

1 - 16: For these questions, choose the best word or expression to fill the space.

1. Agricultural activities increasingly invade the habitats of wild animals, ---- them of space and contact with others of their kind.

- A) encompassing B) including
C) depriving D) occupying
E) resisting

5. People living in long-term care facilities represent less than one percent of the U.S. population but ---- a third of its disease-related deaths.

- A) give up B) get along
C) look after D) pass away
E) account for

2. Many pharaohs who ruled during the New Kingdom as the sole authority within the country based their ---- in Thebes and exercised power from there.

- A) substance B) precision
C) disturbance D) engagement
E) administration

6. Some 55 million years ago – just around 10 million years after the mass ---- that killed T. rex and most of its kin – the average global temperature sat more than 20°F higher than it does today.

- A) utilization B) transience
C) extinction D) submission
E) adherence

3. Hackers around the world are in fact qualified people who have mastered using computers and ---- improve themselves at penetrating cyber-defences to steal valuable documents.

- A) constantly B) painstakingly
C) scarcely D) diplomatically
E) defiantly

7. Getting back to work after the pandemic will not feel the same as colleagues ---- communal spaces and activities, and even beloved lunch spots ---- the pandemic.

- A) could avoid / would not have survived
B) must avoid / cannot have survived
C) have to avoid / must not have survived
D) may avoid / may not have survived
E) used to avoid / might not have survived

4. Hailed as a miracle in the 1950s, the ---- bug killer DDT promised freedom from malaria, typhus and other insect-borne diseases.

- A) manifest B) potent
C) integral D) reliant
E) distant

8. Humans are not alone in ---- close track of natural water sources – many animals make mental maps of their surroundings ---- where important resources are found.

- A) to keep / to be remembering
B) having kept / having remembered
C) keeping / to remember
D) having been kept / remembered
E) to be kept / being remembered

9. Before their defeat in 1521, the Mexica people, who ---- as the Aztec in our day, ---- from a nomadic people to Mesoamerica's dominant power in less than a century.

- A) were known / evolved
B) are known / had evolved
C) would be known / have evolved
D) have been known / will evolve
E) will be known / were evolving

13. ---- they are ubiquitous and owned by almost 90 per cent of adults in the developed world, it is definitely worth remembering that smartphones did not even exist a score of years ago, namely, twenty years ago.

- A) Though
B) Since
C) As if
D) Unless
E) Now that

10. As many health practitioners have repeated, the risks of severe side effects ---- a vaccine are tiny in comparison ---- the risk of the disease itself, yet a sizeable number of people are still reluctant to get the shots.

- A) of / by
B) for / amid
C) off / into
D) from / to
E) on / with

14. ---- temperatures continue climbing and winters grow shorter, ticks will keep on spreading – they have already arrived in parts of Canada that were previously free of them.

- A) Until
B) Although
C) While
D) As
E) Once

11. Off the southern coast of Italy, the largest active volcano in Europe lies hidden ---- the waves, and now scientists are trying to figure ---- what would happen if it erupted.

- A) amid / in
B) beneath / out
C) as / toward
D) below / up
E) between / for

15. Studying corals is a labourious undertaking and usually requires ---- observing them alive in the ocean ---- examining their dead tissue in a laboratory.

- A) neither / nor
B) either / or
C) whether / or
D) so / as
E) not / but

12. When paper notes were introduced in 1929, the U.S. Bureau of Engraving and Printing opted to use green ink ---- the colour was relatively high in its resistance to chemical and physical changes.

- A) in case
B) given that
C) although
D) because
E) so that

16. Polar regions covered with ice year-round are hotspots for micrometeorite research ---- their geographical isolation and stability.

- A) because of
B) as well as
C) in spite of
D) regardless of
E) unlike

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

Acting like giant reservoirs, glaciers lock (17) ---- water that falls as snow in high altitudes in wet seasons before releasing it as meltwater in dry seasons. In doing so, glaciers ensure that the rivers in their basins have a steady supply of water all year round. Humans (18) ---- the water glaciers provide for hydropower, irrigation, livestock, manufacturing and transport. The fact that some of the largest glacier-fed basins flow into some of the fastest-growing nations in the world only adds to their importance. (19) ----, glaciers' finely balanced equilibrium has been off-kilter for a while. They are disappearing, and the rate at which they are doing so is increasing in most cases. This will be a big problem for the economies downstream (20) ---- their income on their output. (21) ---- helping protect people who desperately need glaciers to survive, understanding how quickly the world is losing its glaciers could also help us create a vulnerability index for them.

