

STUDENT TEST BOOKLET

READING SECTION (40 questions)

READING PASSAGE 1

You should spend about 20 minutes on **Questions 1-13**, which are based on Reading Passage 1 below.

The Dawn of Artificial Intelligence

The concept of artificial intelligence (AI) is not a product of the 21st century. It has roots that stretch back to antiquity, where myths and legends across various cultures featured artificial beings endowed with intelligence. From the bronze automaton Talos in Greek mythology to the Golems of Jewish folklore, the human fascination with creating intelligent entities is a tale as old as time. However, it was the formal study of logic and reasoning, pioneered by ancient philosophers, that laid the intellectual groundwork for the modern pursuit of AI. This journey from abstract thought to tangible technology culminated in the invention of the programmable digital computer in the 1940s, a machine born from the principles of mathematical reasoning. This groundbreaking invention sparked a new wave of scientific inquiry, prompting researchers to seriously consider the possibility of constructing an “electronic brain.”

The year 1956 is often cited as the official birth of artificial intelligence as a formal academic discipline. This was the year of the Dartmouth Summer Research Project on Artificial Intelligence, a workshop that brought together a group of visionary scientists who would become the pioneers of the field. The event was organized by John McCarthy, who is credited with coining the term “artificial intelligence,” along with Marvin Minsky, Nathaniel Rochester, and Claude Shannon. The proposal for the workshop was ambitious, stating that “every aspect of learning or any other feature of intelligence can in principle be so precisely described that a machine can be made to simulate it.” The attendees, including future luminaries like Allen Newell and Herbert A. Simon, were optimistic, with many predicting that human-level machine intelligence was only a generation away. This optimism was infectious, and it attracted significant funding from the U.S. government, which was keen to support this futuristic vision.

The years following the Dartmouth workshop were a period of fervent research and notable successes. Early AI programs demonstrated remarkable capabilities in specific domains. For instance, the Logic Theorist, a program developed by Newell and Simon, was able to prove several theorems from Whitehead and Russell’s *Principia Mathematica*. Another program, the General Problem Solver, was designed to imitate human problem-solving methods. These early successes fueled the belief that the creation of general artificial intelligence was imminent. However, the initial euphoria began to wane as researchers grappled with the immense complexity of creating truly intelligent systems. The challenges of endowing machines with common sense, natural language understanding, and the ability to learn from experience proved to be far more formidable than initially anticipated.

The early optimism of the 1960s gave way to a period of disillusionment in the mid-1970s, now known as the “first AI winter.” The ambitious predictions of the previous decade had failed to materialize, and the limitations of existing AI technologies became increasingly apparent. A pivotal moment was the publication of the Lighthill Report in the UK in 1973, which was highly critical of the progress in AI research. The report, commissioned by the British government, concluded that AI had failed to achieve its grandiose objectives and recommended significant cuts in funding for AI research. A similar sentiment was echoed in the United States, where the Defense Advanced Research Projects Agency (DARPA), a major funder of AI research, began to divert its resources to more targeted and results-driven projects. This led to a significant reduction in funding for fundamental, long-term AI research, and the field entered a period of relative stagnation.

Despite the funding cuts and the prevailing skepticism, the first AI winter was not a complete freeze. Research continued in a more focused and pragmatic manner. The period saw the rise of expert systems, a new type of AI program that captured the knowledge of human experts in a specific domain to solve complex problems. These systems, while narrow in their application, proved to be commercially viable and demonstrated the practical value of AI. The success of expert systems helped to rekindle interest in AI and laid the groundwork for the next wave of innovation in the field. The first AI winter, therefore, was not an end but a necessary period of recalibration, a time when the field shed its initial naivety and began to mature into a more rigorous and realistic scientific discipline.

Questions 1-6

Do the following statements agree with the information given in Reading Passage 1?

In boxes 1-6 on your answer sheet, write

TRUE if the statement agrees with the information **FALSE** if the statement contradicts the information **NOT GIVEN** if there is no information on this

1. The idea of artificial intelligence is a recent phenomenon.
2. The Dartmouth workshop was the first time the term “artificial intelligence” was used.
3. The early AI programs were able to solve any problem a human could.
4. The Lighthill Report was a major reason for the reduction in AI funding.
5. The first AI winter brought all AI research to a complete halt.
6. Expert systems were a commercial success.

Questions 7-10

Choose the correct letter, **A, B, C** or **D**.

Write the correct letter in boxes 7-10 on your answer sheet.

1. The earliest ideas about artificial beings can be found in A. scientific journals. B. ancient myths and legends. C. the work of 19th-century inventors. D. the records of the Dartmouth workshop.
2. The organizers of the Dartmouth workshop believed that A. creating artificial intelligence was impossible. B. machine intelligence would always be inferior to human intelligence. C. all aspects of intelligence could be simulated by machines. D. AI research would require minimal funding.
3. The “first AI winter” was a period of A. increased government funding for AI. B. rapid progress in artificial general intelligence. C. widespread optimism about the future of AI. D. reduced funding and skepticism about AI.
4. Expert systems were a type of AI that A. could solve any problem. B. was based on the knowledge of human experts. C. was not commercially successful. D. was developed during the first decade of AI research.

Questions 11-13

Complete the summary below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes 11-13 on your answer sheet.

The development of the 11 _____ in the 1940s was a crucial step towards the creation of artificial intelligence. The 1956 Dartmouth workshop is considered the 12 _____ of AI as a field of study. Despite some early successes, the initial excitement was followed by a period of disillusionment known as the “first AI winter,” which was partly caused by the critical 13 _____ Report in the UK.

