

ĐỀ CHÍNH THỨC

(Đề thi gồm có 09 trang)

Môn thi: TIẾNG ANH 12 (không chuyên)

Thời gian: 90 phút (không kể thời gian giao đề)

Ngày thi: 07/3/2025

MÃ ĐỀ 711

SECTION I: LISTENING

HƯỚNG DẪN PHẦN THI NGHE HIỂU

- Mỗi phần được nghe 2 lần, mở đầu và kết thúc mỗi phần có tín hiệu.
- Mọi hướng dẫn cho thí sinh (bằng tiếng Anh) đã có trong bài nghe.

Part 1. Listen to a lecture about microplastics. Choose the answer which fits best according to what you hear and mark the letter A, B, C, or D on your answer sheet.

Question 1. Why has awareness of plastic waste increased?

- A. Because microplastics are mostly found in oceans, making them easier to track.
- B. Because microplastics are the most dangerous form of pollution.
- C. Because large and small plastic waste is now widely recognized in the environment.
- D. Because strict regulations have eliminated plastic pollution in soil and water.

Question 2. What is still unclear about microplastics?

- A. Whether they are found in oceans.
- B. How they enter the air.
- C. If they exist in synthetic clothing.
- D. Their long-term effects in freshwater and soil.

Question 3. Which of the following is NOT a known source of microplastics?

- A. Factories releasing microplastics into the air.
- B. Large plastic waste breaking into small pieces.
- C. Synthetic clothing shedding fibres.
- D. Tyres wearing down on roads.

Question 4. How do microplastics harm small animals?

- A. They make them resistant to disease.
- B. They block their digestive systems, making feeding difficult.
- C. They help them break down other pollutants.
- D. They improve digestion.

Question 5. How are microplastics commonly ingested by humans?

- A. By touching plastic surfaces.
- B. Only through processed food packaging.
- C. Mainly through air pollution.
- D. Through seafood, salt, bottled water, and tap water.

Question 6. What does research say about microplastics' effect on human health?

- A. There is no solid proof they cause significant harm.
- B. Laws have completely removed their risks.
- C. They only affect people who eat seafood daily.
- D. They have been linked to major diseases.

Question 7. Why were earthworms chosen for the microplastic study?

- A. They are essential for soil fertility.
- B. They consume plastic in large amounts.
- C. They have no role in soil quality.
- D. They are the primary carriers of microplastics.

Question 8. What did researchers find in soil with microplastics?

- A. Plants thrived in plastic-rich soil.
- B. Earthworms lost weight, and soil acidity increased.
- C. Microplastics improved soil fertility.
- D. Earthworms grew larger than normal.

Part 2. Listen to part of an interview between Professor Lee and Doctor Stafford about the topic of big data and health. Choose the answer which fits best according to what you hear and mark the letter A, B, C, or D on your answer sheet.

Question 9. What does the term 'big data' primarily refer to in the context of the interview?

- A. The amount of data stored in physical libraries.
- B. The speed at which data is generated and proliferated.
- C. Substantial data sets assembled for distinct goals.
- D. The large quantities of data available on social media.

Question 10. Why does Dr. Stafford draw an analogy between big data and a giant, fast-moving river?

- A. To compare data to a natural resource.
- B. To illustrate the abundance and necessity of data.
- C. To emphasize the uncontrollable nature of data.
- D. To suggest data is easily accessible.

Question 11. What is one challenge mentioned regarding obtaining reliable health information?

- A. Patients' worries regarding the high cost of advanced medical testing.
- B. Patients' apprehensions about safeguarding their personal data.
- C. Patients' anxiety over the possibility of data being lost during collection.
- D. Patients' concerns about the complexity of medical data analysis.

Question 12. What is suggested as a potential solution to improve the accuracy of health data collection?

- A. Encouraging patients to share their health information anonymously.
- B. Relying on patients' self-reports by promoting willingness to disclose information.
- C. Reducing the number of questions asked during medical evaluations.
- D. Using health tracking devices and objective data collection approaches.

Question 13. Which of the following statements is TRUE?

- A. It is predicted that artificial intelligence will one day replace medical professionals.
- B. Doctors have ample time to sift through and analyze medical data.
- C. Doctors prefer to analyze raw medical data themselves rather than rely on AI.
- D. The current focus on health data collection does not address the need for usability.

Question 14. What is a guiding principle in projects involving big data in pharmaceuticals?