19.

- A) Thus
B) Moreover
C) However
D) Meanwhile
E) On the contrary

17.

- A) for
B) up
C) off
D) out
E) on
- A) basing
B) to base
C) base
D) based
E) having been based

20.

18.

- A) come upon
B) fall apart
C) get off
D) rely on
E) work out

21.

- A) Despite
B) Thanks to
C) Instead of
D) For the sake of
E) Besides

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

Unable to study magma directly, volcanologists rely on surface measurements from seismometers, GPS sensors, and radar satellites **(22)** ---- its movements. **(23)** ---- they can examine solidified magma chambers exhumed by Earth's upheavals, those remnants are incomplete, selectively depleted by ancient lava flows. They can study lava at the surface, but the samples have by then lost most of the trapped gases that drive eruptions and influence the magma's original temperature, pressure, and composition. Crystals, inclusions, and bubbles in the hardened lava hold clues **(24)** ---- its original state. But a sample from the Krafla chamber, which will be obtained by a project aiming to penetrate the molten rock, will tell researchers whether those estimates are fictional or **(25)** ----. **(26)** ----, the results obtained from the project could help explain how magma moves through the crust, while improving eruption forecasts.

22.

- A) guessing
B) to guess
C) to have guessed
D) guessed
E) to be guessing

25.

- A) visible
B) disposable
C) erratic
D) reliable
E) obscure

23.

- A) Given that
B) Whereas
C) Although
D) Since
E) Even so

26.

- A) Otherwise
B) Nevertheless
C) Instead
D) Even so
E) In addition

24.

- A) in
B) to
C) on
D) up
E) from

43 - 46: Answer these questions according to the passage below.

Our species began migrating out of Africa around 100,000 years ago. Aside from Antarctica, the Americas were the last continents humans reached, with the early pioneers crossing the now-submerged Bering land bridge that once connected eastern Siberia to North America. At times throughout the Pleistocene ice age, which ended 10,000 years ago, large ice sheets covered much of Europe and North America. The water locked in these ice sheets lowered the sea level, allowing people to walk the bridge from Asia through the Arctic to Alaska. But during the peak of the last glacial cycle, their path south into the Americas was blocked by a continental-wide ice sheet. Until now, scientists believed humans only travelled south into the Americas when this ice barrier began to melt – at the earliest, 16,500 years ago. But a newly-discovered set of fossil footprints suggest humans first set foot on the continent thousands of years earlier. These footprints, unearthed at White Sands National Park in New Mexico, were made by a group of teenagers, children and the occasional adult, and have been dated to the height of the last glacial maximum, some 23,000 years ago. That makes them potentially the oldest evidence of our species in the Americas.

43. It can be inferred from the passage that the Bering land bridge ----.

- A) was last used 16,500 years ago
- B) doesn't exist in our present day
- C) linked Antarctica to North America
- D) got its name from an ancient Siberian folk
- E) is the area where latest footprints are found

44. Which of the following is true about the Pleistocene ice age?

- A) It ended much earlier than many scientists think.
- B) It may have started 100,000 years ago in Africa.
- C) It was actually among the last known glacial cycles.
- D) It was important for the passage of humans from Asia to Alaska.
- E) It is the age when White Sands National Park was established.

45. The passage makes it clear that without the newly-discovered footprints ----.

- A) scientists would have incorrect information as to when humans first travelled to the Americas
- B) the ancestors of people living in the Americas today would never be known by scientists
- C) we would not have the slightest idea how thick the ice could have gotten at the height of the glacial maximum
- D) scientists would not know exactly when the ice barrier between Siberia and Alaska melted
- E) the discovery of an alternative route between Asia and the Americas would not have been possible

46. Which of the following describes the main purpose of this passage?

- A) To reveal the lack of knowledge among many scientists
- B) To reject the idea that humans migrated from Siberia to Americas
- C) To show how proof about first humans was collected
- D) To clear a misunderstanding about the origins of humans in Siberia
- E) To present new information about the oldest evidence of humans in the Americas

47- 50: Answer these questions according to the passage below.