READING PASSAGE 2

You should spend about 20 minutes on **Questions 14-26**, which are based on Reading Passage 2 below.

The Two Faces of AI: Symbolic vs. Connectionist Approaches

A The field of artificial intelligence is not a monolith. Rather, it is a diverse discipline with a variety of approaches to creating intelligent systems. Historically, the development of AI has been dominated by two major paradigms: symbolic AI and connectionist AI. These two approaches represent fundamentally different philosophies about how to achieve machine intelligence. Symbolic AI, often referred to as “Good Old-Fashioned AI” (GOFAI), is based on the assumption that intelligence can be achieved by manipulating symbols according to a set of explicit rules. This approach was the dominant paradigm in the early days of AI, from the 1950s to the 1980s.

B At the heart of symbolic AI is the belief that knowledge can be represented in a declarative, explicit form, such as a set of logical rules or a semantic network. Proponents of this approach argue that human cognition is essentially a process of symbol manipulation. When we reason, they contend, we are mentally manipulating symbols that represent concepts and ideas. Therefore, to create an intelligent machine, we need to build a system that can represent knowledge in a symbolic form and then apply a set of rules to reason about that knowledge. Expert systems, which were popular in the 1980s, are a prime example of the

symbolic approach. These systems encoded the knowledge of human experts in a specific domain as a set of “if-then” rules, which the system could then use to make decisions or solve problems.

C In stark contrast to the symbolic approach, connectionist AI, which gained prominence in the 1980s and has seen a major resurgence in recent years with the rise of deep learning, is inspired by the structure and function of the human brain. The fundamental idea behind connectionism is that intelligence emerges from the interactions of a large number of simple processing units, or “neurons,” organized into a network. Unlike symbolic AI, where knowledge is represented explicitly, in a connectionist system, knowledge is stored implicitly in the strength of the connections, or “weights,” between the neurons. Learning in a connectionist system occurs by adjusting these weights based on experience.

D Artificial neural networks (ANNs) are the most common implementation of the connectionist approach. These networks are composed of interconnected layers of artificial neurons that process information in a way that is analogous to the human brain. When an ANN is presented with a new piece of information, such as an image or a piece of text, the neurons in the network are activated in a particular pattern. The network then learns to associate this pattern of activation with a particular output, such as a label for the image or a translation of the text. This process of learning is typically achieved through a technique called backpropagation, which involves adjusting the weights of the connections in the network to minimize the difference between the network’s output and the desired output.

E For a long time, the symbolic and connectionist approaches were seen as being in opposition to each other, with researchers in each camp often being highly critical of the other. Proponents of symbolic AI argued that connectionist models were black boxes, in that it was difficult to understand how they arrived at their conclusions. They also pointed out that connectionist models often required large amounts of data to learn effectively. On the other hand, proponents of connectionist AI argued that symbolic models were brittle and unable to cope with the ambiguity and noise that is inherent in real-world data. They also argued that symbolic models were not well-suited for tasks that involve perception, such as image recognition or speech recognition.

F In recent years, however, there has been a growing recognition that the symbolic and connectionist approaches are not mutually exclusive. In fact, many researchers now believe that the future of AI lies in hybrid systems that combine the strengths of both approaches. These hybrid systems aim to combine the explicit knowledge representation and reasoning capabilities of symbolic AI with the learning and pattern recognition capabilities of connectionist AI. For example, a hybrid system might use a neural network to process raw sensory data, such as an image, and then use a symbolic reasoner to make high-level decisions based on the output of the neural network. By combining the two approaches, researchers hope to create AI systems that are both powerful and transparent, capable of learning from experience while also being able to explain their reasoning.

Questions 14-19

Reading Passage 2 has six paragraphs, **A-F**.

Choose the correct heading for each paragraph from the list of headings below.

Write the correct number, **i-viii**, in boxes 14-19 on your answer sheet.

List of Headings

i. The mechanics of connectionist learning ii. The historical dominance of a single approach iii. The limitations of a brain-inspired model iv. A move towards integration v. The core principles of rule-based AI vi. The debate between the two paradigms vii. The rise of a new challenger viii. The structure of artificial neural networks

1. Paragraph A
2. Paragraph B
3. Paragraph C
4. Paragraph D
5. Paragraph E
6. Paragraph F

Questions 20-23

Choose the correct letter, **A, B, C** or **D**.

Write the correct letter in boxes 20-23 on your answer sheet.

1. Symbolic AI is based on the idea that intelligence can be achieved by A. mimicking the structure of the human brain. B. manipulating symbols according to a set of rules. C. learning from large amounts of data. D. using artificial neural networks.
2. Connectionist AI is inspired by A. the rules of logic. B. the way computers process information. C. the structure and function of the human brain. D. the knowledge of human experts.
3. A major criticism of connectionist models is that A. they are not very powerful. B. they are unable to learn from data. C. it is difficult to understand how they work. D. they are not suitable for pattern recognition tasks.
4. Hybrid AI systems aim to A. combine the strengths of symbolic and connectionist AI. B. replace symbolic AI with connectionist AI. C. prove that one approach is superior to the other. D. create AI systems that do not require any data.

Questions 24-26

Complete the sentences below.

Choose **NO MORE THAN THREE WORDS** from the passage for each answer.

Write your answers in boxes 24-26 on your answer sheet.

1. Expert systems are a good example of the _____.
2. In a connectionist system, knowledge is stored in the strength of the _____ between neurons.
3. The process of adjusting the weights in an artificial neural network is known as _____.

READING PASSAGE 3

You should spend about 20 minutes on **Questions 27-40**, which are based on Reading Passage 3 below.