- A. Minimal data collection leads to more streamlined results.
- B. Quality over quantity of data is essential for success.
- C. Accumulating more data contributes to improved outcomes.
- D. Data should be collected only from a limited number of sources.

Question 15. What role does big data play in patient follow-up care?

- A. Identifying patients who are likely to be non-compliant.
- B. Replacing doctors regarding monitoring patients in hospitals.
- C. Eliminating the need for hospital visits among reluctant patients.
- D. Scheduling follow-up appointments with skilled doctors.

Question 16. What is Dr. Stafford's attitude toward big data in the medical field?

- A. Indifferent and uninformed.
- B. Skeptical and cautious.
- C. Optimistic and forward-looking.
- D. Critical and dismissive.

(Adapted from Pathway 4)

SECTION II: LEXICO-GRAMMAR; COMMUNICATION RESPONSES

Part 1. Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.

Question 17. Meryl Streep is the actress _____ I owe my passion for cinema.

- A. that
- B. to which
- C. whom
- D. to whom

Question 18. Television came into _____ and became a competitor with the motion pictures.

- A. enforcement
- B. practice
- C. use
- D. life

- Question 19.** You can tell her to clean her room until you are _____ in the face, but she won't do it.
A. orange B. green C. blue D. red
- Question 20.** Max is visually _____, so he is asked questions by the examiner and answer orally.
A. intellectual B. disruptive C. implied D. impaired
- Question 21.** These _____ earphones are never any good- they've stopped working after only three days.
A. e-commerce B. cut-price C. interest-free D. sell-by
- Question 22.** I don't have a(n) _____ what you are talking about, slow down and start again from the beginning.
A. thought B. inkling C. memo D. clue
- Question 23.** After having chatted for an hour, they no longer had much to say to each other and their conversation began to _____.
A. settle up B. phase out C. peter out D. trickle down
- Question 24.** Parents are always willing to lend a sympathetic _____ to their children when they have problems.
A. paw B. eye C. ear D. hand
- Question 25.** Under no circumstances _____ gratuities from clients.
A. are members of staff to accept B. do members of staff accept
C. may members of staff accept D. must members of staff accept
- Question 26.** _____ violinist is Iris that she has been invited to perform in front of the royal family.
A. So she is a fine B. So fine a
C. Such she is a fine D. Such fine a
- Question 27.** She was being _____ pessimistic about the marketing campaign's success, even though early customer engagement metrics were highly positive.
A. unduly B. abundantly C. plentifully D. assuredly
- Question 28.** The couple had been living in a _____ relationship for eight years and then they didn't feel the attraction of each other.
A. secure B. balanced C. stable D. solid
- Question 29.** I'd rather _____ to George about the matter, but unfortunately I didn't have time.
A. spoke B. have spoken C. speak D. to speak
- Question 30.** Everyone says that new Indian restaurant is fantastic, but I think it's _____ because the food is really not that great.
A. creative B. gripping C. outstanding D. overrated
- Question 31.** Children's _____ skills, which are the brain-based skills required to carry out tasks, develop rapidly in the first few years of their lives.
A. emotional B. conscious C. cognitive D. characteristic
- Question 32.** _____ be given the opportunity to take part in a reality show, what would you do?
A. Were you to B. Should C. Had you D. If you

Part 2. Mark the letter A, B, C, or D on your answer sheet to indicate the word(s) CLOSEST in meaning to the underlined word(s) in each of the following questions.

- Question 33.** If you want to relax, watch the clouds pass by if you are lying on the grass or sit in front of the creek; just doing nothing and having those still movements is what really rejuvenates the body.
A. returns B. refreshes C. reloads D. recollects
- Question 34.** From childhood, Marie was remarkable for her prodigious memory, and at the age of 16 won a gold medal on completion of her secondary education.
A. strong-willed B. customary C. quick-witted D. extraordinary

Part 3. Mark the letter A, B, C, or D on your answer sheet to indicate the word(s) OPPOSITE in meaning to the underlined word(s) in each of the following questions.

- Question 35.** Electric vehicles were hyped up as the future of transportation last year, driven by advancements in battery technology and government incentives.
A. depreciated B. evaluated C. surmounted D. recognized
- Question 36.** One of the best ways to understand what a job is like is to do it. Work experience is a great way to get a feel for what a job is all about.
A. to touch with one's own hands B. to have the faintest idea about

C. to do something on purpose

D. to have an understanding about

Part 4. Mark the letter A, B, C, or D on your answer sheet to indicate the underlined part that needs correction in each of the following questions.

