

17-21: For these questions, choose the best word or expression to fill the spaces in the passage.

Urinary tract infections, or UTIs, are **(17)** ---- the rise – and they may be becoming more dangerous. The overall disease burden **(18)** ---- with UTIs increased by more than 68 percent between 1990 and 2019. At the same time, the bacteria that cause UTIs have developed **(19)** ---- to common drugs. Usually, UTIs are thought of as more of a painful nuisance **(20)** ---- dangerous or fatal. But for an elderly patient or someone with multiple medical conditions, the antibiotics that fight the infection can be essential. Failing to get these antibiotics contributes to the deaths of hundreds of thousands of people every year globally. **(21)** ---- they aren't deadly, the more than 400 million annual worldwide UTI cases significantly strain limited medical resources.

17.

- | | |
|---------------|---------|
| A) throughout | B) on |
| C) to | D) over |
| E) by | |

18.

- | | |
|-----------------------|-----------------|
| A) associated | B) associating |
| C) to have associated | D) to associate |
| E) being associated | |

19.

- | | |
|-----------------|--------------|
| A) perseverance | B) framework |
| C) isolation | D) obstacle |
| E) resistance | |

20.

- | | |
|----------------|--------------------|
| A) rather than | B) such as |
| C) despite | D) notwithstanding |
| E) owing to | |

21.

- | | |
|---------------|--------------|
| A) Only after | B) Even when |
| C) If | D) Since |
| E) As soon as | |

22-26: For these questions, choose the best word or expression to fill the spaces in the passage.

In the first century B.C., Commagene formed a buffer zone between the Roman Republic and the Parthian Empire (22) ---- they fought for control of Anatolia. During this time, Commagene enjoyed a golden era. The society was a/an (23) ---- of Greek and Persian culture; culture merging was common for the Hellenistic period. Between approximately 70 and 36 B.C., Commagene's most famous king, Antiochus I, ruled. He tried to stay neutral in the conflict between the Romans and the Parthians. Unfortunately, Antiochus I's successors (24) ---- well, and a few decades later the Roman Empire annexed the province. Today Commagene is remembered for the extraordinary monument that Antiochus I built on the peak of Mount Nemrut (Nemrut Dağ in Turkish). Nemrut was another name (25) ---- the biblical king Nimrod, described in the Book of Genesis as a "mighty hunter." (26) ---- local tradition, Nimrod once hunted on the slopes of Mount Nemrut.

22.

- | | |
|-------------------|-------------|
| A) whereas | B) although |
| C) as long as | D) as |
| E) providing that | |

23.

- | | |
|------------------|-----------|
| A) inhabitant | B) blend |
| C) contradiction | D) excess |
| E) leap | |

24.

- | | |
|-------------------|-------------------------|
| A) had not fared | B) would not have fared |
| C) would not fare | D) have not fared |
| E) will not fare | |

25.

- | | |
|----------|--------|
| A) for | B) to |
| C) into | D) off |
| E) among | |

26.

- | | |
|------------------|--------------------|
| A) In view of | B) Due to |
| C) On account of | D) With respect to |
| E) According to | |

27-36: For these questions, choose the best option to complete the given sentence.

27. ----; however, municipal recycling programs are not widely available for some types of resins used in plastic containers.

- A) Once plastic enters the environment, it can take 1,000 years or more to decompose, depending on environmental conditions
- B) Plastic is a fast-growing segment of U.S. municipal solid waste, and most of it ends up in the environment
- C) Exposure to plastic through ingestion, inhalation or in drinking water poses potential risks to human health and wildlife
- D) Many critics argue that consumers see "chasing arrows" recyclable symbol and assume that a product is recyclable
- E) Scholars estimate that roughly 80% of plastic has accumulated in landfills or the environment, while 9% has been recycled and 12% incinerated

28. Although large sections of the Swiss-Italian border are determined by glacier ridgelines or areas of perpetual snow, ----.

