stage. The tomatoes will still last much longer during shipping and marketing than regular tomatoes harvested when green.

63. As the passage points out, genetic change is not a new phenomenon, but ----.

- A) formerly it was only achieved by careful breeding and was a long, slow process
- B) it has only recently been applied to plants
- C) farmers have only just started to take an interest in it
- D) its advantages have only just become obvious to farmers
- E) the success-rate of inserting a desired trait is not very high

64. We understand from the passage that biotechnology has produced a tomato that stays fresh and firm much longer than the normal tomato, ----.

- A) and can be left on the vine almost indefinitely
- B) but is far more expensive to produce
- C) because the "softening" enzyme of the normal tomato has been removed by genetic engineering
- D) especially if it is harvested when it is green
- E) by introducing a special gene that prevent the "softening" enzyme from functioning

65. One of the important advantages of the genetically engineered tomatoes as described in the passage is that ----.

- A) they contain a larger proportion of protein than the usual tomato
- B) they are far more nutritious than the normal ones even when picked at the green stage
- C) they can be picked when ripe and at their tastiest, and won't spoil in transport
- D) the gene used to prevent rotting is perfectly stable
- E) their appearance is far more attractive than that of other tomatoes

66 - 68. soruları, aşağıdaki parçaya göre cevaplayınız.

To obtain power from the sun's rays is to use nuclear power developed at no expense in a laboratory 93 million miles away, for the radiant energy of the sun is maintained by nuclear transformation of chemical elements occurring in the sun's interior at temperatures of many million degrees, and at pressures of many million atmospheres. The resources of solar power are enormous. If 100 per cent efficiency could be secured in the transformation of radiant solar energy into mechanical work, a horsepower per square yard of ground surface would be available under cloudless skies. The expense of collecting solar energy still prevents its competition with the usual power sources. Yet, unless the vague promise of safe thermonuclear power from oceans becomes realized, solar power must supply the enormous and growing requirements of posterity within two centuries. Because the ground sources (coal, oil and uranium) as they near exhaustion will become more costly than solar power.

66. The writer of the passage regards the sun ----.

- A) as both the largest and the cheapest source of power
- B) as an inefficient source of energy as cloud prevents it from being effective
- C) as offering little more in the way of energy for the future than thermonuclear power
- D) as a far distant laboratory that produces nuclear power
- E) as a source of power too vast and dangerous to be tampered with or used

67. According to the passage, solar energy is not presently used on a large scale ----.

- A) since it could constitute a threat to the environment
- B) as even on cloudless days it cannot be made to yield a great deal of power
- C) even though it can be harnessed with 100 per cent efficiency
- D) since the harnessing of thermonuclear power from the oceans is felt to be more profitable
- E) because the expense of harnessing it is not economically viable

68. The passage contains a warning that ----.

- A) such ground sources of energy as coal and oil will be used up by the next generation
- B) solar energy could prove dangerous as it is a form of nuclear energy
- C) future ages may have no option but the sun's rays to meet their energy requirements
- D) thermonuclear power from oceans could prove even more costly than solar power
- E) the costs of harnessing solar power are not likely to be reduced

69. - 71. soruları, aşağıdaki parçaya göre cevaplayınız.

The design of ships is governed by scientific principles and economic considerations but in practice it has many of the qualities of an art. The designer may be supplied with the precise and detailed requirements of an owner or he may receive only the barest outline of requirements such as the weight of cargo to be carried and the speed. The dimensions chosen and the main characteristics of the ship are governed by the trade in which the vessel is to compete. High-density cargoes such as iron ore require little cubic capacity; low-density cargoes such as bananas require vast cubic capacity. The ports which the vessel must enter may impose restrictions on length and draught. Passage through canals may restrict both draught and breadth. The nature of the cargo may determine the size of cargo holds and of the hatchways through which the cargo is loaded and unloaded. Available facilities at the ports to be entered affect the loading and unloading apparatus to be installed in the vessel.

69. We understand from the passage that the size of a ship ----.

- A) needs to be large if it is to have high-density cargoes
- B) will reflect the type of goods to be carried
- C) is unimportant so long as it does not have to pass through canals
- D) has relatively little bearing upon its cost
- E) affects the system of loading and unloading of the cargo

70. It is clear from the passage that, when a ship is being ordered the designer is often given a lot of freedom in the type of design, but he will expect to be told ----.

- A) something about what it is to carry and how fast it is to travel
- B) the type of loading and unloading apparatus to install
- C) something about the route it will normally follow
- D) the exact dimensions that are required
- E) exactly how big the cargo holds should be

71. According to the passage, a great many factors have to be considered in the design of a ship ----.

- A) of which economic matters are the least important
- B) and no designer is prepared to accept just a simple outline of requirements
- C) but one of the least important is the cubic capacity needed for the cargo
- D) including regulations and conditions in the ports it will call in at
- E) in particular the relationship between length and breadth

72. - 74. soruları, aşağıdaki parçaya göre cevaplayınız.

