

1-6: For these questions, choose the best word or expression to fill the space.

1. In the time of the Ancient Greeks and Romans, secret societies practised ----, the knowledge of which has since been lost to time.
 - A) disorders
 - B) trials
 - C) deliveries
 - D) rituals
 - E) categories

2. Early evidence suggests that psilocybin may help treat anorexia nervosa, an eating disorder characterised by ---- body image and food restriction.
 - A) definitive
 - B) controversial
 - C) distorted
 - D) qualified
 - E) gorgeous

3. Basking sharks can ---- a body temperature that is higher than their environment, putting them among a small group of fish species that are warm-blooded.
 - A) magnify
 - B) attribute
 - C) curb
 - D) tackle
 - E) maintain

4. The current whirlwind of interest in AI is largely down to the sudden arrival of a new generation of AI-powered chatbots capable of ---- human-like text-based conversations.
 - A) startlingly
 - B) imprecisely
 - C) unwillingly
 - D) fashionably
 - E) effortlessly

5. New research suggests that pouring some seawater on green turtles' nests may be a simple way to reverse a severe ---- in male births that has been linked to global warming.
 - A) concentration
 - B) decline
 - C) clarification
 - D) deterrent
 - E) improvement

6. Knee dislocations and fractures inside the knee can ---- post-traumatic osteoarthritis, yet it is meniscus and cruciate ligament injuries which hold the highest risk of developing the disease.
 - A) lead to
 - B) deal with
 - C) go off
 - D) pull up
 - E) wear out

7-16: For these questions, choose the best word(s) or expression(s) to fill the space(s).

7. Once radium ---- in 1898, various uses for it were suggested including cosmetics, so the likes of perfumes, toothpaste, lipsticks and creams containing radium and thorium chloride ---- popular especially in France.
 - A) was being discovered / were becoming
 - B) had been discovered / would have become
 - C) was discovered / became
 - D) is discovered / are becoming
 - E) would be discovered / will become

8. Theoretically, earthquakes ---- two hours before they occur, saving countless lives – but first we ---- GPS sensors that are 100 times more precise than those in use today.
 - A) must be predicted / need to develop
 - B) could be predicted / must develop
 - C) are to be predicted / were to develop
 - D) had to be predicted / are supposed to develop
 - E) should be predicted / had to develop

9. Deep-fried foods coated in crispy batter ---- all over the world, but perhaps nowhere are they more revered than in Japan, where chefs spend years and do their best ---- their craft.

- A) are being enjoyed / mastering
- B) will be enjoyed / having mastered
- C) enjoyed / to have mastered
- D) were enjoyed / master
- E) are enjoyed / to master

10. Jackal flies ---- the genus *Desmometopa* feed ---- the blood of insects, especially honeybees, that have been killed by spiders and praying mantises.

- A) of / over
- B) at / by
- C) in / into
- D) for / onto
- E) from / on

11. A sediment core from under the Greenland ice sheet has provided the first direct evidence that much of the ice disappeared ---- an interglacial period 400,000 years ago, when global temperatures were similar ---- today's.

- A) to / from
- B) amid / in
- C) with / on
- D) during / to
- E) off / beyond

12. ---- Costa Rica covers just 0.03 per cent of Earth's land surface, it is one of the most species-dense countries in the world.

- A) Since
- B) When
- C) As
- D) Though
- E) If

13. Interest rate rises aim to choke off spending across the economy, helping to dampen inflation, ---- the measures in question are also curtailing investment, with wind, solar and other green energy projects now struggling to get off the ground.

- A) until
- B) since
- C) unless
- D) while
- E) because

14. ---- fast fashion – cheap clothes bought and cast aside as trends change – has grown, the volume of clothing coming to the market has increased, which some say at the expense of the quality.

- A) Even if
- B) As if
- C) As
- D) While
- E) Only if

15. Over the past few years, ---- complex mathematical models combining traditional statistical techniques ---- machine learning analysis have shown promise in the early detection of financial statement fraud.

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

16. NASA's Viking 2 lander probably discovered quakes on Mars almost 50 years ago, but this has only just been confirmed ---- data from the InSight probe.

- A) thanks to
- B) in turn
- C) as opposed to
- D) in spite of
- E) on behalf of

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

Longhouses were the homes of the Iroquois – indigenous American tribes that included Mohawk, Oneida, Onondaga, Cayuga, and Seneca – and (17) ---- a number of families given the extended family structure. Longhouses have been built in a variety of different cultures, with evidence of the earliest examples in Europe and originating from around 5000 BCE. (18) ----, the Vikings of Scandinavia are said to have lived in variations of the form. Other indigenous peoples of North America, including those living on the coast of the Pacific Northwest, lived in such structures, (19) ---- these varied in design and construction to those built by the Iroquois. The name is an obvious reference to the long shape of these homes, usually (20) ---- by the size and number of the families who were to live in them. A typical Iroquois village was comprised of a number of longhouses and was surrounded by a palisade, a protective wall constructed (21) ---- wooden posts and bark.