- A) Switzerland's glaciers lost 4% of their volume in 2023, the second biggest loss ever after 2022's record melt of 6%
- B) melting glaciers have caused these natural boundaries to shift, leading to both countries seeking to rectify the border
- C) border disputes have always been a part of the tense relationships between the two countries throughout history
- D) it is thought that clarifying the borders will help both countries determine which is responsible for the upkeep of specific natural areas
- E) the exact border changes will be implemented and the agreement published once both countries have signed it

29. Because colleges and universities' primary focus is to teach students how to become experts in their fields, ----.

- A) employers increasingly value something that only human workers can provide – soft skills
- B) it impacts young workers' job performance as well as their mental health as they struggle to prove themselves
- C) young workers may rely on social media platforms, like X and Snapchat, for feedback and support
- C) the transition from education to the workforce doesn't have to be complex and challenging
- E) they often fall short in preparing students for the social and emotional demands of the workplace

30. The term "nonverbal communication" refers to information transmitted by behavioural cues, such as facial expressions; ----.

- A) for example, the blind are usually unable to make eye contact or see where others are looking
- B) however, not knowing when someone is talking to them, results in embarrassing or awkward situations
- C) thus, people who are blind or have low vision are unable to perceive most or all visual nonverbal cues
- D) nonetheless, auditory verbal and nonverbal cues provide information about turn-taking in two-way interactions
- E) instead, research on nonverbal communication spans many disciplines and the findings are complex

31. Although it is known that every human body is governed by a biological clock in the brain, a tiny region called the suprachiasmatic nucleus, ----.

- A) outside cues such as light, temperature, and meals also influence circadian rhythms
- B) understanding your own body's rhythms can have a positive effect on your daily performance
- C) the bluer and brighter the light, the more likely it is to suppress melatonin release
- D) the majority of people are most mentally alert in late morning and early evening
- E) some ganglion cells have blue-light-sensitive receptors that tell our brain to set our circadian clock to night or day.

32. Some of the most dramatic hormonal changes that humans experience happen during pregnancy, ----.

- A) while sex hormones, like oestrogen and testosterone, are powerful players in the brain
- B) and yet those nine months have been a black box for human neuroscience until now
- C) because previous brain imaging studies have shown that pregnancy shrinks parts of the brain
- D) so depression during and after pregnancy affects 10 to 20 percent of people who give birth
- E) thus it is not surprising that researchers know so little about its effect on the brain

33. Parents concerned about the possible dangers smartphone use might have for their children are turning to "dumb phones"; ----.

- A) therefore, whatever they do, young people will eventually end up using smartphones in their social and working lives
- B) accordingly, unhappiness among children and teenagers is often seen as being related to smartphone or social media use
- C) for instance, many peer reviewed studies have been conducted to explore the correlations between digital technology and children's mental health
- D) in addition, giving a child a smartphone does not mean allowing them ultimate freedom to use it however and how often they like
- E) however, handing children a "dumb phone" seems to be as much an exercise in nostalgia as proactive practice

34. ----, these verdant veggies can interfere with some medications, such as warfarin, used to prevent blood clots.

- A) Although leafy green vegetables are packed with nutrients such as fibre, vitamins, minerals and antioxidants
- B) While eating more or less leafy green vegetables than usual from week to week will make warfarin's clotting effect difficult to predict
- C) Given that some leafy greens, such as kale and spinach contain a lot less vitamin K than others
- D) Since the key to preventing fluctuations in warfarin's effectiveness is to maintain a consistent intake of vitamin K
- E) Even though another reason vitamin K is important is that the body uses it to make clotting factors

35. The dense hair covering the tarantula's body makes it difficult for the army ants to bite or sting the spider; ----.

- A) therefore, tarantulas enjoy friendlier interactions with amphibians, which sometimes live in their burrows
- B) moreover, the frogs and toads that live within the retreats of tarantulas benefit from the shelter and protection against their predators
- C) on the other hand, tarantulas might not be as scary and threatening as their reputation suggests
- D) however, army ants help fossorial tarantulas – those that live in burrows – by removing old food from their burrow
- E) thus, scientists believe that the hairiness may have evolved as a defence mechanism against these aggressive insects

36. Lions prey on a large variety of animals ranging in size from rodents and baboons to African buffalo and hippopotamuses, ----.

