

受験番号				
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## 英 語

合図があるまでは絶対に中を開けないこと

英語の試験は初めにリスニング、次にリーディングの順序で行います。リーディングの指示は、リスニングが終わった後で行います。

### リスニングの指示

1. リスニングには、PART I, II, III の3つがあります。
  2. 各PARTが始まる前に、日本語で説明をします。注意して聞いて下さい。
  3. 問題冊子には、問いと、4つの選択肢が与えられています。その中から最も適当と思われる答えを1つ選んで、解答カードの相当欄をマークして下さい。
  4. 各PARTが終わったら、音声による指示があるまで、次のページを開けないで待っていて下さい。
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5. PART I では10の短い会話を聞きます。それぞれの会話についての問いに答えて下さい。
  6. PART II ではPART I より長い会話を2つ聞きます。それぞれの会話についての問いに答えて下さい。
  7. PART III では講義を3つ聞きます。講義の内容について、それぞれ5つの問いに答えて下さい。

「受験番号」を解答カードの定められたところに忘れずに書き入れること

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次のページからの問題には、それぞれ a, b, c, d の選択肢が与えられています。  
各問題につき、a, b, c, dの中から、最も適切と思われる答えを1つだけ選び、  
解答カードの相当欄をマークして、あなたの答えを示して下さい。

例  $\left(\frac{1}{2}\right)$

☐ a ☐ b ☒ c ☐ d

## PART I

*Choose the best answer to each question.*

*Questions 1-10.*

1. How will the woman most likely find out if tomorrow's classes are canceled?
  - a. by talking to the man
  - b. by calling the university
  - c. by visiting the university website
  - d. by checking the weather forecast
  
2. Which of the following is true?
  - a. The man prefers the western-style rooms.
  - b. The man would not like to live in the new dormitory.
  - c. The man and the woman have similar tastes in interior design.
  - d. The man and the woman are impressed by the new dormitory.
  
3. When will the woman most likely get the handout from the man?
  - a. during their class the next day
  - b. in Professor Saito's class tomorrow
  - c. just after finishing her part-time job
  - d. immediately before 4th period today
  
4. Which of the following is true?
  - a. The woman is worried about catching a cold.
  - b. The man is worried about the woman's health.
  - c. The woman is worried about meeting the deadline.
  - d. The man is worried about the woman finishing her paper.
  
5. What is the main reason the woman wants to meet the man at 11:30?
  - a. to relax before eating lunch
  - b. to work on their homework together
  - c. to avoid the busy hours in the cafeteria
  - d. to make sure she can choose the food she wants
  
6. What does the man recommend?
  - a. changing the topic
  - b. broadening the focus
  - c. finding a different focus
  - d. narrowing down the topic

7. What will the man probably do next?
- a. talk to his roommate
  - b. contact his study group
  - c. cancel the study session
  - d. check the library schedule
8. According to the woman, what is the most effective way to find good sources?
- a. search for titles
  - b. input authors' names
  - c. enter precise keywords
  - d. limit the publication dates
9. Where is the clinic?
- a. opposite the stairs
  - b. next to the music room
  - c. opposite the counseling center
  - d. next to the Study Abroad Office
10. Based on the conversation, which of the following is true?
- a. The woman is a first-year student.
  - b. The woman bonded with her friends.
  - c. The man is eager to hear the lectures.
  - d. The man did not enjoy last year's camp.

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## PART II

*Choose the best answer to each question.*

***Questions 11-12.***

11. How do the man and the woman usually get to college?
- a. The man and the woman take the bus.
  - b. The man rides his bicycle and the woman takes a taxi.
  - c. The man rides his bicycle and the woman takes the bus.
  - d. The man takes the bus and the woman rides her bicycle.
12. What can be inferred from the man's suggestion?
- a. The woman should live on campus.
  - b. The woman should get more exercise.
  - c. The woman should use money wisely.
  - d. The woman should be on time for class.

***Questions 13-15.***

13. Who is the man talking to?
- a. his friend
  - b. a counselor
  - c. his professor
  - d. a writing tutor
14. What time will the woman's last available appointment end?
- a. 2:10 p.m.
  - b. 2:40 p.m.
  - c. 3:10 p.m.
  - d. 3:40 p.m.
15. Why does this session finish so quickly?
- a. The man does not have enough time.
  - b. The woman has another appointment.
  - c. The woman refuses to correct his writing.
  - d. The man does not have his paper with him.