Question 37. If you have some sufficient knowledge of English, you can make yourself understand almost everywhere.

A. understand

B. of

C. almost

D. some

Question 38. Ha Long Bay, the global heritage realized twice by the UNESCO, remains one of the country's top attractions.

A. attractions

B. remains

C. realized

D. the

Part 5. Mark the letter A, B, C, or D to indicate the best arrangement of utterances or sentences to make a meaningful exchange in each of the following questions.

Question 39.

a. Ann: Absolutely. I've been looking forward to it all month. Do you know what activities they have there?

b. John: Yes, they have huge water slides, a lazy river, and even a wave pool. I can't wait to try them all.

c. John: Hey. Are you excited about the water park trip this weekend?

d. Ann: That sounds so fun. I'm definitely going to start with the biggest slide. What about you?

e. John: I think I'll try the lazy river first, it sounds relaxing. Then we can go on the slides together.

A. c-a-b-e-d

B. c-a-d-b-e

C. c-a-b-d-e

D. c-b-d-a-e

Question 40.

a. Jessica: That sounds amazing. I've always wanted to go to Italy. What's drawing you to Spain?

b. Thomas: I love the culture and the language. Plus, I hear the food is incredible. Are you considering any specific cities in Italy?

c. Thomas: Have you thought about studying abroad next year? I've been looking into programs in Spain.

d. Jessica: I'm thinking about Florence. The art and history there are fascinating. Have you looked into any specific universities?

e. Thomas: Yes, I'm interested in a few programs in Barcelona. I think it would be a great opportunity to immerse myself in the language and meet new people.

A. c-a-b-e-d

B. c-a-b-d-e

C. c-d-e-b-a

D. c-d-b-a-e

SECTION III: READING

Part 1. 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.

HOMESCHOOLING IN RURAL AREAS

For families living in rural areas, geographical constraints can mean that it is not always practicable for parents to enrol their children in the nearest school. In such cases, they (41) _____ the role of the teacher themselves by opting to homeschool their children. Although a(n) (42) _____ form of education, many parents consider homeschooling to have many advantages over the traditional classroom environment. For example, lessons are (43) _____ to a child's needs, interests, and learning style while, at the same time, extra attention can be given to those subjects the child is having difficulties with. While a national (44) _____ is still followed, many parents strive to (45) _____ information in more innovative and creative ways than those often employed in a classroom. Michelle Hamilton, who homeschooled all three of her children, explains: 'If (46) _____ we were to study something related to the environment or science, we would take the lesson into the local woods. Being able to see and touch the things their books were describing really (47) _____ the children to want to learn more. Though many parents worry that the absence of (48) _____ will hinder their child's social development, this is unlikely to be the case. In fact, as homeschooled children have increased opportunity to interact with people of different ages rather than being limited to children of the same age group, they often have (49) _____ social skills.'

Question 41. A. run

B. manage

C. undertake

D. operate

Question 42. A. vocational

B. underprivileged

C. revolutionary

D. unconventional

Question 43. A. versatile

B. adaptable

C. accessible

D. effective

Question 44.	A. curriculum	B. input	C. tutorial	D. guideline
Question 45.	A. acquire	B. convey	C. utilize	D. comprehend
Question 46.	A. at all times	B. on time	C. at times	D. in time
Question 47.	A. inspired	B. initiated	C. engaged	D. qualified
Question 48.	A. associates	B. acquaintances	C. personnel	D. peers
Question 49.	A. boosted	B. enhanced	C. elevated	D. certified

Part 2. Read the following passage and mark the letter A, B, C or D on your answer sheet to indicate the option that best fits each of the following questions.

THE TRUE PRICE OF ORGANIC FARMING

Organic farming is a system of agricultural production that does not make use of genetically modified seeds and that substitutes artificial pesticides and fertilisers with organic ones. But why is there almost always a substantial difference between the cost of organically produced food and that of non-organic alternatives?

One reason organic produce is sold at considerably higher prices (which in some cases can be 100% higher) relates to labour costs, (50) _____. A downside of not using chemicals is that food production is slower and crop failure more common. The organic farmer must therefore spend more time preparing the land and put a more intense effort into tending to crops (51) _____. What is more, as the well-being of livestock is prioritised in organic farming, feeding animals with better-quality food, as well as (52) _____. So, all things considered, organic food may actually be good value for money, which is probably why consumers are anything (53) _____.