- A) just as they are known to take elephants and giraffes, but only if the individual is young or especially sick
- B) because male lions are also adept hunters, and in some areas they hunt frequently if there are right conditions
- C) although they predominantly hunt medium- to large-sized hoofed animals such as wildebeests, zebras, and antelopes
- D) even though a group of hunting lions is potentially nature's most formidable predatory force on land
- E) while they stalk prey from nearby cover and then burst forth to run it down in a short, rapid rush

37-42: For these questions, choose the most accurate Turkish translation of the sentences in English, and the most accurate English translation of the sentences in Turkish.

37. While infants sleep for about 16 - 18 hours a day, with five or six sleep periods alternating with a like number of shorter episodes of wakefulness during their first month, the total amount of time spent sleeping decreases dramatically by age two.

- A) Bebekler, ilk aylarında beş veya altı uyku dönemiyle benzer sayıda kısa uyanıklık dönemleri arasında gidip gelerek günde yaklaşık 16-18 saat uyurlarken iki yaşına geldiklerinde uykuya ayrılan toplam süre önemli ölçüde azalır.
- B) Bebeklerin günde yaklaşık 16-18 saat uyudukları, ilk aylarında beş veya altı uyku döneminin benzer sayıda kısa uyanıklık dönemleriyle değiştiği bilinirken, iki yaşına geldiklerinde uykuya ayrılan toplam süre önemli ölçüde azalır.
- C) Bebekler, ilk aylarında beş veya altı uyku dönemiyle benzer sayıda kısa uyanıklık dönemleri arasında gidip gelerek günde yaklaşık 16-18 saat uyurken, iki yaşına geldiklerinde uykuya ayırdıkları toplam sürenin önemli ölçüde azaldığı bilinir.
- D) Bebekler, ilk aylarında beş veya altı uyku dönemiyle benzer sayıda kısa uyanıklık dönemleri arasında gidip gelerek günde yaklaşık 16-18 saat uyurlar, ancak iki yaşına geldiklerinde uykuya ayrılan toplam süre önemli ölçüde azalır.
- E) Bebekler, ilk aylarında beş veya altı uyku dönemiyle benzer sayıda kısa uyanıklık dönemleri arasında gidip gelerek günde yaklaşık 16-18 saat uyku ile idare ederlerken iki yaşına geldiklerinde uykuya ayırdıkları toplam süre önemli ölçüde azalır.

38. Inventions almost always cause change; for example, the printing press, introduced by Johannes Gutenberg in the 15th century, once and for all curtailed the traditional authority of elders.

- A) Buluşlar neredeyse her zaman değişime neden olur, örneğin matbaa, 15. yüzyılda Johannes Gutenberg tarafından tanıtılmış ve yaşlıların geleneksel otoritesini bir daha geri dönmek üzere sona erdirmiştir.
- B) Buluşlar neredeyse her zaman değişime neden olur, örneğin 15. yüzyılda Johannes Gutenberg tarafından tanıtılan matbaa, yaşlıların geleneksel otoritesini bir daha geri dönmek üzere sona erdirmiştir.
- C) Buluşlar her zaman değişime neden olmuştur, örneğin Johannes Gutenberg tarafından 15. yüzyılın sonlarına doğru tanıtılan matbaa, yaşlıların geleneksel otoritesini bir daha geri dönmek üzere sona erdirmiştir.
- D) Buluşların neredeyse her zaman değişime neden olduğunun en güzel örneği, 15. yüzyılda Johannes Gutenberg tarafından tanıtılan matbaanın yaşlıların geleneksel otoritesini bir daha geri dönmek üzere sona erdirmesidir.
- E) Buluşların her zaman değişime neden olduğunu, Johannes Gutenberg tarafından 15. yüzyılın sonlarına doğru tanıtılan matbaanın yaşlıların geleneksel otoritesini bir daha geri dönmek üzere sona erdirmesi kanıtlamıştır.

39. Sibling rivalry normally begins when a baby is introduced to a family and the older sibling fears the baby will replace him or her, so the older child may become extremely jealous and display aggressive behaviour toward the baby.