17.

- | | |
|-----------------------|----------------|
| A) will house | B) would house |
| C) had to house | D) must house |
| E) should have housed | |

18.

- | | |
|----------------|---------------|
| A) Otherwise | B) Therefore |
| C) In contrast | D) Eventually |
| E) For example | |

19.

- | | |
|---------------|----------------|
| A) though | B) unless |
| C) since | D) by the time |
| E) as soon as | |

20.

- | | |
|--------------|---------------|
| A) overgrown | B) undermined |
| C) dictated | D) protected |
| E) covered | |

21.

- | | |
|---------------|-----------|
| A) for | B) out of |
| C) away | D) below |
| E) throughout | |

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

One of the most exciting **(22)** ---- for Alzheimer's research is in finding new and easily accessible signatures of the disease carried in blood, mucus or saliva. That is important **(23)** ---- patients need to be diagnosed quickly and easily before they can be treated. Scientists and clinicians use imaging such as fMRI and PET as imaging biomarkers allow physicians to look at where and how much the brain has been affected. Additionally, examining cerebrospinal fluid via lumbar puncture **(24)** ---- how much amyloid and tau is being created, a useful marker of disease. But these are all somewhat disruptive procedures, and require significant resources **(25)** ---- staffing, equipment and cost. There is a shift now **(26)** ---- less invasive ways of finding markers. Blood biomarkers are probably the most advanced of the new technologies. They work in a research setting now, but are not quite ready for clinical practice.

22.

- | | |
|-----------------|--------------|
| A) drawbacks | B) estimates |
| C) protectors | D) prospects |
| E) coincidences | |

23.

- | | |
|--------------|--------------|
| A) because | B) although |
| C) as though | D) even when |
| E) just as | |

24.

- | | |
|--------------------------|------------------------|
| A) should reveal | B) must reveal |
| C) is supposed to reveal | D) might have revealed |
| E) can reveal | |

25.

- | | |
|-------------------|-------------------|
| A) in addition to | B) in contrast to |
| C) despite | D) in terms of |
| E) before | |

26.

- | | |
|---------|------------|
| A) onto | B) towards |
| C) over | D) for |
| E) by | |

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

27. ----, their misuse and overuse have contributed to the emergence of bacteria which harbour genes that enable them to withstand the killing power of antibiotics.

- A) As antibiotic resistance is a growing threat to global health, causing over 1.27 million deaths worldwide in 2019 only
- B) Whereas antibiotic resistance mainly spreads to humans through contaminated food or water
- C) Although antibiotics are used to treat bacterial infections such as urinary tract infections and pneumonia
- D) Since scientists are developing antibiotics that are used to eradicate infections that are much harder to treat
- E) Because the unscientific way antibiotics are used throughout the world has been discussed in scientific circles

28. ---- while in ancient Rome, love had very little to do with who you married.

- A) Modern western marriage is usually envisioned as a joining of two people into a union born of love
- B) Marriage has actually always been about a gathering of people with mutual benefits
- C) People who get married most probably do so in order not to lead a lonely life
- D) Opinions about marriage – whether it is necessary at all – differ widely from culture to culture
- E) What people understood when marriage was mentioned was a little different in the past

29. Though language is a common way for men to undermine women everywhere in the world, ----.

- A) women in various countries are aware of this divide and have started to take action
- B) Indian feminists have highlighted the need to remove gender from swearing
- C) a change in policy is not possible as languages were constructed by men, who held the power in society
- C) a report found more than 2.9m tweets in one week that included gendered insults
- E) it is more so in patriarchal cultures where sexist slurs are at the foundation of toxic masculinity

30. Famous brands, designer brands more so, have been fighting fakes for years, ----.

- A) so second-hand shoppers will have a hard time distinguishing the real ones from fakes
- B) and “genuine-fake” has become an alternative for those who make money from textiles
- C) yet counterfeit fashion goes beyond scoring a goal against the conglomerates
- D) or this so-called “dark trade” has links to human trafficking, labour exploitation and child labour
- E) but today’s counterfeit problem has become second only to drugs in terms of criminal income