Since concerns over the effects of conventional farming on both human health and the environment first surfaced the number of people (54) _____. In fact, the demand for organic produce is now so high that the supply is unable to meet it, and with organic farming accounting for no more than 5% of total agricultural production in the UK, this is unlikely to change any time soon.

Question 50.

- A. which are undoubtedly greater for the organic farmer
- B. which the organic farmer benefits greatly from
- C. which lead to the great organic farmer undoubtedly
- D. which result from the great organic farmer

Question 51.

- A. as well as controlling pets and weeds- sometimes by hand
- B. and they use their hands to control pets and weeds
- C. and they control pets and weeds- sometimes by hand
- D. apart from controlling pets and weeds- sometimes by hand

Question 52.

- A. making sure they are in optimal living conditions and keeps high prices
- B. ensuring their optimal living conditions and keeping prices high
- C. ensuring their living conditions are optimal, keeps prices high
- D. making sure they lead an optimistic life and keeping prices high

Question 53.

- A. so discouraged from purchasing what they regard as being much healthier, tastier food
- B. but discouraged from purchasing what they perceive to be much healthier, tastier food
- C. but encouraged them to buy what they perceive to be more delicious food
- D. so it is inadvisable for them to purchase what they perceive to be more delicious food

Question 54.

- A. who tend to cut down on conventionally produced food from their diet has been surprisingly increasing
- B. opting to cut out conventionally produced food from their diet has been on the rise
- C. choosing conventionally produced food for their diet has been on the rise
- D. who opt to reduce conventionally produced food from their diet has been in decline

Part 3. Read an extract from an article on the design of green buildings and choose the answer (A, B, C or D) that fits best according to the text in each of the following questions.

There has, in recent years, been an outpouring of information about the impact of buildings on the natural environment. Information which explains and promotes green and sustainable construction design, strives to convince others of its efficacy and warns of the dangers of ignoring the issue. Seldom do these documents offer any advice to practitioners, such as those designing mechanical and electrical systems for a building, on how to utilise this knowledge on a practical level.

While the terms green and sustainable are often considered synonymous, in that they both symbolise nature, green does not encompass all that is meant by sustainability, which can be defined as minimizing

the negative impacts of human activities on the natural environment, in particular those which have long-term and irreversible effects. Some elements of green design may be sustainable too, for example, those which reduce energy usage and pollution, while others, such as ensuring internal air quality, may be considered green despite having no influence on the ecological balance.

Although there are a good many advocates of ‘green’ construction in the architectural industry, able to cite ample reasons why buildings should be designed in a sustainable way, not to mention a plethora of architectural firms with experience in green design, this is not enough to make green construction come into being. The driving force behind whether a building is constructed with minimal environmental impact lies with the owner of the building; that is, the person financing the project. If the owner considers green design unimportant, or of secondary importance, then more than likely, it will not be factored into the design.

The commissioning process plays a key role in ensuring the owner gets the building he wants, in terms of design, costs and risk. At the predesign stage, the owner’s objectives, criteria and the type of design envisaged are discussed and documented. This gives a design team a solid foundation on which they can build their ideas, and also provides a specific **benchmark** against which individual elements, such as costs, design and environmental impact can be judged.

Owners who skip the commissioning process, or fail to take ‘green’ issues into account when doing so, often **come a cropper** once their building is up and running. Materials and equipment are installed as planned, and, at first glance, appear to fulfil their purpose adequately. However, in time, the owner realises that operational and maintenance costs are higher than necessary, and that the occupants are dissatisfied with the results. These factors in turn lead to higher ownership costs as well as increased environmental impact.

In some cases, an owner may be aware of the latest trends in sustainable building design. He may have done research into it himself, or he may have been informed of the merits of green design through early discussion with professionals. However, firms should not take it as read that someone commissioning a building already has a preconceived idea of how green he intends the structure to be. Indeed, this initial interaction between owner and firm is the ideal time for a designer to outline and promote the ways that green design can meet the client’s objectives, thus turning a project originally not destined for green design into a potential candidate.

Typically, when considering whether or not adopting a green approach, an owner will ask about additional costs, return for investment and to what extent green design should be the limiting factor governing decisions in the design process. **(I)** Many of these costs are incurred by the increased cooperation between the various stakeholders, such as the owner, the design professionals, contractors and end-users. **(II)** However, in green design, they must be involved from the outset, since green design demands interaction between these disciplines. **(III)** This increased coordination clearly requires additional expenditure. **(IV)** A client may initially **balk at** these added fees, and may require further convincing of the benefits if he is to proceed. It is up to the project team to gauge the extent to which a client wants to get involved in a green design project and provide a commensurate service.

