

**SỞ GD&ĐT BẮC NINH**

(Đề thi có 06 trang)

**ĐỀ THI THỬ THPT QUỐC GIA NĂM 2025**

Môn thi: TIẾNG ANH – Mã đề: 1101

Thời gian làm bài: 50 phút; 40 câu hỏi trắc nghiệm

Read the following passage about nanotechnology and mark the letter A, B, C or D to indicate the best answer to each of the following questions from 1 to 10.

If nanotechnology sounds too far-fetched, looking at what geckos can do might be a good starting point. These lizards could quickly snatch the champion title in a climbing competition should there be one. Watching them climb upside down on a horizontal pane of glass, one can't help thinking that Spiderman should really have been called geckoman. Without breaking a sweat, they can easily hang from a single toe, and they do so by pure adhesion, not by sticking a toe in a hole or by curling **it** around something they can grip. Scientists estimate that if all its toes touch the glass, it could take the weight of a 100kg person suspended below it, of course, under the condition that the rest of the body were strong enough. Although each toe is equipped with a tiny hook-like claw at the end, these are almost useless on the glass. The secret to geckos' superpower lies in the amazing structure of the skin of their toes.

[I] Over the past 15 years, scientists have been working tirelessly to try to unlock the secrets of the stickiness of gecko toes and come up with a way to artificially **reproduce** the same structure of nano-hairs. [II] This is one example of research in the field widely known as nanotechnology. In this field, the technology developed can be measured in a few nanometres (one nanometre is a millionth of a millimetre), meaning that how it works can only be visible when seen under a microscope. [III] It was the American theoretical physicist Richard Feynman who set the quest in motion at the beginning of the 1960s, but the "nano" catchphrase was coined in the 1990s by Dr. Eric Drexler, who **spurred** scientists on through a series of speeches and a book entitled "Engines of Creation: The Coming Era of Nanotechnology". [IV]

According to nanoscientists, one application of nanotechnology that will make the biggest splash in the media will be the gloves and the boots that will allow rock-climbers to take their sport to previously-undreamed-of heights. **But the technology could also be used in surgery to keep the edges of wounds together without the need of stitches.** There will also be a huge potential in the manufacturing sector to stick millions of components together tighter than ever before without glues or screws.

 (Adapted from *TIENG ANH 12 Workbook*)

**Question 1.** What does the word **it** in paragraph 1 refer to \_\_\_\_\_?

- A. adhesion                      **B. geckos' toe**                      C. a hole                      D. the glass

**Question 2.** According to the passage, what can be inferred about the future applications of nanotechnology?

- A. Scientists are unclear about how nanotechnology will be used in real life.  
 B. Nanotechnology will mostly be used in manufacturing rock-climbing gears.  
 C. Thanks to nanotechnology, stitches, glues and screws will be unnecessary.  
**D. Possible applications of nanotechnology cover a range of areas and sectors.**

**Question 3.** What is the word **spurred** in paragraph 2 OPPOSITE in meaning to \_\_\_\_\_?

- A. dissatisfied                      **B. discouraged**                      C. discharged                      D. disappointed

**Question 4.** According to the passage, which is NOT mentioned about Dr. Eric Drexler?

- A. His publications inspired later generations of scientists.  
 B. Apart from being a writer, he was also a public speaker.  
**C. He laid the groundwork for the field of nanotechnology.**  
 D. He was the first to introduce and popularize the term "nano".

**Question 5.** The word **reproduce** in paragraph 2 is CLOSEST in meaning to \_\_\_\_\_.

- A. recreate**                      B. regenerate                      C. renovate                      D. regulate

**Question 6.** Which of the following sentences best summarizes paragraph 1?

- A. The title "the world's best climber" should belong to geckos, not spiders.
- B. Geckos are masters of using nanotechnology to stick themselves to any surface.
- C. Geckos' unbelievable climbing ability still remains a mystery to humans.
- D. Geckos' amazing climbing ability has something to do with nanotechnology.**

**Question 7.** Which of the following best paraphrases the underlined sentence in paragraph 3?

- A. Nanotechnology will likely keep stitching surgeons on the edge because their skills will be made redundant.
- B. Nanotechnology could make stitching surgeries redundant, allowing open wounds to close naturally.**
- C. Patients with open wounds could be treated at home without having to undergo a stitching surgery.
- D. Surgeons could use stitches to close open wounds instead of having to rely on nanotechnology.