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### PART III

*Choose the best answer to each question.*

*Questions 16-20.*

*Listen to the lecture.*

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16. Which of the following is one of the three common beliefs about children's lies?
- a. Adults usually cannot identify children's lies.
  - b. Children's lies can reveal aspects of human nature.
  - c. Children begin lying before entering elementary school.
  - d. Young children who lie have problems with their character.
17. According to the lecture, which is true about the first experiment?
- a. The examiner excused the children who did not peek at the cards.
  - b. The examiner created an opportunity for children to look at the cards.
  - c. The children asked the researcher if they could see the cards to win rewards.
  - d. The children wanted to be alone in the room to check the numbers on the cards.
18. How many 2-year-old children admitted that they looked at the cards?
- a. about 30%
  - b. about 50%
  - c. about 70%
  - d. about 80%
19. What did Lee discover about the adult subjects in his follow-up study?
- a. Parents often lie to their children.
  - b. Adults cannot spot children's lies.
  - c. Parents can detect half of children's lies.
  - d. Adults lie once or twice a day on average.
20. According to the lecture, which is the best definition of theory of mind?
- a. the ability to understand the emergence of lying
  - b. the ability to control the situation around oneself
  - c. the ability to function more appropriately in society
  - d. the ability to distinguish one's knowledge from that of others

**Questions 21-25.**

*Listen to the lecture.*

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21. Which of the following is given as a reason for the increased use of technology in the recruitment process?
- a. to save applicants' time
  - b. to develop candidates' skills
  - c. to hire more suitable candidates
  - d. to reduce the number of applicants
22. According to the lecturer, how many job applications did one multinational investment bank receive in 2016?
- a. 100,000
  - b. 250,000
  - c. 750,000
  - d. 1,000,000
23. According to the lecturer, what does AI do during video interviews?
- a. It identifies the most relevant keywords in applicants' résumés.
  - b. It allows applicants to record their answers on their computers.
  - c. It evaluates elements of the applicants' non-verbal communication.
  - d. It enables companies to adapt questions based on the content of responses.
24. Which of the following is the main reason companies think that computer games can be a useful tool for selecting candidates?
- a. Candidates enjoy role-playing in the games.
  - b. Candidates behave more naturally in the games.
  - c. Candidates change facial expressions in the games.
  - d. Candidates show their computer skills in the games.
25. According to the lecturer, how can the use of AI in recruitment reduce diversity in the workplace?
- a. by evaluating applicants based on unrealistic expectations
  - b. by removing human input from the decision-making process
  - c. by making the process of selecting candidates more subjective
  - d. by selecting candidates whose traits resemble those of current staff

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***Questions 26-30.***

*Listen to the lecture.*

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26. According to the lecturer, why are scientists trying to improve solar panels?
- a. to make them less expensive
  - b. to meet environmental standards
  - c. to meet increasing energy demands
  - d. to make them more dependent on silicon
27. Which of the following is true about perovskites?
- a. They make efficient but expensive solar cells.
  - b. They all have the same basic structure and formula.
  - c. They always contain Carbon, Titanium, and Oxygen.
  - d. They are widely available as commercial solar panels.
28. What is one of the reasons the researchers chose caffeine?
- a. It can interact with materials in the perovskites.
  - b. It boils at the same temperature as perovskites.
  - c. It had already enhanced the lifespan of traditional silicon solar cells.
  - d. It can form a “molecular lock” with perovskites at 300 degrees Celsius.
29. How did caffeine affect the perovskite solar cells in the UCLA study?
- a. It improved their thermal stability over 13,000 hours.
  - b. It enhanced their power conversion efficiency by 86%.
  - c. It increased their thermal stability at 85 degrees Celsius.
  - d. It interacted with 1,3,7 trimethylxanthine to boost their efficiency.
30. What is the lecturer’s prediction regarding perovskite solar cells?
- a. They will become more widely used.
  - b. The research on them will not progress.
  - c. They will need more commercial support.
  - d. They are not likely to replace silicon solar cells.