Of course, there may be financial advantage for the client in choosing a greener design. Case studies cite examples of green/sustainable designs which have demonstrated lower costs for long-term operation, ownership and even construction. Tax credits and rebates are usually available on a regional basis for projects with sustainable design or low emissions, among others.

Question 55. The writer’s main purpose is to _____.

- A. explain the importance of green building designs in reducing long-term damage to the environment.
- B. explain to professionals how they can influence clients to choose greener designs.
- C. explain to owners commissioning a building why ignoring green issues is costly and dangerous.
- D. explain to professionals why it is important to follow the correct procedures when a building is commissioned.

Question 56. The examples of green and sustainable designs given in paragraph 2 show that _____.

- A. for the purposes of this paper, the terms green and sustainable have the same meaning.
- B. some sustainable designs are green, while others are not.
- C. designs must be sustainable in order for them to be described as green.
- D. some designs are termed green, even though they are not sustainable.

Question 57. According to paragraph 3, the reason for the lack of green buildings being designed is that

- A. few firms have any experience in designing and constructing buildings to a green design.
- B. firms tend to convince clients that other factors are more important than sustainability.
- C. construction companies are unaware of the benefits of green and sustainable designs.
- D. firms do not get to decide whether a building is to be constructed sustainably.

Question 58. In paragraph 4, what does the word ‘**benchmark**’ mean?

- A. standard
- B. target
- C. comparison
- D. process

Question 59. Which of the following is NOT TRUE about the commissioning process?

- A. It is a step in the design procedure in which the client’s goals are identified.
- B. It is a stage that all clients go through when constructing a building.
- C. It is conducted before the building is designed.
- D. It provides the firm with a measure of how well they did their job.

Question 60. In paragraph 5, what does the phrase ‘**come a cropper**’ mean?

- A. notice the benefits
- B. change one’s mind
- C. experience misfortune
- D. make a selection

Question 61. In paragraph 6, the writer implies that _____.

- A. most clients enter the commissioning process with a clear idea of whether or not they want a green building
- B. the commissioning process offers a perfect opportunity to bring up the subject of green design
- C. designers are usually less concerned about green design than the clients are
- D. firms should avoid working with clients who reject green designs in their buildings

Question 62. Where in paragraph 7 does this sentence belong?

In a typical project, landscape architects and mechanical, electrical and plumbing engineers do not become involved until a much later stage.

- A. (I)
- B. (II)
- C. (III)
- D. (IV)

Question 63. In paragraph 7, what does the phrase ‘**balk at**’ mean?

- A. understand the need for
- B. agree to pay
- C. question the reason for
- D. display shock towards

Question 64. Green buildings are most likely to incur more expense than conventional buildings due to _____.

- A. the higher cost of green construction materials
- B. increased coordination between construction teams
- C. higher taxes incurred on sustainable buildings
- D. higher long-term operational costs

SECTION IV: WRITING

Part 1. Mark the letter A, B, C, or D on your answer sheet to indicate the sentence that best combines each pair of sentences in each of the following questions.

Question 65. There had been prior warning of the earthquake. Nevertheless, it came as a shock to the people living in nearby villages.

- A. The earthquake had been predicted, for the residents in nearby villages were struck before they received the warnings.
- B. Even though the earthquake had been predicted, residents of nearby villages were taken by surprise when it struck.
- C. There had been warnings about the earthquake, so the people in nearby villages must not have been surprised by it.
- D. The earthquake having been predicted, even those inhabitants living in nearby villages were prepared for it.

Question 66. Jake refused to acknowledge his mistake. This only made the situation worse.

- A. Had the situation improved, Jake would have acknowledged his mistake.
- B. If Jake had admitted his mistake, the situation might not have deteriorated.
- C. Jake admitted his mistake, yet the situation continued to worsen.
- D. The worse the situation became, the more Jake admitted his mistake.

Question 67. The new policy caused widespread controversy. Many citizens expressed their strong opposition.

- A.** Such was the backlash from the public that the government had to reconsider the execution of the new policy.
- B.** Rarely has a policy sparked as much unity among citizens as this one, with most standing firmly behind the government's decision.
- C.** The citizens, despite their initial reluctance, ultimately accepted the policy with minimal objections.
- D.** The implementation of the new policy was met with significant public resistance, as numerous citizens voiced their disapproval.

