



澳門科技大學
MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY

ADMISSION EXAMINATION 2025
E101 ENGLISH

Section 1 – Language Use (40 marks)

Part A – Vocabulary and grammar in context (15 marks, 1 mark each)

Read the passages below. Choose the most appropriate answers to complete the passages. Put your answers on the Multiple Choice Answer Sheet.

Dialogue: Preparing for IELTS

- Alex: Hi, Lisa! Have you started thinking about the IELTS exam for studying abroad?
Lisa: Yes! I've been worrying about it lately. Which section do you find most challenging?
Alex: The writing section __1__ me nervous. I struggle with organizing ideas quickly. How about you?
Lisa: I'm worried about the speaking test. I need to practice __2__ fluently without hesitation.
Alex: Maybe we can study together. I know a workshop __3__ helps with writing structures. Want to join?
Lisa: That sounds great! When is it?
Alex: Every Saturday morning. They also offer mock speaking tests. I've heard it's __4__ effective.
Lisa: Perfect! I need more practice in real-time situations. What's your target score?
Alex: 7.0. My dream university requires it for the engineering program. How about you?
Lisa: I aim for 6.5 for business studies. Do you think we can improve __5__ the next two months?
Alex: Definitely! With regular practice and feedback, we'll get there. Let's start this weekend!

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|-------------|-------------|-------------|------------|
| 1. A. make | B. makes | C. making | D. to make |
| 2. A. speak | B. to speak | C. speaking | D. speaks |
| 3. A. who | B. that | C. what | D. where |
| 4. A. real | B. really | C. hardly | D. barely |
| 5. A. about | B. before | C. with | D. within |

Announcement from the school principal

Dear students and staff,

I would like to inform you that the Summer Camp will commence on July 5. During this period, there will be no regular classes, but participants will engage in enriching activities __6__ to foster creativity and teamwork. It is a valuable opportunity for students to explore new interests and build friendships.

Please ensure you prepare appropriately for the camp. Bring essential items __7__ comfortable clothing, sunscreen, and a water bottle, especially if you plan to join outdoor activities. Safety is our priority, so please follow the instructors' guidance at all times.

We anticipate seeing you all fully engaged and excited to make __8__ memories. The camp will conclude on July 15, and we hope you return with new experiences and enthusiasm for the upcoming school year.

Best regards,
Li Wei

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| 6. | A. designing | B. to design | C. designed | D. to be designed |
| 7. | A. with | B. as | C. so as | D. such as |
| 8. | A. last | B. lasting | C. lasted | D. lasts |

Cutting-edge Research

In 2025, scientists made an exciting discovery about plant protection. A *Science* paper revealed a new plant-defense compound, Erucamide.

Researchers from the Chinese Academy of Sciences found Erucamide __9__ rice and soybeans. It doesn't kill bacteria directly. __10__, it disables the bacteria's "weapon" - the type III secretion system (T3SS). The T3SS is like a syringe for injecting toxins into plant cells. Erucamide attaches to the HrcC protein in the T3SS, messing up its assembly in the bacteria's outer membrane. This stops the bacteria from making plants sick.

This discovery is great for agriculture. With antibiotic-resistant bacteria on the rise, new crop - protection methods are __11__. Erucamide is a promising solution. __12__ it doesn't kill bacteria but just stops them from causing disease, it's less likely to lead to resistance, unlike traditional pesticides. This could be a game-changer for farmers, helping to grow healthier crops while being gentler on the environment.

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| 9. | A. out | B. in | C. for | D. with |
| 10. | A. Instead | B. But | C. Opposite | D. Moreover |
| 11. | A. needs | B. need | C. needing | D. needed |
| 12. | A. Since | B. If | C. How | D. So |

Cooperation with Hengqin

The development of the Hengqin-Macao Deep Cooperation Zone has provided new opportunities for Macao's economic development.

As of April 2024, the number of enterprises in the cooperation zone __13__ 6,208, a year-on-year increase of 12.3% and a 33.88% increase since its establishment. The "headquartered in Macao and operating in Hengqin" model has emerged as a new development paradigm.

By the end of October 2024, 6,521 Macao-funded enterprises had settled in Hengqin, making Hengqin the region with the __14__ concentration of Macao-funded enterprises on the Chinese mainland.

This cooperation promotes cross-border resource sharing and complementary advantages, facilitating the flow of people, goods, and capital __15__ Macao and the Chinese mainland, and promoting the long-term and stable development of Macao's economy.