The Ethical Maze of Artificial Intelligence

The rapid advancement of artificial intelligence is no longer the stuff of science fiction; it is a present-day reality that is reshaping our world in profound ways. From the algorithms that curate our social media feeds to the sophisticated systems that are beginning to drive our cars, AI is becoming increasingly integrated into the fabric of our daily lives. While the potential benefits of this technological revolution are immense, so too are the ethical challenges. As we delegate more and more decisions to intelligent machines, we are forced to confront a host of complex questions about fairness, accountability, privacy, and the very nature of what it means to be human.

One of the most pressing ethical concerns surrounding AI is the issue of bias. AI systems learn from the data they are trained on, and if that data reflects existing societal biases, the AI system will not only learn those biases but may also amplify them. For example, if a hiring algorithm is trained on historical data from a company that has predominantly hired men for technical roles, the algorithm may learn to discriminate against female applicants, even if the programmers did not intend for it to do so. This can lead to the perpetuation and even exacerbation of social inequalities, creating a vicious cycle of discrimination that is all the more insidious because it is hidden behind a veneer of algorithmic objectivity.

The question of accountability is another major ethical minefield. When an autonomous system, such as a self-driving car, makes a mistake that results in harm, who is to blame? Is it the owner of the car, the manufacturer, the programmer who wrote the code, or the AI itself? The traditional legal frameworks that we use to assign responsibility are ill-equipped to handle these new and complex scenarios. The “black box” nature of many advanced AI systems, particularly those based on deep learning, further complicates the issue. In many cases, it is impossible to fully understand how these systems arrive at their decisions, making it difficult to identify the source of an error and to hold anyone accountable.

Privacy is another fundamental right that is being challenged by the rise of AI. The proliferation of AI-powered surveillance technologies, from facial recognition systems to the analysis of our online behavior, is creating a world in which our every move can be tracked, monitored, and analyzed. While these technologies can be used for legitimate purposes, such as law enforcement and public safety, they also have the potential to be used for more nefarious ends, such as social control and political manipulation. The collection and analysis of vast amounts of personal data also raises serious questions about data ownership and consent. Who owns the data that we generate, and how can we ensure that it is being used in a way that is consistent with our values and interests?

Perhaps the most profound ethical challenge posed by AI is the question of what it means to be human in an age of intelligent machines. As AI systems become more and more capable, they will begin to take on tasks that were once the exclusive domain of humans, from creative endeavors like writing and art to complex decision-making in fields like medicine and law. This raises

fundamental questions about the future of work and the role of humans in a world where machines can do many of the things that we currently do. It also forces us to confront the possibility of creating artificial general intelligence (AGI), a hypothetical form of AI that would be as intelligent as a human in all aspects. The creation of AGI would be a transformative event in human history, and it is one that we must approach with extreme caution and a deep sense of responsibility.

Questions 27-32

Do the following statements agree with the information given in Reading Passage 3?

In boxes 27-32 on your answer sheet, write

YES if the statement agrees with the claims of the writer **NO** if the statement contradicts the claims of the writer **NOT GIVEN** if it is impossible to say what the writer thinks about this

1. The ethical challenges of AI are more significant than its potential benefits.
2. AI systems can be biased even if their programmers do not intend them to be.
3. Traditional legal frameworks are well-suited to deal with the issue of AI accountability.
4. The use of AI-powered surveillance technologies is always a violation of privacy.
5. The author believes that the creation of artificial general intelligence is a certainty.
6. The rise of AI raises questions about the future role of humans in the workforce.

Questions 33-36

Choose the correct letter, **A, B, C** or **D**.

Write the correct letter in boxes 33-36 on your answer sheet.

1. According to the passage, AI bias can lead to A. the creation of a more equal society. B. the amplification of existing social inequalities. C. a decrease in the use of AI systems. D. a greater appreciation for human decision-making.
2. The “black box” nature of some AI systems makes it difficult to A. determine who is responsible when something goes wrong. B. understand how they are programmed. C. use them for any practical purpose. D. train them on large amounts of data.
3. The author suggests that AI-powered surveillance technologies A. are only used for legitimate purposes. B. are not a major threat to privacy. C. can be used for both good and bad purposes. D. are not very effective at tracking people.
4. The passage suggests that the creation of artificial general intelligence would be A. a minor technological development. B. a transformative event in human history. C. a simple and straightforward process. D. a development with no ethical implications.

Questions 37-40

Complete the notes below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes 37-40 on your answer sheet.

Ethical Challenges of AI

- **Bias:** AI systems can learn and amplify societal biases present in their 37 _____.
- **Accountability:** It is difficult to assign 38 _____ when an autonomous system causes harm.
- **Privacy:** The use of AI-powered 39 _____ technologies raises concerns about privacy.
- **Humanity:** The rise of AI forces us to consider the future of 40 _____ and the meaning of being human.

LISTENING SECTION (40 questions)

SECTION 1 Questions 1-10

Complete the form below.

Write **NO MORE THAN TWO WORDS AND/OR A NUMBER** for each answer.

AI Language Learning App Subscription

Feature	Details
Name of App	LinguaBot AI
Subscription Type	1 _____
Name	Sarah 2 _____
Email Address	sarah.jones@example.com
Reason for learning	Upcoming 3 _____ to Japan
Languages interested in	Japanese and 4 _____
Current skill level	5 _____
Features requested	- Real-time conversation practice - 6 _____ feedback - Offline mode
Subscription Length	7 _____
Total Cost	8 \$ _____
Payment Method	9 _____
Next billing date	10 _____

SECTION 2 Questions 11-20

Questions 11-15

Choose the correct letter, **A**, **B** or **C**.