Question 68. The exam was difficult. Many students failed despite their hard work.

- A. No matter how hard they worked, many students failed because the exam was difficult.
- B. The exam was so difficult that only hardworking students failed.
- C. Even though the exam was difficult, many students did not work hard and failed.
- D. If the exam had not been difficult, many students wouldn't have worked hard.

Question 69. Sarah speaks Spanish very fluently. She could easily be mistaken for a native speaker.

- A. The more Sarah practices Spanish, the more apparent it becomes that she is not a native speaker.
- B. Sarah's Spanish is riddled with errors, making it clear she is a non-native speaker.
- C. Such is Sarah's command of Spanish that she could pass for a native without raising an eyebrow.
- D. Even if Sarah's Spanish were flawless, her foreign accent would give her away.

Question 70. He was successful because he was determined to pursue personal goals. He was not talented.

- A. In addition to his determination, his talent ensured his success in pursuing his goals.
- B. His success lay in his natural ability, not in his determination to pursue personal goals.
- C. His determination to pursue personal goals made him successful and talented.
- D. It was his determination to pursue personal goals, not talent, that contributed to his success.

Question 71. The manager was unhappy with the sales figures. He decided to revise the marketing strategy.

- A. The marketing blueprint was restructured in response to an unexpected surge in sales.
- B. Dismayed by the lackluster sales performance, the manager opted to overhaul the marketing approach.
- C. The manager reveled in the company's soaring sales, thus leaving the strategy unchanged.
- D. The manager manipulated the sales data to justify sticking with the initial plan.

Question 72. The restaurant is very popular. Many customers complain about its poor service.

- A. Despite being well-known, the restaurant faces criticism for its service quality.
- B. Customers continue to praise the restaurant's service, making it highly popular.
- C. The restaurant's popularity is due to the excellent service it provides.
- D. No matter how good the service is, the restaurant struggles to attract customers.

Part 2. Mark the letter A, B, C or D on your answer sheet to indicate the sentence that is closest in meaning to each of the following questions.

Question 73. She didn't understand the joke, but she laughed anyway to avoid looking out of place.

- A. Although the joke went over her head, she forced a laugh to blend in.
- B. The joke was so hilarious that she laughed despite not understanding it.
- C. She pretended to laugh at the joke even though she found it offensive.
- D. Despite understanding the joke, she chose not to laugh.

Question 74. The scientist's discovery revolutionized modern medicine.

- A. Modern medicine was transformed due to the scientist's discovery.
- B. The scientist's discovery failed to contribute to modern medicine.
- C. The scientist's discovery had little impact on modern medicine.
- D. Modern medicine has existed long before the scientist's discovery.

Question 75. Although we understand the project's complexities, any further delays would only exacerbate the situation and make things worse.

- A. Despite understanding the difficulties involved in the project, further delays would only result in better solutions.
- B. While we understand the challenges of the project, further delays will only complicate matters and make the situation more dire.
- C. Even though we comprehend the project's difficulties, we need to avoid making any further delays that could worsen the situation.
- D. We acknowledge the complexity of the project, but continuing to delay it would not solve any of the existing problems.

Question 76. It is believed that modern farming methods have greatly improved farmers' lives.

- A. Modern farming methods are believed to have had negative effects on farmers' lives.
- B. Farmers are believed to have enjoyed a much better life thanks to modern farming methods.
- C. Modern farming methods were believed to have greatly improved farmers' lives.

D. People believe that there is little improvement in farmers' lives thanks to modern farming methods.

Question 77. Wouldn't it be a good idea to inform employees about the policy changes?

- A. Employees must be informed about the policy changes as soon as possible.
- B. The management announced the policy changes without informing employees.
- C. Why didn't employees inform the management about the policy changes?
- D. Don't you think employees should be informed about the policy changes?

Question 78. Although the company narrowly avoided a crisis, the situation could have easily spiraled out of control if not for their swift action.

- A. The company did not need to intervene as the crisis would have resolved itself without consequences.
- B. Thanks to timely intervention, the company avoided the crisis, but the situation could have become much worse.
- C. The company let the crisis escalate, failing to address the problem in time.
- D. The company prevented the crisis from spiraling out of control by inaction.

Question 79. The company admitted that the security breach had been caused by a lack of proper safeguards and vowed to take more measures to prevent future occurrences.