- A) Kardeş rekabeti genellikle yeni bir bebeğin aileye katılmasıyla başlar ve büyük kardeş, bebeğin kendisinin yerine geçeceğinden endişe eder, bu yüzden büyük çocuk yoğun bir kıskançlık hissedip bebeğe karşı agresif tavırlar sergileyebilir.
- B) Kardeş rekabeti genellikle ailenin yeni bir bebekle genişlemesiyle ortaya çıkar ve büyük kardeş, onun kendisinin yerini alabileceğinden korkar, bu nedenle büyük çocuk, kıskançlık içinde boğulabilir ve bebeğe karşı saldırgan tutumlar sergileyebilir.
- C) Kardeş rekabetinin başlamasının nedeni yeni bir bebeğin aileye katılmasıdır çünkü bebeğin yerinin alacağından korkan büyük kardeş, aşırı derecede kıskanç olabilir ve bebeğe karşı saldırgan davranışlar sergileyebilir.
- D) Kardeş rekabeti genellikle bir bebek aileye katıldığında başlar ve büyük kardeş, bebeğin onun yerini alacağından korkar, bu nedenle büyük çocuk aşırı derecede kıskanç olabilir ve bebeğe karşı saldırgan davranışlar sergileyebilir.
- E) Kardeş rekabeti genellikle ailenin yeni bir bebeğin gelişiyle başlar ve büyük kardeş, bu durumun kendi yerini tehdit ettiğinden endişe duyar, bu yüzden büyük çocuk, kıskançlık içinde kaybolarak bebeğe karşı saldırgan davranışlar sergileyebilir.

40. Siyasi istikrarla ilgilenenler, gelişmekte olan ülkelerin düşük kişi başı gelirlerini göreceli olarak, yani gelişmiş ülkelerin yüksek kişi başı gelirlerine kıyasla görme eğilimindedirler.

- A) Individuals focused on political stability often view the low per capita incomes of developing countries in relative terms, meaning they compare them to the high per capita incomes of developed nations.
- B) People who prioritize political stability typically assess the low per capita incomes of developing countries in a relative context, comparing them to the higher per capita incomes found in developed countries.
- C) Those concerned with political stability have a tendency to see the low per capita incomes of the developing countries in relative terms; in other words, they relate them to the high per capita incomes of the developed countries.
- D) Those who are keen on political stability tend to see the low per capita incomes of the developing countries in relative terms so they compare them to the high per capita incomes of the developed countries.
- E) Those who are concerned with political stability tend to see the low per capita incomes of the developing countries in relative terms; that is, in relation to the high per capita incomes of the developed countries.

41. Daha fazla insan yiyecek ve içecek üretimi ve tüketiminin çevresel etkilerinin farkına vardıkça, birçok batı ülkesinde daha düşük karbon ayak izine sahip vejetaryen, vegan ve esnek diyetlere olan ilgi yeniden artmaktadır.

- A) As more people become aware of the environmental impact of making and consuming food and drink, there is renewed interest in many western countries in vegetarian, vegan and flexitarian diets, which come with lower carbon footprints.
- B) As more people become aware of the environmental effect of making and consuming food and drink, there will be renewed interest in many western countries in vegetarian, vegan and flexitarian diets, which are known to have lower carbon footprints.
- C) By becoming aware of the environmental impact of making and consuming food, people in many western countries are renewing their interest in in vegetarian, vegan and flexitarian diets, which come with lower carbon footprints.
- D) As awareness grows about the environmental impact of producing and consuming food and beverages, many Western countries are seeing a resurgence of interest in vegetarian, vegan, and flexitarian diets, which have lower carbon footprints.
- E) With increasing awareness of the environmental effects of food and drink production and consumption, many Western nations are experiencing a renewed fascination with vegetarian, vegan, and flexitarian diets, known for their smaller carbon footprints.

42. Meditasyon ve farkındalığın beyindeki değişiklikleri ve düşünceleri, hisleri ve duygusal tepkileri nasıl işlediğimizi uyarmaya yardımcı olduğu gösterilmiştir ve bu, bağırsaktan gelen sinyalleri nasıl algıladığımızı ve yorumladığımızı olumlu yönde etkileyebilir, böylece IBS semptomlarını iyileştirebilir.