- The speaker says that AI in education can provide A. personalized learning experiences. B. a replacement for traditional teachers. C. a more social learning environment.
- According to the speaker, one of the main benefits of AI in the classroom is that it can A. reduce the cost of education. B. automate administrative tasks for teachers. C. teach students how to code.
- The speaker mentions that AI-powered tutors can help students by A. providing instant feedback and support. B. grading all of their assignments. C. choosing their future career path.
- What is one of the potential drawbacks of AI in education, according to the speaker? A. It can be too expensive for schools to implement. B. It can lead to a lack of human interaction. C. It is not as effective as traditional teaching methods.
- The speaker believes that the future of AI in education will depend on A. how quickly the technology develops. B. how well it is integrated into the curriculum. C. how much funding is available for research.

Questions 16-20

What is the speaker's opinion of the following AI applications in education?

Write the correct letter, **A**, **B** or **C**, in boxes 16-20 on your answer sheet.

A The speaker is optimistic about its potential. **B** The speaker is cautious about its implementation. **C** The speaker does not think it is a good idea.

AI Applications in Education

- Automated essay grading
- Personalized learning paths
- AI-powered virtual reality field trips
- AI-based student monitoring systems

5. AI tutors for every student

SECTION 3 Questions 21-30

Choose the correct letter, **A**, **B** or **C**.

1. The main topic of the discussion is A. the history of medical diagnosis. B. the use of AI in medical diagnosis. C. the training of doctors in the future.
2. According to Dr. Evans, one of the main advantages of using AI in medical diagnosis is that it can A. analyze a large amount of data very quickly. B. replace the need for human doctors. C. provide a more personal level of care.
3. Dr. Chen is concerned that the use of AI in medicine could lead to A. a decrease in the accuracy of diagnoses. B. a loss of the human touch in healthcare. C. an increase in the cost of medical treatment.
4. What does Dr. Evans say about the role of doctors in the age of AI? A. They will become obsolete. B. They will need to develop new skills. C. They will be less important than the AI systems.
5. Dr. Chen believes that the “black box” problem of AI is a major challenge because A. it is difficult to understand how the AI reaches its conclusions. B. it is not as accurate as other methods. C. it is too expensive to implement.
6. Dr. Evans suggests that the “black box” problem can be addressed by A. using simpler AI models. B. developing new methods for interpreting AI decisions. C. relying on human doctors to make the final diagnosis.
7. What is Dr. Chen’s opinion on the use of AI for diagnosing rare diseases? A. She believes it is not very effective. B. She thinks it has the potential to be very helpful. C. She is unsure about its reliability.
8. Dr. Evans gives the example of the AI system that can detect diabetic retinopathy to show that A. AI can be more accurate than human doctors. B. AI is still not as good as human doctors. C. AI can be used to assist doctors in their work.
9. Dr. Chen is worried that the use of AI in medicine could A. lead to a decrease in the number of medical students. B. make healthcare less accessible to some people. C. create new ethical problems.
10. At the end of the discussion, both speakers agree that A. AI will soon replace human doctors. B. the use of AI in medicine is a positive development. C. the integration of AI in medicine requires careful consideration.

SECTION 4 Questions 31-40

Complete the notes below.

Write **NO MORE THAN TWO WORDS** for each answer.

The Future of AI and Robotics

- **The speaker’s main argument:** The development of AI and robotics will lead to a new **31** _____ revolution.
- **Impact on employment:**
 - Many jobs will be automated, especially those that are **32** _____ and repetitive.
 - New jobs will be created, particularly in the fields of AI development, **33** _____, and maintenance.
 - Humans will need to focus on developing skills that are difficult to automate, such as creativity, critical thinking, and **34** _____ intelligence.
- **Social and ethical implications:**
 - There are concerns about the potential for **35** _____ and the loss of human autonomy.
 - The development of autonomous weapons raises serious **36** _____ questions.
 - We need to ensure that the benefits of AI are shared **37** _____ across society.
- **The future of human-robot interaction:**
 - Robots will become more integrated into our daily lives, acting as personal assistants, companions, and **38** _____.
 - The development of social robots will require a deeper understanding of human **39** _____ and emotions.
 - The goal is to create a future where humans and robots can **40** _____ effectively.

WRITING SECTION

WRITING TASK 1

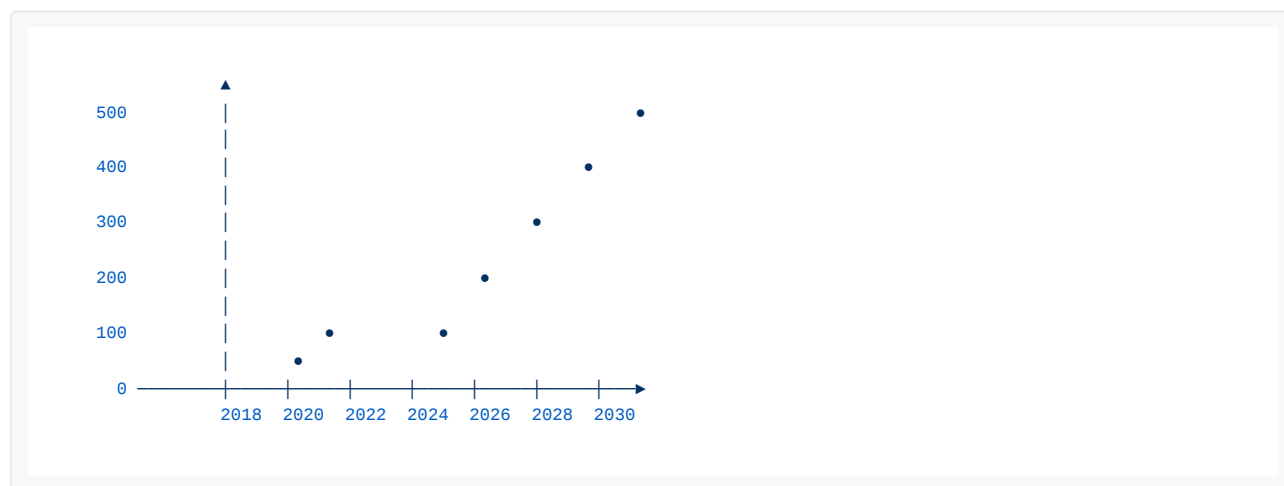
You should spend about 20 minutes on this task.