- A. The company failed to recognize the cause of the security breach and has not made any plans to improve their systems.
- B. The company claimed the security breach happened because of inadequate protection and promised to put in place more measures to ensure it doesn't happen again.
- C. Despite the security breach, the company remained confident in their current measures and did not take further action.
- D. The company insisted that the breach was not due to security issues, but promised to introduce additional safeguards.

Question 80. Right after Robert moved to the new school, he could effortlessly socialize with the new friends.

- A. Robert had moved to a new school and he could socialize with his new friends in vain.
- B. Hardly had Robert made new friends effortlessly when he could move to a new school.
- C. Scarcely had Robert moved to the new school when he could fit in with the new friends.
- D. Before moving to the new school, Robert could make an effort to make new friends.

----- **THE END** -----

- Thí sinh không được sử dụng tài liệu. Giám thị không giải thích gì thêm.

- Họ và tên thí sinh:.....; Số báo danh:.....

ĐÁP ÁN

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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B	D	C	C	A	B	A	C	B	D	C	A	B	D	A	B	A	C	C	B
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
C	D	B	A	B	C	A	D	B	A	A	C	B	B	B	D	D	A	B	C
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
B	B	D	B	B	B	D	A	C	D	B	A	A	A	B	B	D	B	B	C

TRANSCRIPTS

Part 1

In today's lecture, I'm going to be talking about microplastics.

Microplastics are tiny pieces of plastic smaller than five millimetres in size. **(Q1)** Recently there's been a greater awareness that there are large quantities of plastic waste - big and small - in the environment. The

amount of plastic waste in the oceans has received widespread attention, (Q2) but far less is known about the effects of microplastics in freshwater and particularly in soil.

Microplastics can enter the environment via a number of different sources. (Q3) Threads and microfibres detach from synthetic clothing every time they're put in a washing machine, and these find their way into the water system. Other sources include big pieces of plastic waste that are already in the environment, and these break down into microscopic particles over a period of time. On a larger scale, factory waste is another route, as are tyres which wear down as cars, lorries and so on travel along road surfaces.

We already understand some of the impacts of microplastics from studies involving fish and other animals. (Q4) There is evidence that microplastics harm small creatures in a variety of ways, such as by damaging their mouths, or by impairing their ability to feed, for example when microplastics get lodged in their digestive system.

(Q5) Surprisingly perhaps, it is likely that humans consume microplastics, as these have been detected in a wide range of food and drink products, including bottled water, as well as in water that comes direct from the tap. What's more, salt and many kinds of seafood have also been found to contain microplastics.

(Q6) However, it's important to underline that there is not yet conclusive proof that microplastics cause significant harm to people. In many countries, including here in the UK, there is legislation which prevents manufacturers from adding plastic microbeads to shower gels, facial cleansers and toothpaste.

It is very difficult to accurately estimate the total amount of microplastic particles in the soil as they can be hard to detect, but we do know they are carried in the air and deposited in the soil by rain. What's more, many of the fertilisers used by both farmers and gardeners contain microplastics.

A team from the Anglia Ruskin University in Cambridge has carried out a study of the effects of microplastics on the digestive tracts of earthworms. (Q7) These worms, which live in topsoil, are an essential component of our agricultural system. By feeding on soil, they mix nutrients into it, thereby making it more fertile.

The researchers set out to discover whether the introduction of microplastics into the soil - and the subsequent ingestion of these by earthworms - would impact soil quality and ultimately inhibit plant growth. The short answer was, yes, it did. After placing three different types of microplastic particles into the soil, they planted perennial rye grass. The particles of microplastic, which included biodegradable PLA and conventional high-density polyethylene, or HDPE, were then ingested by the earthworms in the soil. (Q8) The result was that the worms lost weight rapidly. What's more, a lower percentage than normal of the rye grass seeds germinated, and the researchers concluded that this was a direct result of the earthworms being unable to fulfil their normal role in making soil more fertile. The team also discovered that there was an increase in the amount of acid found in the soil, and this was attributed mainly to the microplastic particles from conventional HDPE plastic.

The conclusions of the study make for very interesting reading - I've included the reference in the notes to give you at the end of this session. To summarise, the authors proposed the idea that we need to regard soil as we would regard any other process in nature. This means we should accept the implications of soil being dependent on decaying and dead matter constantly being passed through the bodies of earthworms. That is, when soil becomes impoverished by the presence of microplastics, not only ecosystems but also the whole of society are negatively impacted.

