

TA12. CK2.7

Read the passage and mark the letter A, B, C or D on your answer sheet to indicate the best answer to each of the following questions from 1 to 8.

For much of the 20th century, AI struggled not from a lack of ambition, but because available hardware wasn't powerful enough. Early systems hit limits on processing speed and memory, contributing to "AI winters" as progress **stalled** and funding dried up. Today, this problem is largely resolved. AI models are now trained on specialized chips in vast data centers. Compute, which used to be the main **bottleneck**, can now simply be purchased. Companies like Nvidia mass-produce powerful graphics processing units (GPUs)—originally designed for gaming but perfectly suited to AI calculations. What holds AI back now? The physical limit of electricity.

Modern AI models don't just train once; they operate continuously, powering chatbots, search engines, and autonomous agents. **This shift** has made AI a constant, large-scale electricity consumer. According to Sampsa Samila of IESE Business School, **the core issue is not a shortage of energy in absolute terms, but rather the availability of reliable, firm capacity at the right place and the right time**.

Predictions for AI energy consumption show this strain. The International Energy Agency (IEA) projects data centers will consume more than twice as much electricity by the decade's end. In parts of the U.S., data center power usage already rivals heavy industry. How AI is used matters as much as how it is trained. Training large models consumes immense power but occurs infrequently. What is growing faster is the everyday work of models responding to users. Samila notes that newer "reasoning" AI systems, which deliberate longer, push energy demands into everyday operations rather than occasional large training runs.

(Adapted from: <https://www.livescience.com>)

Question 1. Which of the following is **NOT** mentioned in the passage as a factor that contributed to AI's slow progress in the 20th century?

- A. Limited memory capacity
- B. Absence of skilled AI engineers and scientists
- C. Insufficient processing speed
- D. Lack of research funding after stalled progress

Question 2. The word **stalled** in paragraph 1 is OPPOSITE in meaning to ____?

- A. accelerated
- B. frozen
- C. prevented
- D. paused

Question 3. In paragraph 2, the phrase **this shift** refers to ____?

- A. the change from AI training occasionally to AI operating continuously across multiple applications
- B. the move from running AI computations on local machines to large-scale cloud data centers
- C. the development of more powerful GPU chips by companies such as Nvidia and AMD for AI use
- D. the transition from AI being used for research to being used commercially

Question 4. The word **bottleneck** as used in paragraph 1 is CLOSEST in meaning to ____?

- A. resource
- B. barrier
- C. component
- D. advantage

Question 5. Which of the following BEST paraphrases the underlined sentence in paragraph 2?

- A. AI data centers should move to energy-surplus regions to resolve the power shortage crisis.
- B. The world currently does not generate sufficient electricity to meet the growing demands of modern AI systems.
- C. The challenge is not the global energy supply, but ensuring stable power is available where and when AI systems require it.

D. Energy companies have not made sufficient investments in the infrastructure required to adequately support global AI growth.

Question 6. According to the passage, which of the following statements is NOT TRUE?

- A. The IEA projects data center electricity use will more than double by the end of the decade.
- B. Training large AI models is currently the fastest-growing source of AI energy consumption.
- C. Reasoning AI systems increase energy use during everyday operations rather than only during training.
- D. GPUs were originally developed for gaming and visualization before being used in AI.

Question 7. In which paragraph does the author explain how GPUs, though originally designed for gaming, became central to AI processing?

- A. Paragraph 4
- B. Paragraph 1
- C. Paragraph 3
- D. Paragraph 2

Question 8. Which paragraph mentions the everyday operations of newer "reasoning" systems responding to users?

- A. Paragraph 4
- B. Paragraph 3
- C. Paragraph 1
- D. Paragraph 2

Read the passage and mark the letter A, B, C or D on your answer sheet to indicate the best answer to each of the following questions from 9 to 18.

The so-called generation gap has arguably never been wider, yet it has never been more misunderstood. [I] Picture a family dinner at which a grandparent laments that young people are glued to screens, while a grandchild concludes the elder is irrelevant. Both retreat into their own certainties, leaving their misalignment of values, priorities, and lived experiences entirely unexamined. Commentators habitually frame this estrangement as a consequence of technological acceleration: older generations struggle to master tools that younger ones absorb instinctively, and each side interprets the other's unfamiliarity as evidence of deeper inadequacy.

Social media has transformed what was once a private tension into an **intractable** cultural spectacle. Viral videos pit young professionals against exasperated older voices, harvesting engagement through generational grievance. Older adults are mocked as technologically incompetent and emotionally rigid; younger generations are dismissed as entitled and incapable of sustained effort. [II] Media features and corporate reports amplify these caricatures into boardrooms, classrooms, and policy chambers, where consequential decisions about employment, education, and social provision are made.

The term 'generation gap' entered popular discourse in the 1960s, but the practice of treating generational difference as fixed, oppositional, and insurmountable has intensified in recent decades. Employers who dismiss younger workers as entitled simultaneously overlook their own rigidity in the face of change. [III] Researchers have documented how the burden of proof is disproportionately assigned to the young: it is consistently they who must adapt **their** communication styles, suppress their expectations, and perform gratitude for opportunities previous generations received without question. Performance review culture illustrates this imbalance most vividly, as assessments of 'professionalism' routinely encode the preferences of whoever holds the senior position.