31. Although you might think you know when something has made your hair stand on end, ----.

- A) people are very good at distinguishing between different physiological sensations
- B) many mammal species use piloerection to protect themselves from the cold
- C) a study shows we generally can’t tell whether or not we have goosebumps
- D) goosebumps are no longer thought to have such an important role
- E) it probably takes a level of acuity we don’t have to distinguish between chills and actual goosebumps

32. While a nuclear fusion power plant could create more energy, with no radioactive waste, ----.

- A) a breakthrough fusion experiment has produced a net gain in energy for the second time ever
- B) containing and controlling such a reaction has been proving a monumental problem for physicists and engineers
- C) a challenge for the future is to create a reaction that dwarfs its total energy requirements, and not just the final laser stage
- D) a commercial reactor would have to run nearly continuously with multiple ignitions a second
- E) fusion works differently, by squeezing smaller particles together into larger atoms – the same process that operates within our sun

33. As there are more new ways to reduce your carbon footprint than ever before, and some destinations are toying with banning certain types of luggage on commercial flights, ----.

- A) tour operators are still advising passengers to pack as much as they see fit
- B) it is easy to pack light for a winter sports holiday when you know you can collect most of the gear you will need upon arrival
- C) stuffing your life in a suitcase for a holiday abroad may soon be a thing of the past
- D) every item manufactured for a seaside holiday has a carbon footprint
- E) there is an expectation for travellers to understand and respect the need to carry more luggage

34. Members of generation X – those who were born roughly from 1965 to 1980 – in the US were a little unlucky compared to their peers in Canada ----.

- A) in that college tuition started climbing when it was their time to get higher education
- B) although they were also the worst to suffer from student loan debts
- C) while Gen-Zers today have no prospects of buying even a tiny house
- D) unless, of course, we take into account the difficulties they had to endure
- E) after the arrival of new technologies that made online education possible

35. As video consumption shifts from movie theatres toward content shrunk down for televisions, tablets and smartphones, ----.

- A) making dialogue crisp and clear has become the entertainment world's toughest technology challenge
- B) about 50 percent of Americans – and the majority of young people – watch videos with subtitles on most of the time
- C) many modern flat-screen TVs hide their speakers, blasting sound away from the viewer's ears, which makes the problem even worse
- D) nowadays, even on the most expensive TVs, the speakers are tiny and crammed into the back or the bottom of the display
- E) modern TVs have software that automatically calibrate the sound levels for you, meaning that it might solve your hearing problem

36. Pterosaurs, the flying reptiles that lived alongside the dinosaurs, are an evolutionary mystery ----.

- A) since they appear in the fossil record fully formed, some with 33-foot wingspans
- B) because there is very little evidence of the ancestors that came before them
- C) though lagerpetid fossils are in short supply, especially the bones from the animals' heads
- D) as a new fossil provides an elusive glimpse of a group of reptiles most closely related to pterosaurs
- E) while there is new evidence that lagerpetids were actually more closely related to pterosaurs

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

72. The United States is well past a boom in consumption during the pandemic that pulled in \$536.8 billion worth of imports from China in 2022. ---- That lowers demand for goods from Chinese factories — which had already been weakened by a swath of tariffs that former President Donald J. Trump started and the Biden administration has largely kept in place.

- A) When considering the economic relationship between the two countries, it is important to recognize that the United States has played some role in China's troubles.
- B) For years, China's leaders have said they want to rely more on the country's households to drive economic growth, but they have taken few steps to support domestic consumption.
- C) An export-based Chinese recovery will run up against a world that is reluctant to become ever more dependent on China for manufactures, and that becomes a source of tension.
- D) This year, with home offices and patios stuffed full of furniture and electronics, Americans are spending their money on cruises and Taylor Swift tickets instead.
- E) The U.S. economy is composed of millions of companies with particular concerns, and some may have more to worry about as China's economy flounders.

73. Recently, the "lazy girl job" has over social media. In a video, a 26-year-old social media creator, who coined the term, described this kind of role as "basically something you can just quit" while making a comfortable salary and having excellent work-life balance. If it sounds like an ideal job that anyone can do, it is – yet the user wrapped it as a "girl" phenomenon. It was one of the reasons the term went viral. ---- In the past month, we have seen the rise of "girl math", which allows shoppers to justify pricey purchases with a bit of number crunching; and "girl dinner", in which meagre snack platters constitute a full dinner.

- A) Lazy girl jobs are just one instance of a parade of content recently branded as "girl" trends.
- B) Just as easily as women, men can have good, low-stress jobs.
- C) These creators are onto something – branding them as girl trends is a smart move if they want maximum impact.
- D) In many cases, there's very little inherently gendered about these viral girl trends.
- E) When something is labelled as a 'girl' thing, it creates an immediate sense of relatability.