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### リーディングの指示

1. リーディングには、PART I と PART II の 2 つがあります。
2. 解答時間は、PART I、PART II を合わせて 60 分です。どちらの PART、どの問いから始めてもかまいません。
3. 各問いには 4 つの選択肢が与えられています。その中から最も適切と思われる答えを 1 つ選んで、解答カードの相当欄をマークして下さい。
4. 終了の指示があったら直ちに鉛筆を置いて、問題冊子と解答カードを試験監督が集め終わるまで待っていて下さい。

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5. PART I では、3 つの文章をよく読んで、それぞれの文章についての 8 つの問いに答えて下さい。文章はくりかえし読んでもかまいません。
  6. PART II では、文章中の 12 の空欄を埋めて、意味が通るように文章を完成させて下さい。PART II の解答指示は 24 ページにありますので、それに従って下さい。

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## PART I

### *Text 1*

1. An 18th century portrait of a Polynesian tattooed man sold for over £10 million in 2001. The man had traveled to England in 1774 with the British explorer, Captain Cook, and his exotic skin decorations had aroused curiosity. In 1891, the future emperor of Russia, Nicholas II, visited Japan and returned with a tattoo. Although Europeans were fascinated by the distinctive designs of Polynesian and Japanese tattoos in the 18th and 19th centuries, they were generally ignorant of their range of meanings. It was in part the ignorance of those Europeans that gave rise to the significant negative impact on tattooing in the Pacific, both directly and indirectly.
2. On their 18th century expeditions around the Pacific, Europeans formed various interpretations of tattoos: they believed tattoos could express primitiveness, exoticism or rebellion. With no initial knowledge of local tattoo culture, all they could do was record what they saw. For instance, sketches were made by Cook's artists. In England, the decorated skin in the sketches was thought by many to represent the 'primitiveness' of the Pacific islanders. Importantly, 'primitiveness' would be used as part of the justification to 'civilise' and colonise the region. However, some of Captain Cook's crew, including even the reputed botanist, Sir Joseph Banks, were actually tattooed during their voyages. This body art acted as an exotic souvenir of their Pacific adventures. Furthermore, some European sailors in the region got themselves tattooed to indicate their rebellious sentiments. For example, crewmen on the 1787 Pacific voyage of the *Bounty* used Polynesian tattoos to express rebellion against Captain Bligh. Primitiveness, foreign adventurousness and disobedience were all new interpretations given to Polynesian tattoos by early European visitors.
3. In fact, the original meanings of Polynesian tattoos, lost to Cook and other European voyagers, were profound and diverse. Anthropologists have revealed that, despite regional variations, these ancient symbols were closely tied to social status and roles in politics, warfare and religion. Of these, the religious aspect was primary. To conceal the skin with tattoos was to protect life in the everyday world, known as '*ao*', against the threats of the spirit world, '*po*'. In the mid-19th century, Christian missionaries, uninformed of the actual significance of tattoos, were partly responsible for forbidding this custom in many Polynesian islands. They did this as they considered tattoos to be not only savage but also 'ungodly'. Although the custom of tattooing was revived in the region in the 20th century, the impact of the period of prohibition is still felt today; it has contributed to the loss of a complete understanding of the significance of Polynesian tattoos.