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| 13. | A. reach | B. reaches | C. reaching | D. reached |
| 14. | A. large | B. larger | C. largest | D. larged |
| 15. | A. forward | B. within | C. between | D. toward |

Part B – Cloze passage (15marks, 1.5 marks each)

Read the passage below. Choose the most appropriate answers to complete the passage. Put your answers on the Multiple Choice Answer Sheet.

New Insights on the FOXP2 Gene: Rewriting Language Evolution

For years, the FOXP2 gene was hailed as a “language gene.” Early studies, including a 2002 paper, __1__ two unique mutations in FOXP2 emerged in humans within the past 200,000 years, spreading rapidly to enhance __2__ skills and drive human dominance. This idea shaped textbooks, suggesting these mutations were a key “upgrade” for human language.

But new research __3__ this story. Scientists at the University of California, Davis, analyzed 50 modern human genomes __4__ those of Neanderthals and Denisovans. They found the “unique” mutations weren’t special at all—they existed in __5__ ancient human species. The earlier conclusion likely came from a biased sample (mostly European/Asian individuals, few from Africa). When the new team replicated the old study’s sample bias, they accidentally __6__ the same misleading results, proving the original claim was flawed.

Does this mean FOXP2 isn’t __7__ to language? No. Mutations in FOXP2 still cause speech difficulties in humans, like trouble forming sounds or understanding grammar. In mice, the gene __8__ vocal sounds and movement, hinting at shared evolutionary roots.

The takeaway? Language’s evolution is far more complex than a single gene’s mutations. FOXP2 is part of the puzzle, but human communication likely arose from __9__ genes and traits working together. This discovery shows how science evolves—when we expand our data and correct biases, we get closer to the truth about __10__ makes us human.

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|-----------------|---------------|---------------|--------------|
| 1. A. claim | B. claims | C. claiming | D. claimed |
| 2. A. writing | B. driving | C. speech | D. hunting |
| 3. A. supports | B. challenges | C. proves | D. against |
| 4. A. when | B. with | C. and | D. than |
| 5. A. another | B. others | C. others’ | D. other |
| 6. A. recreated | B. recreate | C. recreating | D. recreates |
| 7. A. caused | B. evolved | C. developed | D. linked |
| 8. A. affects | B. causes | C. makes | D. drives |
| 9. A. few | B. many | C. more | D. less |
| 10. A. that | B. how | C. which | D. what |

Part C – Joining sentences (10 marks, 2 marks each)

The paragraph below is divided into five pairs of sentences. Read each pair of sentences carefully and choose from the four options (A, B, C, or D) the one that joins the two sentences into one sentence grammatically and logically without changing the meaning.

- (1) By 2023, there were approximately 393,000 Brazilians legally residing in Portugal.
They accounted for about 40% of the foreign-born population.
- (2) There is a common language and culture between the two countries.
This makes it easier for Brazilians to integrate.
- (3) Many Brazilians are drawn to the country for its quality of life.
These include students and retirees.
- (4) In the past, Brazilian immigrants in Portugal often worked in service, construction, and similar sectors.
These immigrants lacked formal education.
- (5) Brazilian immigrants have brought a unique cultural style to Portugal.
This enriched the country's cultural diversity.

1. A. By 2023, there were approximately 393,000 Brazilians legally residing in Portugal, accounting for about 40% of the foreign-born population.
B. By 2023, approximately 393,000 Brazilians legally residing in Portugal accounted for about 40% of the foreign-born population.
C. By 2023, there were approximately 393,000 Brazilians legally residing in Portugal, accounted for about 40% of the foreign-born population.
D. By 2023, there were approximately 393,000 Brazilians legally residing in Portugal, they accounting for about 40% of the foreign-born population.

2. A. Being a common language and culture between the two countries makes it easier for Brazilians to integrate.
B. There is a common language and culture between the two countries, what makes it easier for Brazilians to integrate.
C. There is a common language and culture between the two countries, this making it easier for Brazilians to integrate.
D. There is a common language and culture between the two countries, which makes it easier for Brazilians to integrate.

3. A. Many Brazilians are drawn to the country for its quality of life, included students and retirees.
B. Many Brazilians, including students and retirees, are drawn to the country for its quality of life.
C. Many Brazilians, included students and retirees, are drawn to the country for its quality of life.
D. Many Brazilians are drawn to the country for its quality of life, who included students and retirees.