Erosion is regarded not merely as the physical removal of soil by water and wind, but rather as the deterioration of all the component parts of the habitat in which man and his crops and livestock have to exist. Since there is no conclusive evidence for any major climatic change in historic times to explain this deterioration, we must conclude that the eroding of the total environment has been due primarily to thoughtless destruction of the vegetative cover. This has led to deterioration of the microclimate above and below the surface, generally in the direction of a general drying out of the soil which has exposed it to erosive action of wind and rainfall of high intensity or frequency, and to the loss of organic matter in the soil, thus reducing its capacity to resist erosion by conserving the water that falls on the surface. If everything possible is done within the total environment to conserve the naturally planted or cultivated vegetation, this will also ensure optimal conservation of soil and water.

72. It is argued in the passage that the impoverishment of the world's habitat ----.

- A) It is first and foremost due to man's irresponsible abuse of the vegetable cover of the earth
- B) is largely due to gradual changes in climate over long years
- C) became inevitable as soon as agricultural and animal husbandry developed
- D) cannot be remedied
- E) has been needlessly exaggerated

73. The definition of erosion given in this passage ----.

- A) is a strictly regional one
- B) disregards man's role in it
- C) concentrates on flooding
- D) assumes that the process is inevitable
- E) is a broad one

74. It is pointed out in the passage that the loss of organic matter in the soil ----.

- A) led to the destruction of the world's vegetative cover
- B) is a direct result of insufficient rain
- C) is an irreversible process
- D) has made the soil more susceptible to erosion
- E) came about through over-planting which robbed the soil of nutrients

75. - 77. soruları, aşağıdaki parçaya göre cevaplayınız.

The world's nuclear plants have accumulated vast stocks of highly radioactive waste. Worldwide, high-level waste is currently stored above ground, and no government has a clear policy on its eventual disposal. While most experts believe that burying the waste is the safest bet in the long term, the problem is finding sites that everyone can agree are geologically stable. Decaying radioactive isotopes release heat. As a result, high-level waste must be constantly cooled; otherwise, it becomes dangerously hot. This is why many experts want to store waste above ground until it has decayed and is cool enough to be stored safely in sealed repositories several hundreds of metres below ground. According to one recent theory, however, waste should be lowered down boreholes drilled to 4 kilometres. The trick is to exploit heat generated by the waste to fuse the surrounding rock and contain any leaking radioactivity.

75. It is clear from the passage that the safe disposal of radioactive waste -----.

- A) has been satisfactorily dealt with by scientists in conjunction with governments
- B) is a problem that each government must decide on for its own country
- C) remains a global problem of great magnitude
- D) is a problem that has not attracted enough attention
- E) will in all likelihood soon be resolved, and a clear policy agreed on by concerned governments

76. As it is pointed out in the passage, many experts are of the opinion that radioactive waste -----.

- A) should never be stored underground as it can not then be monitored
- B) should not be stored underground while the radioactive isotopes continue to let off substantial amounts of heat
- C) does not require to be cooled when stored above ground
- D) cannot be safely disposed of anywhere and the problem of what to do with it intensifies as the amount increases
- E) can be safely left to cool down underground in sealed repositories

77. The passage describes a new method, still only a theoretical one, for the disposal of radioactive waste, -----.

- A) which uses bore holes so that all sites are suitable
- B) at a depth considerably less than that normally recommended but the chosen site must meet certain geological requirements
- C) which, unfortunately, increases the time needed for cooling the waste before final disposal
- D) in which the radioactive isotopes are prevented from releasing heat
- E) whereby the heat produced by that waste will serve to seal it safely into the rock under which it has been buried

78. - 80. soruları, aşağıdaki parçaya göre cevaplayınız.

Sounds produced by continuous vibration tones are spreads waves of compression through the air. Where there is a solid boundary such as the walls of a room the sound waves are reflected so that the sounds within the room are prolonged beyond what they would be in the open. The sounds produced by the voice or by a musical instrument then reverberate through the room after the actual tone production has ceased. When the sound waves strike the walls some of the sound energy travels on and is either absorbed in the material or may penetrate to the other side; but with the usual hard, unyielding walls of which most buildings are made, more than 90% of the sound energy is reflected back into the room at each impact, so that some time must elapse before all is spent. It is this reverberation which, in its excess, is the prime cause of the faulty acoustics of many pre 20th century buildings.

78. We understand from the passage that reverberation -----.

- A) is never taken into account in questions of acoustics
- B) is less obvious in an enclosed space
- C) occurs within an enclosed space such as a room
- D) is of equally short duration both indoors and outdoors
- E) has duration equal to that of the tone production

79. It is emphasized if the passage that, until the 20th century -----.

- A) the sounds produced by musical instruments could not be properly controlled
- B) there was among scientists, a great deal of controversy as regards the importance of reverberation
- C) there was an unaccountable deficiency of reverberation in ever major building
- D) good acoustics were absent in the majority of buildings
- E) acoustics were a primary concern in the design of all buildings

80. It is explained in the passage that only a very small percentage of the sound waves -----.

- A) can pass through a wall made of firm and resistant material
- B) does actually travel back towards its source at each impact
- C) can be accurately measured for acoustic purposes
- D) has a damaging effect upon the acoustics of a room
- E) can last longer than the actual tone-production itself

**TEST BİTTİ
YANITLARINIZI KONTROL EDİNİZ**

CEVAP ANAHTARI

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