4. The history of tattoos in Polynesia is largely at variance with the history of the practice in another Pacific archipelago, Japan. While Polynesians treated tattoos with respect, most Japanese generally viewed them negatively. For example, criminals were branded with tattoos as a common form of punishment. The exact period and duration of this custom is disputed, but it continued at least until the middle of the 17th century. Some scholars suggest that the connection between tattoos and criminality is deeply rooted in Confucianism; it is a practice that goes against the doctrine that one should not deliberately damage one's skin. Whatever the underlying reasons, the persistent and predominant hostility of the Japanese to permanent body decorations sharply contrasts with attitudes elsewhere in the Pacific.
5. There have been, nevertheless, periods in Japanese history when tattooing has thrived. One such time was the late Edo period. Notwithstanding the opposition of the ruling *samurai* class, newly wealthy merchants became supporters of the popular arts, such as *kabuki* and *ukiyo-e* woodblock prints. This in turn led to the flourishing of tattoo art. Tattoo artists worked on their merchant- and working-class clients to reproduce and exaggerate the dramatic tattoos seen on *kabuki* heroes on stage and in woodblock prints. The tattooists' work also stimulated new designs that would then reappear on *kabuki* actors. Thus, despite the hostile attitude of the governing class, tattoos became fashionable and widely appreciated.
6. However, tattooing was banned throughout Japan in the late 1800s. Fear of colonisation by Western powers was widespread, and one way believed effective to avoid this was to appear 'civilised'. Based on earlier reactions of Europeans to decorated skin, the Meiji government believed ill-informed foreigners would interpret tattooing as 'primitive'. Moreover, they feared regional practices of tattooing in Hokkaido and Okinawa might detract from the concept of one homogenous Japanese nation. Homogeneity was thought to be important to discourage Western colonisation of the geographically separate northern and southern islands. Tattooing was, therefore, officially suppressed.
7. In parallel but distinct developments, tattooing had blossomed and faded from view in the Pacific by the late 19th century. Ignorance and misinterpretation on the part of Europeans can be cited as both a direct cause of its suppression in Polynesia and an indirect cause in Japan. Even in 21st-century Europe, despite the popularity of tattoos and greater respect for the roots of tattoo culture, areas of ignorance continue to prevail. To quote a contemporary Polynesian tattooist, Te Rangitu Netana: 'for Western artists ... when they borrow from other cultures ... little bits here and there ... you're just pulling the "and" out of a sentence and it doesn't make sense'.

Quote from: Macpherson, Amy. "Video: Oceania and the Art of Tattooing".  
*Royal Academy*. 17 Oct. 2018, URL:[royalacademy.org.uk/article/video-oceania-and-the-art-of-tattooing](http://royalacademy.org.uk/article/video-oceania-and-the-art-of-tattooing).

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31. What is the main argument of the text introduced in paragraph 1?
- Europeans did harm to Pacific tattoo cultures out of ignorance.
  - European and Pacific cultures were similar in the 19th century.
  - Europeans had an adventurous spirit in the 18th and 19th centuries.
  - Europeans imported the practice of tattooing from the Pacific region.
32. What does the example of the sailors on Captain Bligh's ship demonstrate?
- Their tattoos were a form of exotic decoration.
  - Their tattoos signified being a courageous explorer.
  - Their tattoos symbolised resistance against authority.
  - Their tattoos were a sign of being savage and primitive.
33. Why did the missionaries strongly object to the Polynesian custom of tattooing?
- Tattoos gave Polynesians excessive social status.
  - Missionaries regarded tattoos as being unchristian.
  - Tattoos protected Polynesians from unworldly danger.
  - Missionaries considered tattoos to represent political rebellion.
34. Which of the following is the closest in meaning to the underlined phrase at variance with in paragraph 4?
- a variety of
  - different from
  - consistent with
  - contradictory to
35. According to paragraph 4, which of the following is true?
- Most Japanese generally viewed Polynesians' tattoos negatively.
  - Tattoos were used to mark criminals until approximately 1650 in Japan.
  - Damaging one's skin was against cultural beliefs throughout the Pacific.
  - The branding of criminals with tattoos was controversial in the 17th century.
36. What is the main function of paragraph 5?
- to emphasise the development of Japanese tattooists' skills
  - to present the contrast between *kabuki*, *ukiyo-e* and tattoos
  - to describe people who contributed to the popularity of tattoos
  - to explain a shift in attitude towards tattoos in Japanese history

37. According to the text, what can be inferred about tattooing in Japan?
- a. The ruling *samurai* class considered tattooing to be primitive in the late Edo period.
  - b. Tattooing in Polynesia negatively contributed to the Meiji government's view on tattooing.
  - c. Tattooing had been common in Hokkaido and Okinawa before the Meiji government prohibited it.
  - d. The Meiji government's decision about tattooing was influenced by the ruling class during the Edo period.
38. What does the final quotation by the tattoo artist imply?
- a. To borrow tattooing practices from other cultures is a kind of theft.
  - b. To remove tattooing practices from their original context is meaningless.
  - c. To separate tattooing practices from other art forms does not make sense.
  - d. To imitate tattooing practices from one Polynesian culture alone is pointless.