- A) It has been shown that meditation and mindfulness can cause alterations in the brain and how thoughts, sensations, and emotional responses are processed, and this may have a positive effect on how we perceive and interpret gut signals, thereby improving IBS symptoms.
- B) Meditation and mindfulness have been shown to help stimulate changes in the brain and how we process thoughts, sensations, and emotional responses, and this may positively affect how we perceive and interpret signals from the gut, thus improving IBS symptoms.
- C) Some changes in the brain and the way we process thoughts, sensations, and emotional responses can be stimulated by meditation and mindfulness, which may positively affect the way we perceive and interpret signals from the gut, thus improving IBS symptoms.
- D) Meditation and mindfulness might well help stimulate changes in the brain and how we process thoughts, sensations, and emotional responses, which may positively affect how we perceive and interpret signals from the gut, thus improving IBS symptoms.
- E) Meditation and mindfulness have been shown to help stimulate changes in the brain and how thoughts, sensations, and emotional responses are processed, and this may positively affect how we perceive and interpret signals from the gut, thereby improving IBS symptoms.

63 - 67: For these questions, choose the best option to complete the dialogue.

63. TV Presenter:

- **Nowadays, we keep hearing the term 'resistant starch', which, at first glance, sounds like a handy way to eliminate wrinkles while ironing clothes.**

Doctor:

- **Ha ha. Not really. It's actually a type of carbohydrate – and a secret weapon for controlling your weight and preventing certain diseases.**

TV Presenter:

— ----

Doctor:

- **Yes. Unlike other starches including rice, resistant starch doesn't get digested in your small intestine. Instead, it moves on and becomes fermented in your large intestine where it feeds beneficial bacteria that support various aspects of your health.**

TV Presenter:

- **Well, that is very good to know.**

- A) Do you mean we should cut the intake of all types of starch once and for all?
- B) Is this different from the starch that we get from crops such as rice?
- C) Is this the starch that we get from products like beans and green bananas?
- D) Is it possible to get this resistant starch from easily available products?
- E) Does the amount of intake increase the health benefits of resistant starch?

64. Professor Williams:

- **Today, we're going to discuss the importance of finding alien life within our solar system.**

Student:

— ----

Professor Williams:

- **I will be talking about finding any form of life beyond our own home planet – be it in micro scale or macro scale.**

Student:

- **That's great. I hope we will also have a discussion about the coming projects to find Planet Nine.**

- A) Do you mean intelligent alien life like us, or microorganisms that can survive on other planets or on their moons?
- B) How do you think this endeavour will help improve our lives on this planet? Will we ever find alternative planets to live on?
- C) Do you think this type of space exploration has ethical considerations in that we are wasting precious resources to find microbial life?
- D) Will we also discuss how the planets that will be explored can help us understand concepts like gravity?
- E) Do you think there will be backlash from ordinary folks about the expenses spent for space exploration?

65. Reporter:

- Please tell us about your latest research featuring the defense of caterpillars.

Zoologist:

- Of course. The bristly fibers covering their bodies can detect wasp attacks by sensing electrostatic fields created by wasps wingbeat frequency.

Reporter:

— ----

Zoologist:

- They might. One of the three species of caterpillars bravely fought by trying to bite the electrodes we used in our experiment.

Reporter:

- Well, that is a surprise for me. I thought they lack the ability to fight back.
- A) But can we say that caterpillars are among the most defenseless animals in the animal kingdom?
- B) Do you think they can stand their ground against predators like wasps in real-life conditions?
- C) So, did your research confirm the fact that the only defense line for the caterpillar is to coil up?
- D) Does this mean your research has come up with a groundbreaking discovery?
- E) What could be the ramifications of the findings of your research?

66. Student:

- We all know that Stonehenge, is perhaps the most famous of all vast circular monuments constructed from wood or stone that litter the British countryside. But why was it built in the first place?

Professor:

- Yes, it is the most famous one. As for why it was built, I can say that it's not unreasonable to think of it as a ritual site and there's no evidence of people eating or living there.

Student:

— ----

Professor:

- It is true. We can only have a few educated guesses on the reason.
- A) You don't sound so sure, so can we assume that there is no exact knowledge as to why it was built?
- B) So you say it was built by Druid monks to hold religious ceremonies?
- C) Does this also explain the origin of the altar stone, which seems to have been brought from Scotland?
- D) Does this information come from the knowledge that most stones were sourced from a nearby quarry?
- E) Will we ever learn the exact reason why and by whom this monument was built?