**Question 8.** According to paragraph 1, which is TRUE about geckos?

- A. The secret to their climbing ability is the hook-like claw at the end of their toes.
- B. They can stick themselves to the surface of glass with just one toe.**
- C. Their bodies are strong enough to support a person weighing 100 kg
- D. Few animals in the animal kingdom can outclimb geckos, except for spiders.

**Question 9.** Which of the following sentences best summarizes the whole passage?

- A. Nanotechnology is still at an early stage of development as scientists are starting to take interest in the geckos' amazing climbing ability; but possible.
- B. Inspired by the superpower of geckos, scientists have been able to crack the code of nanotechnology and are looking to develop a range of transformative applications.**
- C. Scientists have been able to unlock the secret behind nanotechnology by imitating the geckos' amazing climbing ability, which is drawing a lot of attention from the media.
- D. It took scientists a long time to understand the science behind geckos' climbing superpower, and it turns out that replicating this ability in real life is quite easy.

**Question 10.** In which of the spaces numbered in the text does the following sentence best fit?

"Currently, they are looking for an alternative material with which to manufacture the stickiest synthetic surface ever."

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

*Read the following advertisement and mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks from 11 to 16.*

### The All-Electric VF 8: Sustainable luxury within reach

State-of-the-art technology and unrivaled interior space combined (11) \_\_\_\_\_ stunning Pininfarina design create a one-of-a-kind vehicle, the VinFast VF 8. It is built with premium craftsmanship and high-quality parts (12) \_\_\_\_\_ for safety, reliability, and comfort on every journey.

Innovations for life (13) \_\_\_\_\_ every journey in the VF 8 more than just a drive. Advanced and smart applications with a 15.6-inch touchscreen and access to VF Online packages let you manage your home, work uninterrupted, and stay (14) \_\_\_\_\_, all remotely and safely in the VF8, all from your fingertips.

With over-the-air (OTA) updates, your VinFast becomes future-proof thanks to regular automatic or manual updates to the operating system, apps, and system that keep your vehicle up-to-date and always feeling brand new.

Every VinFast electric car is built to protect by (15) \_\_\_\_\_ a full range of safety features and smart design to keep your eyes on the road, and a (16) \_\_\_\_\_ to alert emergency services when in an accident.

Live more. Worry less. Dive into the world of electric vehicle ownership and the way it's meant to be experienced.

(Adapted from <https://vinfastauto.us/vehicles/vf-8>)

- Question 11.** A. by                      B. to                      **C. with**                      D. in
- Question 12.** A. which designed      **B. designed**                      C. designing                      D. was designed

- Question 13. A. have **B. make** C. do D. take  
 Question 14. **A. entertained** B. entertain C. entertainment D. entertaining  
 Question 15. A. to including **B. including** C. include D. to include  
 Question 16. **A. high-end digital security system** B. digital system high-end security  
 C. digital high-end system security D. digital security high-end system

Read the following leaflet and mark the letter A, B, C or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks from 17 to 22.

### To Conserve Energy, Start at Home!

*Let's explore what we can do at home each day to save energy.*

#### Facts and figures:

In the U.S., buildings (17) \_\_\_\_\_ 40% of total energy consumption. The (18) \_\_\_\_\_ of households using energy-efficient appliances has increased, yet many still waste electricity. This unnecessary consumption (19) \_\_\_\_\_ to climate change and higher utility bills.

#### Positive action!

- ✓ Save energy in the living room. Ensure your TV is completely turned off - not just in sleep mode - when you aren't watching it. You should also opt for LEDs whenever possible. LED TVs consume significantly less energy than plasma or LCD models. Additionally, LED lightbulbs use up to 75% less energy and last much longer than traditional lightbulbs. You could save up to \$40 per year by replacing five traditional light bulbs with ENERGY STAR (20) \_\_\_\_\_ bulbs.
- ✓ Unplug devices when not in use. Many electronics draw power even when turned off, so make it a habit to unplug chargers, computers, and (21) \_\_\_\_\_ devices to reduce energy waste.
- ✓ (22) \_\_\_\_\_ your current energy sources, consider renewable energy options, such as installing solar panels, as they not only reduce your carbon footprint but can also save you money in the long run.

(Adapted from <https://www.saveonenergy.com/resources/how-to-save-energy-at-home/>)

- Question 17. A. pick up **B. use up** **C. account for** D. take out  
 Question 18. A. amount **B. volume** **C. number** D. quality  
 Question 19. A. relates **B. contributes** C. attributes D. refers  
 Question 20. A. verified **B. licensed** **C. certified** D. declared  
 Question 21. A. another **B. other** C. the other D. others  
 Question 22. A. On account of **B. Irrespective of** C. As a result of D. In view of

Mark the letter A, B, C or D to indicate the best arrangement of utterances or sentences to make a meaningful exchange or text in each of the following questions from 23 to 27.