Why does this matter beyond interpersonal friction? Surface-level interventions — reverse-mentoring programmes and generational awareness workshops — are adopted by HR departments eager to signal modernity while leaving underlying power hierarchies untouched. [IV] **Expecting harmony between generations without fostering conditions for genuine mutual listening resembles asking two musicians to perform in unison when neither has agreed to hear the other's melody.** Collaborative possibilities remain squandered, not because the divide is

unbridgeable, but because addressing it seriously would require organisations to redistribute power rather than merely rebrand it.

Bridging the generation gap authentically — through enforceable equity, transparent dialogue, and a genuine willingness to revise inherited assumptions — is indispensable if workplaces and families are to harness the full range of human experience across age.

Question 9. According to paragraph 1, framing the generation gap purely as a consequence of technological acceleration will _____.

- A. prevent any genuine exploration of the deeper value and priority differences separating both sides
- B. prove financially costly for families attempting to close the technological divide at home
- C. widen the existing digital competence gap between older and younger generations significantly
- D. inspire both older and younger generations to invest greater effort in mastering unfamiliar tools

Question 10. The word **intractable** in paragraph 2 mostly means _____.

- A. constant
- B. evolving
- C. outdated
- D. insignificant

Question 11. Which of the following best summarises paragraph 2?

- A. Social media platforms have become the primary arena in which generational stereotypes are produced, circulated, and eventually dismantled.
- B. Generational stereotypes have spread beyond private settings into media and institutions where consequential decisions are made.
- C. Corporate diversity reports have successfully reduced generational tension in workplaces by representing the perspectives of both employers and employees fairly.
- D. Digital communication has made it easier for members of different generations to identify common ground and bridge inherited cultural divisions.

Question 12. What does the passage suggest about employers who dismiss younger workers as entitled?

- A. They are equally susceptible to generational bias, failing to recognise their own resistance to change.
- B. They are products of a formal education system that never adequately prepared them for managing a multi-generational workforce.
- C. They are largely correct in their assessments, as younger workers consistently fail to demonstrate adequate commitment to organisational goals.
- D. They are typically overruled by HR departments that enforce strict equity policies across all generational cohorts.

Question 13. What challenge do younger workers face in professional environments, according to paragraph 3?

- A. A systematic exclusion from senior promotional pathways regardless of demonstrated performance
- B. A widespread tendency among peers of the same generation to undermine one another's efforts
- C. An unequal expectation that they must be the ones to adjust their behaviour to fit existing norms
- D. A legal framework that actively prevents them from challenging outdated professional standards

Question 14. The word **their** in paragraph 3 refers to _____.

- A. researchers B. opportunities C. generations D. the young

Question 15. Which of the following best paraphrases the underlined sentence in paragraph 4?

- A. Generational harmony is impossible unless both sides adopt the same communication technology as a shared platform for dialogue.
B. Cohesion across generations cannot be achieved unless both sides are genuinely willing to understand and acknowledge each other's perspective.
C. Since both generations already share common goals, the only remaining barrier to harmony is the absence of a structured programme to coordinate their efforts.
D. The differences between generations are so fundamental that no institutional intervention, however well-designed, can realistically overcome them.

Question 16. Which of the following can be inferred from the passage?

- A. Younger and older workers, having recognised their mutual biases, are increasingly collaborating to reform the professional review systems that disadvantage both groups.
B. HR departments are effectively dismantling intergenerational hierarchies through the consistent and rigorous application of reverse-mentoring programmes.
C. Organisations play an active role in preserving the conditions that sustain intergenerational division, as redistributing power would threaten existing institutional structures.
D. The primary responsibility for resolving generational conflict rests with older workers, who hold the institutional power needed to initiate meaningful structural change.

Question 17. Where in the passage does the following sentence best fit?

Yet the more consequential divide is not technological but psychological.

- A. [IV] B. [II] C. [III] D. [I]

Question 18. Which of the following best summarises the passage?

- A. The generation gap is a culturally reinforced divide that demands genuine structural reform, not superficial fixes.
B. Bridging the generation gap requires younger generations to take the initiative in revising their professional expectations and communication habits to align with established norms.
C. The rise of social media has made the generation gap irreversible, as digital platforms continuously produce new stereotypes faster than institutions can address the old ones.
D. Intergenerational conflict is predominantly a workplace issue, and its resolution depends entirely on employers introducing enforceable equity policies in performance review systems.

Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct word or phrase that best fits each of the numbered blanks from 19 to 24.

Urban gardening has become a powerful movement for city dwellers seeking a deeper connection (19)_____ nature. Growing food in small spaces — whether on rooftops, balconies, or community plots — brings both environmental and mental health benefits. (20)_____, it empowers residents to take meaningful control over what they consume, reducing dependence on long supply chains.

Our neighborhood initiative has recently launched a series of (21)_____ to help beginners get started. Volunteers provide tools, seeds, and hands-on training every Saturday morning. (22)_____ participant who completes the four-week programme will receive a certificate of achievement.