67. Darlene:

- People are so enthusiastic about going green when it comes to producing energy, but I don't think most of them see the dark side of the story.

Saul:

- I don't understand. Is there a dark side of going green, a positive thing by definition?

Darlene:

- Ok then. Try to empathize with the residents of Rempang island in Indonesia, who were forced out of their homeland as part of a plan to turn their island into a solar panel city.

Saul:

— ----

Darlene:

- Certainly yes. Not only that but governments are also backing these practices as some islanders who protest the decision are now facing criminal charges.

- A) Alright, but this one practice doesn't necessarily mean that the green movement is bad for people, does it?
- B) Can we assume that if this dark side cannot be subsided, green movement will collapse?
- C) Do you think big energy giants are behind this malpractice, or is it the governments to blame?
- D) What can we do at an individual level to stop practices that harm entire populations?
- E) Are you suggesting that there are practices around the world that claim the lands of people?

68-71: For these questions, choose the best rephrased form of the given sentence

68. Despite the fact that self-care is a term that is thrown around a lot in wellness spaces, evoking images of leisurely beach strolls and luxurious bubble baths, it encompasses more than just these indulgent moments.

- A) Though self-care is often associated with leisurely beach strolls and luxurious bubble baths in wellness spaces, it involves much more than just these indulgent moments.
- B) Notwithstanding the image that self-care brings to mind, such as leisurely beach strolls and luxurious bubble baths, the term goes far beyond these indulgent activities.
- C) Wellness spaces often talk about the term self-care, bringing to mind leisurely beach strolls and luxurious bubble baths; however, self-care covers more than these hedonistic instances only.
- D) Given that self-care is often used in the context of wellness spaces, with leisurely beach strolls and luxurious bubble baths brought to mind, it is hardly surprising that the term is covers more mundane concepts.
- E) Although self-care is often portrayed as leisurely beach strolls or luxurious bubble baths in wellness spaces, the increasingly more popular term involves much more than these indulgent activities.

69. Methane is around 80 times more powerful as a greenhouse gas than CO₂, but it lasts for only around 10 years in the atmosphere, so any reductions in methane sources can have a disproportionately important climate effect over the short-term.

- A) Methane is 80 times more powerful than CO₂ as a greenhouse gas, and since it remains in the atmosphere for only 10 years, cutting its emissions can have a much larger impact on climate change.
- B) Methane is about 80 times more powerful than CO₂ as a greenhouse gas, yet since it only lasts around 10 years in the atmosphere, cutting methane emissions can have a disproportionately large short-term impact on climate.
- C) Methane is 80 times more potent than CO₂ as a greenhouse gas, and because it only persists in the atmosphere for 10 years, reducing its emissions can have a significantly greater short-term effect on climate change.
- D) Methane is known to be almost 80 times more powerful as a greenhouse gas as CO₂, but as it only remains in the atmosphere for 10 years, even a small reduction in its emission will have a great effect on climate.
- E) Methane is nearly 80 times more potent than CO₂ as a greenhouse gas, but since it stays in the atmosphere for just 10 years, even a modest reduction in its emissions can have a significant impact on the climate.

70. We often hear about the harmful effects of tourism on major cultural destinations, but in less-developed countries, the revenue it generates is vital for building essential infrastructure and community spaces.

- A) Although the negative impacts of tourism on cultural destinations are often highlighted, in less-developed countries, the revenue from tourism plays a crucial role in funding essential infrastructure and community spaces.
- B) Devastating effects of tourism on major cultural destinations are on the news recently, yet the money that comes from tourism might be helpful in funding much-needed infrastructure and community spaces in less-developed countries.
- C) While we often hear about the destructive forces of tourism in major cultural destinations, for lesser-developed countries, the money tourism brings in helps to build much-needed infrastructure and community spaces.
- D) The harmful effects of tourism on major cultural destinations have often been emphasized; however, the revenue it generates can be crucial for funding essential infrastructure and community spaces in less-developed countries.
- E) Even though the harmful effects of tourism on major cultural destinations are often emphasized, the revenue it generates can still be vital for funding essential infrastructure and community spaces in less-developed countries.