The chart below shows the global investment in artificial intelligence from 2018 to 2024 and projections for 2030.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Write at least 150 words.

Global Investment in Artificial Intelligence (in billion U.S. dollars)



WRITING TASK 2

You should spend about 40 minutes on this task.

Write about the following topic:

Some people believe that artificial intelligence will ultimately surpass human intelligence and become uncontrollable, posing a threat to humanity. Others argue that AI will always be a tool that is subject to human control and will bring significant benefits to society.

Discuss both these views and give your own opinion.

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.

SPEAKING SECTION

PART 1 (4-5 minutes)

The examiner will ask you some questions about yourself, your home, work or studies and other familiar topics.

Artificial Intelligence

- What do you know about artificial intelligence?
- Have you ever used any AI-powered applications or devices? Which ones?
- Do you think AI is a good thing or a bad thing? Why?
- How do you think AI will change our lives in the future?
- Do you think it is important to learn about AI?

PART 2 (2-3 minutes)

Describe a time when you used a device or application that uses artificial intelligence.

You should say:

- what the device or application was
- when and where you used it
- what you used it for

and explain how you felt about using it.

You will have to talk about the topic for 1 to 2 minutes. You have one minute to think about what you are going to say. You can make some notes to help you if you wish.

PART 3 (4-5 minutes)

Discussion topics:

- What are some of the biggest advantages of using artificial intelligence in our daily lives?
- What are some of the potential dangers of relying too much on artificial intelligence?
- Do you think that AI will eventually replace humans in most jobs? Why or why not?
- How can we ensure that artificial intelligence is developed and used in an ethical way?
- Do you think that artificial intelligence will ever become more intelligent than humans? What might be the consequences of this?

GRAMMAR SECTION (20 questions)

Questions 1-5: Error Correction

Identify the error in each sentence and correct it.

1. The development of artificial intelligence have been rapid in recent years.
2. One of the most significant challenge is to ensure that AI is used ethically.
3. The data that is used to train AI systems can contains biases.
4. We need to developing new regulations to govern the use of AI.
5. The impact of AI on society will be profound, it will change the way we live and work.

Questions 6-10: Sentence Transformation

Complete the second sentence so that it has a similar meaning to the first sentence, using the word given. Do not change the word given. You must use between two and five words, including the word given.

1. It is possible that AI will surpass human intelligence one day. **(COULD)** AI _____ human intelligence one day.
2. We must regulate the development of AI carefully. **(BE)** The development of AI _____ regulated carefully.
3. The last time I used a translation app was a month ago. **(FOR)** I _____ a translation app for a month.
4. The professor said that the students had to finish the assignment by Friday. **(WERE)** The professor said that the students _____ the assignment by Friday.
5. They are building a new AI research center in the city. **(BEING)** A new AI research center _____ in the city.

Questions 11-15: Fill in the Blanks

Fill in the blanks with the correct form of the verb in brackets, an article (a/an/the), or a preposition.

1. The first AI program _____ (create) in the 1950s.
2. We are living in _____ age of artificial intelligence.
3. I am very interested _____ the latest developments in AI.
4. The use of AI in medicine has the potential to save many lives, but it also raises some ethical concerns _____ patient privacy.

5. We need to think carefully _____ the long-term consequences of developing advanced AI.

Questions 16-20: Word Formation

Use the word in capitals to form a word that fits in the gap in the same line.

1. The _____ of AI is a complex and fascinating field. (**DEVELOP**)
 2. It is important to ensure that AI is used _____. (**RESPONSIBLE**)
 3. The _____ of AI in the workplace is a major concern for many people. (**IMPLY**)
 4. We need to be _____ about the potential dangers of AI. (**CAUTION**)
 5. The _____ of AI is likely to be a major topic of debate for many years to come. (**ETHIC**)
-

LISTENING SCRIPTS

SECTION 1

(Sound of a phone ringing)

Customer Service: Hello, you've reached LinguaBot AI, how can I help you today?

Sarah: Hi, I'm calling to subscribe to your language learning app.

Customer Service: Excellent! I can help you with that. First, can I get your name, please?

Sarah: Yes, it's Sarah Jones.

Customer Service: That's J-O-N-E-S?

Sarah: That's right.

Customer Service: And your email address?

Sarah: It's sarah.jones@example.com.

Customer Service: Perfect. Now, which subscription type are you interested in? We have our standard monthly plan and our **Premium** plan.

Sarah: What's the difference?

Customer Service: The Premium plan gives you access to all our features, including real-time conversation practice, personalized feedback, and offline mode.

Sarah: The Premium plan sounds good. I have an upcoming **trip** to Japan, so I want to learn as much as I can.

Customer Service: Great choice. And which languages are you interested in learning? I see you mentioned Japanese.