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| 4. | A. In the past, Brazilian immigrants in Portugal often worked in service, construction, and similar sectors, so they lacked formal education. |
| | B. In the past, Brazilian immigrants in Portugal often worked in service, construction, and similar sectors. However, these immigrants lacked formal education. |
| | C. In the past, Brazilian immigrants in Portugal, due to lack of formal education, often worked in service, construction, and similar sectors. |
| | D. In the past, Brazilian immigrants in Portugal, because lack of formal education, often worked in service, construction, and similar sectors. |
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| 5. | A. Brazilian immigrants have brought a unique cultural style to Portugal, enriched the country's cultural diversity. |
| | B. Brazilian immigrants having brought a unique cultural style to Portugal, that enriching the country's cultural diversity. |
| | C. Brazilian immigrants who have brought a unique cultural style to Portugal, enriching the country's cultural diversity. |
| | D. Brazilian immigrants have brought a unique cultural style to Portugal, which enriched the country's cultural diversity. |

Section 2—Reading Comprehension (30 marks)

Part A—Everyday English (5 marks, 1 mark each)

Read the following notices or signs and choose the best answer for each question. Put your answers on the Multiple Choice Answer Sheet.

1. **"NO SMOKING IN THIS AREA."** What does this sign prohibit?
 - A. Smoking only in designated rooms.
 - B. Smoking anywhere in the area.
 - C. Selling cigarettes in the area.
 - D. Bringing cigarettes into the area.
2. **"EXIT: THIS WAY."** What does this sign indicate?
 - A. A direction to leave the building.
 - B. A warning about restricted access.
 - C. A request to stay indoors.
 - D. A location for emergency supplies.
3. **"TURN OFF ALL ELECTRONIC DEVICES BEFORE BOARDING."** What is required?
 - A. Using devices during boarding.
 - B. Charging devices before boarding.
 - C. Powering off devices before entering the vehicle/plane.
 - D. Leaving devices behind.
4. **"CAUTION: LOW CEILING."** What does this sign warn about?
 - A. A risk of hitting one's head.
 - B. A broken ceiling ahead.
 - C. A need to duck under wires.
 - D. A low-quality construction.

5. **"PLEASE QUEUE HERE."** What is the correct action?
- A. Wait in line at the specified spot.
 - B. Sit down and wait for a call.
 - C. Ask for help at the counter.
 - D. Leave the area immediately.

Part B—Short passage (7.5 marks, 1.5 marks each)

Read the passage below and choose the best answer for each question. Put your answers on the Multiple Choice Answer Sheet.

Last year, a group of neighbors decided to transform an empty lot into a community garden. At first, the lot was full of trash and weeds, but the neighbors worked together to clean it up. They planted vegetables like tomatoes, carrots, and lettuce, as well as flowers to attract bees and butterflies.

The garden quickly became a popular spot. Every Saturday morning, volunteers meet to water the plants, pull weeds, and harvest vegetables. Families with children often visit to learn about gardening—kids love picking fresh tomatoes or watching the butterflies. The garden also has a small shed where tools are stored, and a bench where people can sit and chat.

One of the best things about the garden is that it brings the community together. People who used to be strangers now share tips on gardening and help each other. The vegetables harvested are shared among the volunteers, and any extra is donated to a local food bank. "This garden has made our neighborhood friendlier and greener," said Maria, one of the volunteers. "I never knew gardening could be so rewarding."

1. What was the empty lot like before the project?
 - A. Full of flowers and trees.
 - B. Clean but unused.
 - C. Filled with trash and weeds.
 - D. A popular meeting spot.
2. Why did the neighbors plant flowers?
 - A. To make the garden beautiful.
 - B. To attract insects like bees.
 - C. To sell them for money.
 - D. To use in cooking.
3. When do volunteers work in the garden?
 - A. Every morning.
 - B. On Saturday afternoons.
 - C. Every weekday.
 - D. Saturday mornings.
4. What happens to extra vegetables?
 - A. They are sold at a market.
 - B. They are thrown away.
 - C. They are given to a food bank.
 - D. Volunteers take them all home.

5. How has the garden affected the neighborhood?
- A. It has made people less friendly.
 - B. It has increased trash in the area.
 - C. It has improved community bonds.
 - D. It has caused arguments among neighbors.

Part C—Long passage (17.5 marks, 1.5 marks each for 5 multiple choice questions and 2 marks each for open-ended questions)

Read the passage carefully and answer the following questions.