71. It is now scientifically accepted that the human brain is a social organ and that we need social connection to survive, so put bluntly, loneliness can be a killer.

- A) Due to the fact that human brain is now acknowledged by scientists to be a social organ and social connection is key to survival, loneliness can be lethal – in simple terms.
- B) It is now scientifically recognized that the human brain functions as a social organ and that social connections are essential for survival; therefore, loneliness can be lethal.
- C) It is now accepted that the human brain is a social organ and that social connections are necessary for its survival; unfortunately, this means loneliness can be deadly.
- D) Loneliness can actually be deadly as, according to scientists, human brain is a social organ and social connection might be essential for this organ to survive.
- E) Loneliness can truly be deadly, given that scientists recognize the human brain as a social organ that relies on social connections for its survival.

72-75: For these questions, choose the best option to complete the missing part of the passage.

72. Far beyond the orbit of Neptune, a mysterious, massive entity may be moving through the ring of icy objects that surrounds our solar system. Scientists studying this region have found that the orbits of more than a dozen rocky objects are being subtly altered, as if being tugged on by the gravity of an enormous, unseen planet – a theoretical object known as Planet Nine. This hidden world is estimated to be anywhere from five to 10 times as massive as Earth and to take up to 10,000 years to complete a single orbit of the sun. ---- If it is out there, slowly orbiting more than 500 times farther from the sun than Earth does, the mysterious world is far too dim to detect with current telescopes.

- A) Thus, astronomers have been scouring the outer solar system for signs of a hypothetical ninth planet for almost a decade, without success.
- B) Remarkably, astronomers have predicted how big this hypothetical world could be and even where it should be in its orbit around the sun.
- C) With the opening of a new observatory in 2025, we may either finally find Planet Nine within the next few years – or rule out the idea for good.
- D) The idea of a ninth planet in the solar system was first seeded by the discoveries of Uranus in 1781 and Neptune in 1846.
- E) But besides the strange "kinks" in the orbits of nearby objects, there is still no concrete evidence of Planet Nine's existence.

73. Ageing is an inevitable part of life, which may explain our strong fascination with the quest for longevity. The allure of eternal youth drives a multi-billion pound industry ranging from anti-ageing products, supplements and diets for those hoping to extend their lifespan. If you look back to the turn of the 20th century, average life expectancy in the UK was around 46 years. Today, it is closer to 82 years. We are in fact living longer than ever before, possibly due to medical advancements and improved living and working conditions. But living longer has also come at a price. ---- So while we are fascinated by what may help us live longer, maybe we should be more interested in being healthier for longer. Improving our "healthy life expectancy" remains a global challenge.

- A) We are now seeing higher rates of chronic and degenerative diseases – with heart disease consistently topping the list.
- B) However, studies indicate genetics may only account for around 20-25% of longevity, especially in the context of the UK.
- C) Why some people live to be more than 100 lies a combination of the protective effects of various nutrients in their diets.
- D) While diet is only one part of the bigger picture when it comes to longevity, it is an area we can do something about.
- E) Unfortunately, other parts of the world are not as lucky as the UK as life expectancy might be as low as 62 years in some underdeveloped countries.

74. When a museum displays a piece of art, they generally try to show the whole thing. It is rare to see a painting with half the canvas missing, or a tapestry with one side unravelled. ---- Walk around any museum of classical art, and you'll likely see shattered noses, cleaved fingers and an awful lot of severed heads. When statues survive thousands of years, a few chips are to be expected. But why is it so common for Roman statues to be missing their heads?

- A) One reason statues get beheaded is that the neck is a natural weak point on the human body.
- B) Some sculptures would deliberately be designed with removable heads that "popped out" at the neck.
- C) But when it comes to ancient Roman statues, being a little broken is almost the norm.
- D) There are many reasons an ancient statue might accidentally lose its head.
- E) But broken heads aren't always an accident; sometimes, the Romans deliberately smashed their own statues.

75. The Chinese concept of "face" refers to a cultural understanding of respect, honour and social standing. Actions or words that are disrespectful may cause somebody to "lose face" while gifts, awards and other respect-giving actions may "give face." It is a complex concept that is important to grasp if you want to really understand Chinese culture. ---- In other words, it is less about your own personal pride or ego, and more about how one is viewed by others.