Consistent effort is essential if you wish to (23)_____ a thriving garden over the long term. While the initial setup can feel overwhelming, many growers report that the (24)_____ obstacles of the first season quickly give way to confidence and creativity.

that risk being left permanently behind. Bridging this divide demands sustained public investment in digital infrastructure, affordable access to devices and connectivity, and (35). Without a coordinated effort across government, industry, and civil society, the digital revolution risks deepening inequality rather than alleviating it.

Question 31.

- A. Many governments have long struggled to bridge the digital divide and address persistent regional inequalities
- B. Tech corporations face growing global scrutiny over the digital divide and access inequalities
- C. Leading tech experts argue that the digital divide stems from significant hardware inequalities in schools
- D. The digital divide remains a defining and widespread inequality across contemporary societies

Question 32.

- A. all of which place a disproportionate burden on rural schools and young learners
- B. which continues to widen despite government pledges to expand broadband coverage
- C. where high-tech hubs concentrate the best opportunities in wealthy urban districts
- D. this gap is expected to narrow as mobile devices become more widely adopted

Question 33.

- A. being systematically excluded from the opportunities that digital literacy unlocks
- B. are systematically excluded from the opportunities that digital literacy unlocks
- C. local authorities have failed to provide them with adequate internet facilities nearby
- D. having been excluded from the opportunities that technology often provides

Question 34.

- A. Recent figures reveal rural students are likely to lack a lot of digital skills due to cost and distance
- B. Several municipal governments have introduced subsidies to improve digital access in underserved areas
- C. Some volunteer organisations run mobile programmes to bring basic digital training to remote communities
- D. Deteriorating connectivity in rural zones continues to raise serious concerns among non-government organisations

Question 35.

- A. the provision of inclusive digital literacy training and the elimination of barriers to online participation
- B. to deliver digital literacy training and the removal of technical barriers to online services
- C. because delivering digital literacy training helps remove technical barriers facing rural users
- D. the provision of inclusive digital literacy training and to systematically eliminate barriers to online participation

Mark the letter A, B, C or D on your answer sheet to indicate the best arrangement of utterances or sentences to make a cohesive and coherent exchange or text in each of the following questions from 36 to 40.

Question 36.

- a. Mary: That's fine! Enjoy your walk and your workout then.
 - b. Mary: It's starting to rain. Do you want me to drive you to the train station?
 - c. Tom: Thanks for the offer, but I have an umbrella and I'd prefer to walk to the gym first.
- A. b – a – c B. b – c – a C. a – c – b D. a – b – c

Question 37.

- a. Jack: Uh, once you get used to making plans, you can balance everything without stress.
- b. Jose: You handle schoolwork well even with all your clubs; what's your secret to being organized?
- c. Jack: I plan my week every Sunday and write down my assignments.
- d. Jose: That's smart! I often forget what to do because I have many tasks.
- e. Jose: I should start doing that! It sounds like a great way to avoid stress.

A. b - c - a - d - e **B.** b - d - c - a - e **C.** b - c - d - a - e **D.** c - b - d - a - e

Question 38.

- a. I dedicated a lot of time to organizing my presentation materials, hoping to make a strong impression on the committee.
- b. The situation, however, turned out to be quite different when I met with unexpected technical difficulties during my speech.
- c. This challenging experience was truly a great lesson that helped me build more resilience in my professional life.
- d. Accepting a position as a project coordinator at a leading firm motivated me to develop my leadership skills further.
- e. Rather than losing my confidence, I remained calm and adapted my approach to complete the task successfully.

A. c - a - e - d - b **B.** c - b - e - a - d **C.** d - b - e - c - a **D.** d - a - b - e - c

Question 39.

Dear Valued Customer,

- a. If you do not update your information, it may lead to temporary limits on using your online banking services.
- b. To keep your access working, please update your contact information, especially your mobile number, in the 'Profile' section before October 15th.
- c. We are writing to tell you about an important security improvement to our online banking system, starting next month.
- d. We thank you for your help in keeping the highest level of security for your money transactions.
- e. This new part will add two-factor authentication for all logins, greatly increasing the protection of your accounts.

Yours sincerely,

The Customer Security Team

A. a - c - b - e - d **B.** c - b - e - a - d **C.** e - c - b - a - d **D.** c - e - b - a - d

Question 40.

- a. These wide-ranging developments illustrate a profound transformation of the district, turning it from a declining industrial zone into a prestigious and socially integrated urban core.
- b. This transition was further supported by the ecological restoration of the nearby waterfront, marked by the introduction of long-lasting green corridors and recreational facilities.
- c. Historically forgotten sectors were greatly renovated, involving the large-scale demolition of old buildings for luxury high-rise apartments.

d. Concurrently, a significant expansion of the service sector emerged, most notably through the development of high-tech innovation hubs and large retail complexes on former industrial sites.

e. Throughout the early 21st century, the outskirts of Aethelgard underwent a major transformation, signaling a shift toward thorough modernization and renewed economic expansion.

A. e - d - b - a - c
d - c

B. e - c - d - b - a

C. e - c - b - a - d

D. e - a - b -