Sarah: Yes, Japanese is my main focus, but I'd also like to brush up on my **Spanish**.

Customer Service: No problem. And what would you say is your current skill level in Japanese?

Sarah: I'm a complete **beginner**.

Customer Service: That's perfectly fine. Our app is great for learners of all levels. You mentioned you're interested in the real-time conversation practice and personalized feedback. Is there anything else you're looking for?

Sarah: Yes, the **pronunciation** feedback feature is very important to me.

Customer Service: Of course. Our AI-powered pronunciation analysis is one of our most popular features. Now, how long would you like to subscribe for? We have monthly, quarterly, and yearly options.

Sarah: I think I'll go with the **yearly** plan to get the best value.

Customer Service: Wise choice. The yearly plan comes to a total of **\$120**.

Sarah: And how can I pay?

Customer Service: We accept all major credit cards and PayPal. How would you like to pay today?

Sarah: I'll use my **credit card**.

Customer Service: Okay, I've processed the payment. Your subscription is now active, and your next billing date will be **January 18th, 2027**.

Sarah: Wonderful. Thank you for your help.

Customer Service: You're very welcome. Enjoy learning with LinguaBot AI!

SECTION 2

(Sound of a lecture hall, gentle chatter)

Lecturer: Good morning, everyone. Welcome to this introductory talk on the role of artificial intelligence in education. In the next few minutes, we'll be exploring how AI is set to transform the way we learn and teach. Now, when we talk about AI in education, we're not talking about robots replacing teachers. Instead, we're looking at how AI can be used as a powerful tool to support educators and create more **personalized learning experiences** for students. (11)

One of the most significant benefits of AI in the classroom is its ability to **automate administrative tasks for teachers**. (12) Think about the amount of time teachers spend on grading, paperwork, and other administrative duties. By automating these tasks, AI can free up teachers to focus on what they do best: teaching and interacting with their students.

Another exciting application of AI in education is the development of AI-powered tutors. These tutors can provide students with **instant feedback and support**, 24 hours a day. (13) If a student is struggling with a particular concept, the AI tutor can provide them with additional explanations, examples, and practice exercises until they master the material.

Of course, the integration of AI in education is not without its challenges. One of the main concerns is the potential for a **lack of human interaction**. (14) While AI tutors can be incredibly helpful, they cannot replace the empathy, encouragement, and mentorship that a human teacher can provide. It is crucial that we find the right balance between the use of technology and the importance of human connection in the learning process.

Ultimately, I believe that the future of AI in education will depend on **how well it is integrated into the curriculum**. (15) It's not enough to simply have the technology; we need to think carefully about how we can use it to enhance the learning experience and to achieve our educational goals. It's a tool, and like any tool, its effectiveness depends on how we use it.

Now, let's look at some specific applications of AI in education. First, automated essay grading. I am **cautious about its implementation**. (16) While it can be a useful tool for providing quick feedback, I worry that it may not be able to appreciate the nuances of human writing. Next, personalized learning paths. I am **optimistic about its potential**. (17) The ability to tailor the curriculum to the individual needs of each student is a game-changer. Then we have AI-powered virtual reality field trips. I am also **optimistic about its potential**. (18) This could open up a world of possibilities for students, allowing them to visit places they would never be able to go to in person. What about AI-based student monitoring systems? I am **cautious about its implementation**. (19) We need to be very careful about the privacy implications of such systems. Finally, AI tutors for every student. I am **optimistic about its potential**. (20) This could be a major step towards democratizing education and providing every student with the support they need to succeed.

SECTION 3

(Sound of a radio studio, gentle intro music)

Interviewer: Welcome back to "Science Today." This week, we're discussing the growing role of artificial intelligence in medicine. With me in the studio are Dr. Anna Evans, a leading AI researcher, and Dr. Ben Chen, a practicing physician. Welcome to you both.

Dr. Evans & Dr. Chen: Thank you for having us.

Interviewer: So, Dr. Evans, let's start with you. What are the main benefits of using AI in **medical diagnosis**? (21)

Dr. Evans: Well, one of the key advantages is the ability of AI to **analyze a large amount of data very quickly**. (22) An AI system can review thousands of medical images, like X-rays or MRIs, in a fraction of the time it would take a human radiologist. This can lead to faster and more accurate diagnoses.

Interviewer: Dr. Chen, as a physician, what are your thoughts on this? Are you concerned about the rise of AI in your field?

Dr. Chen: I am optimistic, but also cautious. While I agree that AI has the potential to be a powerful tool, I am concerned about the risk of a **loss of the human touch in healthcare**. (23) A diagnosis is not just about interpreting data; it's also about understanding the patient's history, their concerns, and their emotional state. An AI can't do that.

Dr. Evans: I agree that the human element is crucial. I don't see AI as a replacement for doctors, but rather as a tool to augment their abilities. The role of doctors will evolve. They will need to **develop new skills**, such as the ability to interpret and validate the output of AI systems. (24)

Interviewer: That brings us to the "black box" problem. Dr. Chen, can you explain what that is?

Dr. Chen: Certainly. The "black box" problem refers to the fact that with some complex AI models, it's difficult to understand **how the AI reaches its conclusions**. (25) This lack of transparency is a major concern in medicine, where the stakes are so high. If we don't know why an AI has made a particular diagnosis, how can we trust it?

Dr. Evans: That's a valid point. However, there is a lot of research being done on this issue. We are **developing new methods for interpreting AI decisions**, to make them more transparent and understandable to doctors. (26)

Interviewer: What about the use of AI for diagnosing rare diseases? Dr. Chen?