74. The Dutch capital, Amsterdam, is one of the most-visited cities in Europe, with its 800,000-person population welcoming up to 20 million tourists a year. But despite its world-class museums, achingly beautiful green spaces and tranquil waterways, Amsterdam has also earned a raunchy reputation as Europe's most liberal party capital. ---- A new series of measures is being implemented to "maintain the quality of life in Amsterdam" while "working to prevent tourism that causes nuisances". The city council banned cruise ships from its city centre in July to prevent over-tourism in its most popular areas.

- A) And now, the city officials are trying new methods to clean up its image.
- B) Visitors will remain welcome, but not if they misbehave and cause nuisance.
- C) Of course, the Dutch capital has always been much more than just a place to let loose.
- D) The Netherlands – and Amsterdam in particular – is one of the world's most bike-friendly destinations.
- E) Amsterdam is renowned for its many world-class museums and galleries.

75. The Netherlands is a small, densely populated country, with more than 1,300 inhabitants per square mile. ---- Yet it is the globe's number two exporter of food as measured by value, second only to the United States, which has 270 times its landmass.

- A) The Netherlands has become an agricultural giant by showing what the future of farming may look like.
- B) They have almost completely eliminated the use of chemical pesticides on plants in greenhouses.
- C) It is bereft of almost every resource long thought to be necessary for large-scale agriculture.
- D) Since 2009 Dutch poultry and livestock producers have cut their use of antibiotics by as much as 60 percent.
- E) In the country's principal farming regions, there's almost no potato patch or no greenhouse.

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

76. (I) In a young, healthy person, the immune system is routinely deployed to maintain order – patching up damage and shooing off infections. (II) But as we get older, or when we are in poor health, these inflammatory responses can pass a certain critical threshold – a point beyond which they go into overdrive, releasing a cascade of potent chemicals that rampage around the body, destroying healthy cells and mutilating our DNA. (III) Enter "inflammaging" – the simmering backdrop of inflammation that accompanies the ageing process, and this is where the skin comes in. (IV) Locally, these chemicals degrade collagen and elastin, causing further skin thinning, wrinkles, and reduced elasticity. (V) The latest research suggests that wrinkly, diseased, or damaged skin becomes part of this system of inflammation, releasing a chemical cocktail that leads to yet further damage and inflammation.

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

77. (I) Alpha-gal may sound empowering, but the nickname, short for galactose-alpha-1, 3-galactose, is a sugar molecule that might just cause you to become allergic to meat. (II) Some patients have had to be given life support because their blood pressure is so low that they are in eminent danger of dying. (III) The sugar molecule is spread from the Lone Star tick bite, named for the single star-shaped spot marking on its back. (IV) A new study by the Centers for Disease Control and Prevention found that the number of suspected cases in the United States has increased substantially since 2010. (V) Moreover, some were identified in states not typically known as stomping grounds for these bloodsucking parasites.

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

78. (I) Most of us have a rough map of the world in our minds that we use any time we think about places. (II) However, these mental maps we created in our minds aren't necessarily reliable. (III) North Americans tend to think of Africa as a located almost entirely in the southern hemisphere, similar to South America. (IV) In fact, many of the maps in our heads share the same errors, some of which are quite large, and surprisingly resistant to correction. (V) For instance, we all know that South America is south of North America, of course, but you may be surprised by the fact that virtually the entire South American continent is east of Florida.

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

79. (I) When hospitals were filled beyond capacity and bed ventilators were in short supply during the pandemic, many people got a glimpse of how devastating lung diseases can be. (II) Unfortunately, lung function is not only harmed by respiratory illnesses like COVID-19, but also declines with age. (III) Swelling or inflammation caused by disease, environmental exposures, or advanced age can also partially obstruct breathing passages and limit airflow, research shows. (IV) Past studies, including a 2022 analysis on why some ethnic groups suffer worse lung disease outcomes than others, and pooled research that provides important data on chronic lower respiratory diseases, have measured lung health in people before. (V) Now, a new study, shows how consuming nutrients called omega-3 fatty acids can reduce such inflammation and slow declining lung function.

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

80. (I) For many workers, Covid-19 altered our attitudes towards our jobs and how we do them. (II) First, the dissolution of personal and professional boundaries during home working may have played a significant role. (III) The conditions of the past three years catalysed a full re-evaluation of careers and values, and subsequently dislodged some staid traditions that have bogged down workplace progress. (IV) In the new world of work, many employees have received what they've wanted from their employers – new ways of getting things done including flexible hours, remote working and even shortened workweeks. (V) Despite this, however, one entrenched feature of business culture that has proved tough – and in some cases impossible – to shift, is presenteeism.

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