Part 2

Professor Lee: OK, everyone, I'm going to let Dr. Stafford take over for this part of the class to cover the topic of big data and health. Dr. Stafford, thank you so much for your time today.

Dr. Stafford: It's my pleasure. I'd like to thank Professor Lee for inviting me to speak to you today. As she said, I'll be talking to you about big data and health.

To begin with, we really need to clarify what we mean when we say "big data." As you know, there's more data available about people and their activities today than ever before. That's largely thanks to the Internet, social media, communication devices, and monitoring devices of all kinds. **(Q9)** So, big data simply means large sets of data that we put together for specific purposes.

One way to visualize all this data, this big data, is as a giant, fast-moving river. The huge amount of data, or information, is like water—water that everyone needs—but it's a wild river that's not necessarily easy to control or access. We need to somehow get that water out of the river, treat it to make it clean and pure, run it through a very complex network of pipes, and then direct it into homes and businesses so people can use it for various purposes. Like this giant, fast-moving river, **(Q10)** this huge collection of different types of data has enormous potential to serve various needs of people. However, like the water in the river, in order for big data to be useful, it has to be "treated" by being analyzed, and different pieces of this information need to be distributed to the right people.

Currently, the main focus is on collecting and storing medical data—data that is accurate and can be trusted. But it's not an easy task, as reliable information isn't always easy to obtain. There are a couple of challenges here. One is that, until recently, lots of health information has been self-reported. It's a funny thing, but patients have a tendency to be dishonest when they report their own personal health information. Psychologists say it's because they want to make themselves appear healthier than they actually are.

(Q11) Another issue is that even if the data is accurate, some people are reluctant to share this information. They're concerned that it won't be treated as confidential. **(Q12)** The first problem of self-reporting can be addressed by collecting factual information only, such as weight measured in a doctor's office or blood tests done in a lab. Health monitoring gadgets are another great source of reliable data. The second issue, concerning confidential information, is being addressed by the development of increasingly effective data security technology. At the moment, the number of businesses specializing in the collection and storage of health data is growing by leaps and bounds, and hundreds of millions of dollars are being invested in this area.

(Q13) But we need to keep in mind that all the medical data in the world is useless unless doctors receive it in a form they can use, such as patient profiles or software to help them with decision making. They don't have time to sift through the data and analyze it themselves. Organized information is what doctors really need. Unfortunately, comparatively little money is being spent in this area at the present time. However, one group that is working toward making big data more accessible is the Pittsburgh Health Data Alliance. They're developing profiles that collect all the information doctors need, in a form that's easy to access. The problem is that the amount of data on patients is becoming overwhelming. One way to address this is by using artificial intelligence, or AI, to analyze and interpret all that data for us. AI programs can interpret big data to provide a diagnosis for certain diseases more quickly and effectively than doctors can by comparing symptoms or combinations of symptoms with similar cases in vast medical databases. This could mean catching diseases at an earlier stage, thereby saving more lives.

However, let me stress that we haven't yet reached the point where a computer can replace a doctor. Even ideas suggested by AI programs can't be trusted without being tested in the real world, on real people, in studies supervised by doctors. And although big data will undoubtedly continue to enhance the work of medical professionals, it's still no replacement for old-fashioned medical science. But in the future, doctors

will probably consult data on a patient's genetic information, lifestyle, and environmental factors to help determine the best choice of treatment.

In the years to come, we'll probably see big data facilitating the development of effective treatments in various ways. For example, it'll likely help create new pharmaceutical drugs and be used to select the best participants for studies to test those drugs. In fact, certain effective drugs have already been created thanks to data-sharing arrangements between some of the world's largest drug companies. **(Q14)** Let me highlight the guiding principle such projects follow—the more data, the better the results.

Lastly, big data can assist with patient follow-up care. **(Q15)** It's been confirmed again and again that certain patients are simply reluctant or unable to follow their doctor's orders. Big data is used to determine who these patients are. While it has traditionally been difficult to monitor patients in follow-up care, new apps keep track of where they are, whether they're taking their medicine, how well they're sleeping, and even their psychological state after they've left the hospital.

(Q16) I think you'll agree that big data has immense potential to greatly increase our understanding of disease and our ability to treat it. There are so many important changes just around the corner. That's what's so exciting about the medical field today. Thanks for your attention. Now, I'll be happy to answer any questions you might have.