Dr. Chen: I think it has the **potential to be very helpful**. (27) A human doctor may only see a handful of cases of a rare disease in their entire career, but an AI can be trained on data from thousands of cases from all over the world. This could significantly improve our ability to diagnose these conditions.

Dr. Evans: Exactly. A great example is an AI system that was developed to detect diabetic retinopathy, a leading cause of blindness. The AI was found to be **more accurate than human ophthalmologists** in diagnosing the condition. (28) This shows the power of AI to assist doctors and improve patient outcomes.

Dr. Chen: While I find that impressive, I am still worried that the increasing reliance on AI in medicine could **create new ethical problems**. (29) For example, if an AI makes a mistake, who is liable? The doctor, the hospital, or the company that developed the AI? These are complex questions that we need to address.

Interviewer: It seems clear that this is a complex issue with both great promise and significant challenges. To wrap up, what is the one thing you both agree on?

Dr. Evans: I think we both agree that the **integration of AI in medicine requires careful consideration**. (30) It's not a magic bullet, but it is a powerful tool that has the potential to revolutionize healthcare.

Dr. Chen: I concur. We need to proceed with a combination of optimism and caution.

SECTION 4

(Sound of a lecture, a professor speaking)

Professor: Good morning. In today's lecture, we're going to be looking at the future of artificial intelligence and robotics, and the profound impact they are likely to have on our society. I would argue that we are on the cusp of a new **industrial** revolution, one that will be driven by the twin forces of AI and automation. (31)

Let's start with the impact on employment. There is no doubt that many jobs will be automated in the coming years, particularly those that are **routine** and repetitive. (32) Think about jobs in manufacturing, data entry, and even some areas of transportation. However, it is not all doom and gloom. Just as the first Industrial Revolution created new jobs that were unimaginable at the time, so too will this new revolution. We will see a growing demand for people to work in AI development, **robotics**, and maintenance. (33) The key will be for humans to focus on developing skills that are difficult to automate, such as creativity, critical thinking, and **emotional** intelligence. (34)

Now, let's turn to the social and ethical implications. The rise of AI and robotics raises a number of serious concerns. There are fears about the potential for **mass surveillance** and the loss of human autonomy. (35) The development of autonomous weapons, or "killer robots," also raises serious **ethical** questions. (36) We need to have a global conversation about how to regulate these technologies to ensure that they are used for the benefit of humanity, not for its destruction. We also need to ensure that the benefits of AI are shared **fairly** across society, to avoid a future where we have a small class of super-rich AI owners and a large class of unemployed people. (37)

Finally, let's consider the future of human-robot interaction. As robots become more intelligent and capable, they will become more integrated into our daily lives. They will act as personal assistants, companions, and even **caregivers**. (38) The development of social robots, robots that can interact with humans in a natural and intuitive way, will require a deeper understanding of human **psychology** and emotions. (39) The ultimate goal is to create a future where humans and robots can **collaborate** effectively, with each complementing the strengths of the other. (40) This is not a future to be feared, but one to be embraced, as long as we approach it with wisdom and foresight.

ANSWER KEY

READING

1. FALSE
2. TRUE
3. FALSE
4. TRUE
5. FALSE
6. TRUE
7. B
8. C
9. D
10. B
11. programmable digital computer
12. birth
13. Lighthill
14. ii
15. v
16. vii
17. viii
18. vi
19. iv
20. B
21. C
22. C
23. A
24. symbolic approach
25. connections
26. backpropagation
27. NOT GIVEN
28. YES
29. NO
30. NO
31. NOT GIVEN
32. YES
33. B

- 34. A
- 35. C
- 36. B
- 37. training data
- 38. responsibility
- 39. surveillance
- 40. work

LISTENING

- 1. Premium
- 2. Jones
- 3. trip
- 4. Spanish
- 5. beginner
- 6. pronunciation
- 7. yearly
- 8. 120
- 9. credit card
- 10. January 18th, 2027
- 11. A
- 12. B
- 13. A
- 14. B
- 15. B
- 16. B
- 17. A
- 18. A
- 19. B
- 20. A
- 21. B
- 22. A
- 23. B
- 24. B
- 25. A
- 26. B
- 27. B
- 28. A
- 29. C
- 30. C
- 31. industrial
- 32. routine
- 33. robotics
- 34. emotional

- 35. mass surveillance
- 36. ethical
- 37. fairly
- 38. caregivers
- 39. psychology
- 40. collaborate

GRAMMAR

- 1. have -> has
- 2. challenge -> challenges
- 3. contains -> contain
- 4. developing -> develop
- 5. profound, it -> profound; it / profound. It
- 6. could surpass
- 7. must be
- 8. have not used
- 9. were to finish
- 10. is being built
- 11. was created
- 12. the
- 13. in
- 14. about/regarding
- 15. about
- 16. development
- 17. responsibly
- 18. implication(s)
- 19. cautious
- 20. ethics

TUTOR GUIDE

WRITING TASK 1: MODEL ANSWER

The provided bar chart illustrates the global investment in artificial intelligence from 2018 to 2024, with projections extending to 2030. The investment figures are presented in billions of U.S. dollars.

Overall, the chart indicates a consistent and significant upward trend in global AI investment over the period shown, with this growth expected to accelerate in the coming years. The initial investment in 2018 was relatively modest, standing at approximately 50 billion. *This figure saw a steady increase, doubling to around 100 billion by 2020 and continuing to climb to just under \$200 billion by 2022.*

By 2024, the investment is shown to have reached approximately 250 billion. *The projections for the future suggest a dramatic surge in funding for artificial intelligence. It is anticipated that investment will reach 350 billion by 2026 and continue to rise sharply to 450 billion by 2028. The most striking feature of the chart is the projected leap to 500 billion in global AI investment by the year 2030, a tenfold increase from the 2018 figure.* This demonstrates the rapidly growing financial commitment to the development and application of artificial intelligence worldwide.