- A) Because "saving face" is such a strong motivating force in China, it's also one of the most important concepts in understanding the Chinese Mind.
- B) Unlike "Western face" – which is more self-oriented and individualistic – Chinese face is more other-directed and relational.
- C) Of all the idiosyncrasies of Chinese culture, the concept of "face" is perhaps most difficult for Westerners to fully grasp.
- D) Being abstract and intangible, "face" is yet the most delicate standard by which Chinese social intercourse is regulated.
- E) Unlike Western face, Chinese face can be given or earned, which also means it can also be taken away or lost.

76-80: For these questions, choose the irrelevant sentence in the passage.

76. (I) Neuroscientists have found that the brains of men can be "rewired" by becoming fathers. **(II)** Most of the body of research dedicated to fatherhood has understandably been focused on how children benefit from the presence of a male parent or guardian. **(III)** More attention is gradually being paid to the value of fatherhood to men themselves, however. **(IV)** Not just kids benefit immensely from involved and engaged dads, but so do adults, studies have shown, something that holds true across economic lines. **(V)** Research has demonstrated there are a host of positive effects of parenting among men, with fathers finding the time spent with their children to be rewarding and fulfilling on many levels.

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

77. (I) Located roughly 2.5 million light-years away, the Andromeda (M31) galaxy is approaching our Milky Way at a speed of 110 kilometres per second. **(II)** Because of this, astronomers have long predicted that the two galaxies will inevitably become locked in a fatal dance sometime in the next several billion years – spiralling into each other and merging to form a new galaxy. **(III)** But according to a new study, the two galaxies are just as likely to narrowly miss each other. **(IV)** Further studies predicted that Andromeda's eventual collision with our Milky Way was inevitable within the next 5 billion years – a process that would see our solar system catapulted to an outer arm of the newly merged galaxy. **(V)** Researchers of the study have found that uncertainties in the present positions, motions, and masses of all galaxies leave room for drastically different outcomes, and a probability of close to 50% that there is no Milky Way-Andromeda merger during the next 10 billion years.

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

78. (I) There is no shortage of research to support the view that America's public schools treat black students more harshly than their white peers. **(II)** For example, a study by sociologists Edward Morris and Brea Perry found black boys are twice as likely as white boys to receive disciplinary action such as office referral, detention, suspension or expulsion. **(III)** In 2017, black kids made up 15% of public school students, or 7.7 million kids of the roughly 50.7 million public school kids that year. **(IV)** The same study found black girls are three times as likely as white girls to be disciplined for less serious and arguably more ambiguous behaviour, such as disruptive behaviour, dress code violations or disobedience. **(V)** The middle-class black mothers interviewed for the study say that despite their college education, salaries and advocacy on behalf of their children, they were unable to protect their children from the racial hostilities at school.

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

79. (I) Jujitsu, which comes from the Japanese words "ju", meaning "gentle" or "yielding," and "jutsu", meaning "art" or "technique," is believed to have originated as early as the 8th century in Japan. **(II)** It evolved out of the necessity for samurai warriors to defend themselves in situations where they were unarmed or had lost their weapons. **(III)** One of the key figures in jujitsu's history is Jigoro Kano, who in 1882 founded judo, a modern martial art derived from jujitsu. **(IV)** Samurai relied heavily on weapons like swords, spears, and bows, but in close combat or when disarmed, they needed techniques that allowed them to defend themselves effectively. **(V)** During Japan's feudal period (1185-1868), jujitsu was widely practiced by the samurai class, who developed various styles (or ryu) of the art.

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

80. (I) Women in the UK continue to be underdiagnosed and under-treated for cardiovascular diseases, a recent statement from the British Cardiovascular Societies has concluded. **(II)** There are many differences in the way the heart looks and functions between men and women. **(III)** While there are many reasons for this, part of the problem is that cardiovascular disease is still seen as a "man's condition". **(IV)** This is troubling, as cardiovascular diseases can look very different in women than they do in men. **(V)** Recognising these differences – and why they exist – is essential to improving diagnoses of cardiovascular disease in women and saving lives.

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