Artificial intelligence (AI) has emerged as a transformative tool in healthcare, with applications ranging from diagnostic imaging to personalized treatment plans. While its potential to improve patient outcomes and streamline workflows is undeniable, AI also raises profound ethical questions that demand careful consideration.

One of the most pressing issues is **algorithmic bias**. AI models are only as objective as the data they are trained on. For example, a diagnostic tool trained primarily on data from male patients may misinterpret symptoms in female patients, leading to inaccurate diagnoses. This bias perpetuates health disparities, particularly for marginalized groups such as ethnic minorities and low-income populations, who are often underrepresented in medical datasets.

Another concern is **patient autonomy and transparency**. AI-driven decisions in healthcare are often “black boxes”—complex algorithms that even developers struggle to interpret. When a doctor relies on AI to recommend a treatment, patients may not fully understand the rationale behind the decision, undermining their ability to provide informed consent. This lack of transparency erodes trust in the medical profession and raises legal questions about accountability if errors occur.

On the positive side, AI offers unprecedented opportunities for innovation. Machine learning can analyze vast datasets to identify patterns in diseases, enabling early detection of conditions like cancer or Alzheimer’s. AI-powered chatbots can also provide instant mental health support to patients in underserved areas, reducing wait times for counseling. Additionally, AI optimizes resource allocation in hospitals, ensuring that critical supplies like ventilators or antibiotics are distributed efficiently during crises.

However, balancing innovation with ethics requires robust regulatory frameworks. Governments and healthcare organizations must establish standards for data diversity, ensuring that AI models are trained on inclusive, representative datasets. They must also mandate transparency in algorithm design, requiring developers to explain how AI arrives at its conclusions. Furthermore, integrating AI into healthcare should not replace human judgment but enhance it, with clinicians retaining ultimate responsibility for patient care.

As AI continues to evolve, the healthcare industry stands at a crossroads. Embracing this technology could revolutionize how we prevent, diagnose, and treat diseases, but only if we address its ethical challenges proactively. Failure to do so risks exacerbating inequalities and undermining the core principles of medical ethics: justice, beneficence, and respect for persons.

Choose the one best alternative from the four options A, B, C, and D. (1.5 marks each)

1. What is the primary concern regarding AI in healthcare?
 - A. Its inability to process large datasets.
 - B. The high cost of implementing AI tools.
 - C. Ethical issues like bias and lack of transparency.
 - D. Resistance from medical professionals.
2. The term “black boxes” (paragraph 3) refers to:
 - A. AI systems that are difficult to understand or interpret.
 - B. Physical devices used to store medical data.
 - C. Security protocols for patient information.
 - D. Errors in AI-driven diagnoses.
3. How does algorithmic bias affect marginalized groups?
 - A. It provides them with better access to healthcare.
 - B. It reinforces existing health disparities.
 - C. It ensures their data is prioritized in AI training.
 - D. It has no significant impact on their healthcare.
4. What is a positive impact of AI in healthcare mentioned in the passage?
 - A. Reducing the need for human doctors.
 - B. Eliminating all ethical concerns in medicine.
 - C. Enabling early detection of diseases through data analysis.
 - D. Increasing wait times for mental health support.
5. According to the passage, how can AI ethics be improved?
 - A. By relying solely on developers to police algorithms.
 - B. By creating more “black box” systems.
 - C. By mandating diverse data and transparent algorithms.
 - D. By banning AI in critical medical decisions.

Answer the following questions on information found in the article, using complete sentences. (2 marks each) Write your answers on the lines provided.

6. Why is patient autonomy compromised by AI-driven medical decisions?

7. How do inclusive datasets help address ethical issues in AI healthcare?

8. In what ways can AI enhance, rather than replace, human judgment in medicine?

9. How does the passage suggest AI could exacerbate health inequalities?

10. What steps are proposed to mitigate the issue mentioned in question 9?

Section 3—Writing (30 marks)

Instructions:

Choose ONE topic from below and write an essay of at least 200 words.

The writing topics are designed to give you an opportunity to demonstrate your ability to write clearly and effectively. Essays that are memorized, copied from other parts of the examination, and/or unrelated to the given topics will receive no marks. You **MUST** write the essay on page 13 to 15 and answers written elsewhere will receive NO marks. You may make your draft on this page.

1. Some people believe that social media has made us less connected in real life. Do you agree or disagree?
2. What are the advantages and disadvantages of using smartphones in education?
3. The popularity of online shopping has grown rapidly. How has it impacted traditional brick-and-mortar stores?