Before 1960, the way in which British schools taught English grammar was based on Latin. Categories that had been developed for Latin grammar were imposed on English. That frequently made little sense because English is a very different language. From the 1920s, this Latinate approach was highly criticised, and the argument against English grammar in schools gathered force in the 1940s and 1950s. Studies in Scotland and England in the middle of the 20th century claimed that the subject was essentially too difficult for children. Research suggests the disappearance of grammar from the English school curriculum in 1960 is also due to an increased emphasis on English literature. The idea was that children would pick up the needed grammar more or less as they went along. The 1970s marked a turning point. The government published several critical reports, citing in particular high levels of illiteracy in England and Wales. This led to a U-turn in policy, with grammar gradually returning to the classroom from 1988. Research in the years that followed showed that student teachers didn't have the knowledge they needed to teach it, though. The authors of a 1995 study of 99 student teachers in Newcastle noted – and subsequent researchers concurred – that without significant input during training, teachers would struggle.

47. Which of the following is not mentioned as a reason for the disappearance of grammar from English school curriculum in 1960?

- A) High levels of illiteracy in Wales and England
- B) Its being too difficult for children
- C) An increased emphasis on English literature
- D) The way grammar was taught until then
- E) That English is a very different language from Latin

48. According to the passage, one of the reasons for student teachers' inability to teach grammar is ----.

- A) that Latin is used as a base for grammar teaching
- B) their lack of experience in teaching
- C) the illiteracy of their trainers at university
- D) the emphasis on English literature in 1970s
- E) lack of input while they are being trained

49. What is the author's attitude toward teaching English grammar based on Latin?

- A) Tolerant
- B) Cautious
- C) Supportive
- D) Critical
- E) Neutral

50. It is clear from the passage that when it comes to teaching English grammar, the British government ----.

- A) made a huge positive move by using Latin as a base
- B) favoured the emphasis on English literature the most
- C) frequently changed their policies in the 20th century
- D) was quick to give reaction to arguments against teaching grammar at schools
- E) made a lot of U-turns in a matter of a few years

51- 54: Answer these questions according to the passage below.

Humankind's peculiar preoccupation with time – and, in particular, whether we spend it “productively” – became much greater with the common usage of the clock and the emergence of the Industrial Revolution. Before then, the natural rhythms of the day guided people: The cows needed milking when they needed milking, and you couldn't decide to sort of do all the milking for the month in a couple of days. Once people started working in mills and factories, however, their activities had to be coordinated more precisely. This led to a greater focus on scheduling and the creation of the timetable – along with the realisation that our productivity could be carefully monitored. And the resulting pressure, to get more done in less time, seems to have grown incrementally in the second half of the 20th century. The self-help industry has catered to these anxieties by offering tips for better time management in many books. The implication is that, however much or endless they seem, with the right technique, you might be able to deal with pretty much any obligation that comes your way. Unfortunately, it often doesn't work that way. The drive for efficiency and productivity is a kind of trap since you never truly escape the feeling that you should be doing more.

51. One can understand from the passage that the timetable ----.

- A) was a necessity even when the natural rhythms of the day were the norm
- B) came into being due to the need for coordinating the activities of factory workers
- C) is the sole reason why we feel like we should be doing more
- D) is a necessary part of our lives, even if we are farmers responsible for milking cows
- E) became a part of our lives with the invention of the clock

52. It is pointed out in the passage that the self-help industry ----.

- A) did not do much to help people to get rid of the feeling that they should be doing more
- B) paved the way for a culture where efficiency and productivity are indispensable
- C) has had tremendous influence on the way we plan and organize our lives
- D) became a huge industry towards the end of the 20th century
- E) has been in our lives since people started to work at mills and factories

53. The underlined word 'incrementally' is closest in meaning to ----.

- A) severely
- B) exponentially
- C) superficially
- D) crucially
- E) definitively

54. Which of the following could be the best title for the passage?

- A) Our First Preoccupation with Time
- B) The Role of the Industrial Revolution in Shaping our Sense of Time
- C) Tips for Better Time Management in Modern Times
- D) The Fallacy of “More can be Done in Less Time” Doctrine
- E) The Natural Rhythms of the Day