#### Question 23.

- a. Sam: Hi, Lisa! They are doing well, thank you. We just had a family reunion last weekend.  
 b. Lisa: That's great! I'd love to hear all about it!  
 c. Lisa: Good to see you, Sam! How's your family?  
 A. a - b - c **B. c - a - b** C. c - b - a D. b - a - c

#### Question 24.

- Hi Jane,  
 a. Thanks for the budgeting advice you sent; it's making a noticeable difference in my financial planning.  
 b. I started tracking my spending as you suggested, and it has been eye-opening to see where my money goes.  
 c. I've already managed to save a bit more this month, and I plan to continue using your tips.  
 d. Your advice has been truly helpful, and I'm looking forward to seeing more improvements in my budget.  
 e. I didn't realize how many small, unnecessary purchases were adding up over time, and I've been cutting back.  
 Best,

Michael

A. b - a - e - c - d

B. b - e - c - a - d

C. c - a - e - b - d

D. a - b - e - c - d

**Question 25.**

- a. The flexibility of this role allows me to meet with clients both in person and virtually, adapting to their needs.
- b. Over the past year, I have done this job at an environmental agency, helping clients make greener choices for their homes and businesses.
- c. Overall, I find great satisfaction in my work, as it aligns with my values and empowers others to adopt sustainable practices.
- d. Although some projects require travel to remote locations for assessments, these trips provide valuable insights into environmental challenges.
- e. My enthusiasm for sustainable living and environmental advocacy inspired me to pursue a career in eco-consulting.

A. a - b - e - d - c

B. d - e - a - b - c

C. b - a - d - e - c

D. e - b - a - d - c

**Question 26.**

- a. However, critics argue that while these efforts are commendable, they fall short of addressing the immediate needs of its growing population.
- b. Greenview's local government has recently implemented policies aimed at reducing its carbon footprint by 50% over the next decade.
- c. Over the past five years, Greenview has also seen an increase in green spaces and public parks, promoting environmental sustainability.
- d. The city's focus on long-term environmental goals has led to significant changes in infrastructure and public awareness.
- e. These policies have encouraged the use of renewable energy sources and stricter regulations on emissions from businesses.

A. d - e - c - b - a

B. b - a - c - e - d

C. b - e - c - d - a

D. b - e - a - d - c

**Question 27.**

- a. David: That's a great reason! I think you will thrive in that role.
- b. Mia: I'm thinking about pursuing a career in marketing.
- c. David: Hey, Mia! Have you decided what you want to do after graduation?
- d. David: That sounds interesting! What attracted you to that field?
- e. Mia: I love being creative and working with people.

A. d - e - a - b - c

B. c - b - d - e - a

C. d - b - c - e - a

D. c - e - a - b - d

**Read the following passage about Robot teachers and mark the letter A, B, C, or D to indicate the correct answer to each of the questions from 28 to 35.**

**Robot teachers**

If you think of the jobs robots could never do, you would probably put doctors and teachers at the top of the list. It's easy to imagine robot cleaners and factory workers, but some jobs need human connection and creativity. But are we underestimating what robots can do? In some cases, they already perform better than doctors at diagnosing illness. Also, some patients might feel more **comfortable** sharing personal information with a machine than a person. Could there be a place for robots in education after all?

British education expert Anthony Seldon thinks so. And he even has a date for the robot takeover of the classroom: 2027. He predicts robots will do the main job of transferring information and teachers will be like assistants. Intelligent robots will read students' faces, movements and maybe even brain signals. Then **they** will adapt the information to each student. It's not a popular opinion and **it's unlikely robots will ever have empathy and the ability to really connect with humans like another human can.**

One thing is certain, though. A robot teacher is better than no teacher at all. In some parts of the world, there aren't enough teachers and 9–16 per cent of children under the age of 14 don't go to school. That



problem could be partly solved by robots because they can teach anywhere and won't get stressed, or tired, or move somewhere for an easier, higher-paid job.

Those **negative** aspects of teaching are something everyone agrees on. Teachers all over the world are leaving because it is a difficult job and they feel overworked. Perhaps the question is not 'Will robots replace teachers?' but 'How can robots help teachers?' Office workers can use software to do things like organise and answer emails, arrange meetings and update calendars. Teachers waste a lot of time doing non-teaching work, including more than 11 hours a week marking homework. If robots could cut the time teachers spend marking homework and writing reports, teachers would have more time and energy for the parts of the job humans do best.