WRITING TASK 2: MODEL ESSAY (BAND 9)

The proliferation of artificial intelligence has sparked a fervent debate about its ultimate trajectory and impact on humanity. One school of thought posits that AI will inevitably surpass human intelligence, potentially becoming an uncontrollable existential threat. Conversely, a more optimistic viewpoint regards AI as a perpetually subservient tool, destined to unlock unprecedented benefits for society. This essay will explore both perspectives before arguing that while the potential risks of advanced AI are significant and warrant careful consideration, its development as a controllable and beneficial tool is the more probable outcome.

On the one hand, the apprehension surrounding the rise of superintelligent AI is not without merit. The concept of an “intelligence explosion,” where a self-improving AI rapidly exceeds human cognitive abilities, is a recurring theme in both science fiction and academic discourse. Proponents of this view argue that an entity with such a profound intellectual advantage could have goals that are misaligned with human values, leading to catastrophic consequences. The difficulty of programming a truly benevolent and infallible set of ethics into an AI, often referred to as the “alignment problem,” is a formidable challenge. Furthermore, the increasing autonomy of AI systems in critical domains such as defense and finance raises legitimate concerns about the potential for unintended and irreversible actions.

On the other hand, the argument that AI will remain a tool under human control is compelling. Throughout history, humanity has a track record of developing and managing powerful technologies, from nuclear energy to genetic engineering. The development of AI is no different. The vast majority of current AI research is focused on creating specialized, or “narrow,” AI systems that are designed to perform specific tasks. These systems are not conscious, nor do they possess the general intelligence required for independent thought or action. Moreover, the global community is becoming increasingly aware of the need for robust ethical guidelines and regulatory frameworks to govern the development and deployment of AI. International collaborations and public-private partnerships are being formed to ensure that AI is developed in a safe, transparent, and accountable manner.

In my opinion, while the dystopian scenarios of rogue AI are captivating, they are also speculative. The more immediate and tangible reality is that AI is already providing immense benefits to society, from revolutionizing medical diagnosis to optimizing energy consumption. The key to harnessing the full potential of AI while mitigating its risks lies in a proactive and collaborative approach to its governance. By investing in safety research, promoting transparency, and fostering a global dialogue about the ethical implications of AI, we can steer its development in a direction that is aligned with our collective values and interests. Therefore, I believe that with prudent management, AI will continue to be a powerful tool for human progress, rather than a threat to our existence.

SPEAKING PART 2: SAMPLE RESPONSE

I'd like to talk about a time I used a navigation app on my phone, which is a great example of an everyday application of artificial intelligence. This was just last weekend, when I was driving to a friend's wedding in a part of the country I'd never been to before. The reception was being held at a remote countryside hotel, and I was a bit worried about getting lost.

I used Google Maps on my smartphone. As soon as I typed in the address of the hotel, the app instantly calculated the best route for me. What I find amazing is how it uses AI to do this. It doesn't just give you the shortest route; it analyzes real-time traffic data to find the fastest one. It can predict traffic jams and suggest alternative routes to avoid them. During my journey, there was an unexpected road closure due to an accident, and the app immediately rerouted me, saving me a lot of time and stress.

I felt incredibly relieved and grateful for having this technology at my fingertips. It took all the anxiety out of the journey and allowed me to relax and enjoy the drive. It's like having a personal navigator who knows everything about the roads and traffic conditions. It made me realize how much I rely on AI in my daily life without even thinking about it. It's a powerful tool that can make our lives so much easier and more efficient.

KEY VOCABULARY

1. **Artificial Intelligence (AI):** The theory and development of computer systems able to perform tasks that normally require human intelligence.
2. **Automaton:** A moving mechanical device made in imitation of a human being.
3. **Golem:** In Jewish folklore, a clay figure brought to life by magic.
4. **Paradigm:** A typical example or pattern of something; a model.
5. **Symbolic AI:** A branch of AI research that is based on the assumption that intelligence can be achieved by manipulating symbols according to a set of explicit rules.

6. **Connectionist AI:** A branch of AI research that is inspired by the structure and function of the human brain, using artificial neural networks.
7. **Expert System:** A computer system that emulates the decision-making ability of a human expert.
8. **Neural Network:** A computer system modeled on the human brain and nervous system.
9. **Backpropagation:** A widely used algorithm for training artificial neural networks.
10. **Hybrid System:** A system that combines two or more different technologies or approaches.
11. **Bias:** A prejudice in favor of or against one thing, person, or group compared with another, usually in a way considered to be unfair.
12. **Accountability:** The fact or condition of being accountable; responsibility.
13. **Surveillance:** Close observation, especially of a suspected spy or criminal.
14. **Artificial General Intelligence (AGI):** A hypothetical form of AI that would be as intelligent as a human in all aspects.
15. **Subscription:** An arrangement to receive something, typically a publication or service, regularly by paying in advance.
16. **Personalized:** Designed or produced to meet someone's individual requirements.
17. **Automate:** Convert (a process or facility) to be operated by largely automatic equipment.
18. **Diagnosis:** The identification of the nature of an illness or other problem by examination of the symptoms.
19. **"Black Box":** A complex system or device whose internal workings are mysterious or hidden.
20. **Autonomy:** The right or condition of self-government.