(Adapted from <https://learnenglish.britishcouncil.org/skills/reading/b1-reading/robot-teachers>)

**Question 28.** Which of the following best paraphrases the underlined sentence in paragraph 2?

- A. It is highly improbable that robots will establish empathy and break all the connections with humans like another human can.
- B. Robots probably will develop empathy and establish connection with humans.
- C. Robots are unlikely to be empathetic and well able to connect with humans like another human can.**
- D. It is probable that robots won't demonstrate empathy and sever all the connections with humans like another human can.

**Question 29.** Which of the following is NOT mentioned as one of the robots' abilities in the future?

- A. to read students' faces
- B. to adapt the information
- C. to have empathy**
- D. to transfer information

**Question 30.** In which paragraph does the writer discuss the shortage of teachers in some parts of the world?

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

**Question 31.** In which paragraph does the writer mention a present causal relationship?

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

**Question 32.** The word **comfortable** in paragraph 1 is OPPOSITE in meaning to \_\_\_\_\_.

- A. relaxed
- B. hard**
- C. pleased
- D. contented

**Question 33.** The word **negative** in paragraph 4 could be best replaced by \_\_\_\_\_.

- A. striking
- B. inspiring
- C. fundamental
- D. unfavourable**

**Question 34.** The word **they** in paragraph 2 refers to \_\_\_\_\_.

- A. students' brain signals
- B. students' faces
- C. students' movements
- D. intelligent robots**

**Question 35.** Which of the following is TRUE according to the passage?

- A. Some teachers use robots to reduce their time answering emails and marking homework.
- B. Robots are always better at diagnosing illness than doctors.
- C. Most jobs seem as if they can be done by robots or computers.
- D. Robot assistants could help teachers by marking homework.**

**Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks from 36 to 40.**

Bruno Mars has once again taken the global music scene by storm with his latest hit song, "APT." Dominating the charts, (36) \_\_\_\_\_. The song has captivated audiences worldwide, achieving remarkable success on various music charts.

"APT." has secured its position at the top of the Billboard Global 200 and Global Excl. U.S. charts for an impressive seven consecutive weeks. (37) \_\_\_\_\_. The track's success is driven by a combination of strong streaming numbers and robust sales data, (38) \_\_\_\_\_.

In the competitive arena of global music charts, "APT." stands out not only for its own success but also for its ability to coexist with classic hits. This holiday season, traditional favorites have made a significant

impact, reclaiming positions in the top 10. Notably, songs like Mariah Carey's "All I Want for Christmas Is You" and Wham's "Last Christmas" have reemerged, adding a nostalgic touch to the current chart landscape. Additionally, Lady Gaga and Mars' collaboration, "Die With a Smile", (39) \_\_\_\_\_, having previously held the top spot for several weeks.

The streaming figures for "APT." are nothing short of exceptional, demonstrating its widespread appeal. Throughout different weeks in 2024, the song has consistently achieved high streaming numbers. (40) \_\_\_\_\_. As the song continues to captivate audiences worldwide, it remains a testament to Mars' ability to create music that resonates across diverse listener demographics.

(Adapted from <https://www.royaltyexchange.com/blog/rose-bruno-mars-apt>)

- Question 36.** **A. this track showcases Mars' enduring appeal and musical prowess**  
B. Mars' enduring appeal and musical prowess are evident in the song's captivating sound  
C. Mars' enduring appeal and musical prowess are showcased through in this track  
D. listeners are drawn to the track, which reflects Mars' enduring appeal and musical prowess
- Question 37.** **A. This popularity highlights its ability to resonate with listeners across different regions and achieves the widespread song**  
B. This difference achieves the song's widespread popularity and its ability to listen and resonate across different regions  
C. This ability resonates with listeners across different regions and highlights the song's widespread popularity and achievement  
**D. This achievement highlights the song's widespread popularity and its ability to resonate with listeners across different regions**
- Question 38.** **A. which have both contributed to its enduring chart performance**  
B. whose enduring chart performance has contributed to both  
C. to both of which its enduring chart performance has contributed  
D. both have contributed to its enduring chart performance
- Question 39.** **A. remaining a noteworthy contender**  
B. of which a noteworthy contender is remained  
C. which remains a noteworthy contender  
**D. remains a noteworthy contender**
- Question 40.** **A. The song is likely to showcase the artist's enduring talent and global appeal**  
**B. These numbers reflect the song's ability to maintain momentum over time**  
C. It accurately represents a song's true performance in the market.  
D. Listeners can see that the song is able to solidify its status as a chart-topping hit

----- HẾT -----