*Text 2*

1. Over the last 20 years, the proposition that violent conflict among humans is in decline has gained support from several prominent social scientists. Recent wars in places such as Iraq, Syria and Yemen may make this claim seem counter-intuitive. However, these 'declinists' contend that there has been a steady reduction in violence throughout human history, and that this trend has strengthened over the last hundred years. One way in which the trend is shown is by a decrease in the rate of war-related deaths. While the declinists insist that their thesis is firmly supported by evidence, their assertions have been disputed by a range of academics.
2. The declinists point out that over the course of human history, the proportion of deaths caused by war has fallen significantly. They maintain that the ratio of humans killed in conflict 10,000 years ago was significantly higher than it has been in the last 100 years. This conclusion is reached by examining the ratio of deaths caused by conflict in contemporary hunter-gatherer societies, such as the Durum Dani and Mae Enga in the highlands of New Guinea, and extrapolating this to the time when all human societies were organised in this way. The reduction in the ratio of deaths can also be seen in a more recent comparison. During World War II, the ratio of battle deaths was 300 per 100,000 of the world population; in the 21st century, it has fallen to less than 1 per 100,000. In sum, the evidence provided by the declinists appears to indicate that there is a clear trend showing that the lethality of war has diminished significantly over time.
3. However, many academics question the empirical support on which the declinists base their arguments. Perhaps most critically, these scholars criticise the declinists for using deaths per capita, rather than the aggregate number of deaths, to support their argument. As the human population has increased dramatically in the last hundred years, the declinists' approach allows them to assert that recent conflicts have not been as deadly as conflicts from earlier in human history. However, one has to wonder about the claim that as the 60-70 million deaths in World War II only equated to approximately 3% of the global population, it was a less violent war than earlier conflicts. This claim is made even though the total number of deaths in the war represents the greatest number of conflict deaths in human history.
4. Even if the approach of comparing the ratio of deaths, in place of the total number of deaths, is accepted, another major criticism has been the reliability of the data used by the declinists. Modern states are likely to keep relatively accurate records of the number of soldiers who die during a conflict, but it is much more difficult to maintain clear records of civilian war-related deaths. This is particularly true when the conflict occurs in a developing country. For instance, in the 2003 invasion and subsequent occupation of Iraq, the initial estimate of the total number of Iraqi deaths was 100,000; however, the Lancet medical journal later put the figure at over six times higher. This lack of accurate data regarding war mortality becomes a more significant weakness when arguments are made about historical trends. If it is difficult to assess the accuracy of the recorded numbers of the war dead in the 21st century, it would seem that there is much greater room for error when using data from hundreds or even thousands of years ago. For example, accurate figures regarding the number of civilian casualties in the Peloponnesian War would seem to be extremely hard to obtain.

5. The validity of the historical comparison is further weakened when advances in medicine are considered. During the last hundred years, there have been significant improvements in the way that war injuries are treated. Consequently, war injuries which would have caused death earlier in human history are often no longer fatal. This increases the survival rate but does not support the claim that we have become less violent; rather, it simply shows that we have become better at treating war's horrific effects.
6. Although the proposition of declining violence is comforting, there is insufficient evidence to support the declinists' thesis that the likelihood of dying in war has never been lower. In fact, our predecessors in 1912 may also have had this sense of comfort as they too had experienced a period of relatively few wars among the great powers. However, only two years later World War I began, resulting in the deaths of millions. With rising geopolitical tensions fuelled by climate change, it is far from unimaginable that there could be major conflicts leading to massive casualties in the foreseeable future. Rather than seeing this as an alarming prediction, we should use the knowledge that war continues to pose a significant threat to life to ensure that we remain vigilant to the risks we face.
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39. What is the main function of paragraph 1?
- a. to provide historical background to the passage
  - b. to expose the weaknesses in the declinists' thesis
  - c. to show that there are contrasting views on the topic
  - d. to emphasize the validity of the declinists' argument
40. In paragraph 2, why does the author mention contemporary hunter-gatherer societies?
- a. to explain the method used to estimate average lifespan in prehistoric societies
  - b. to show how the number of war-related deaths in prehistoric societies was calculated
  - c. to make readers aware that hunter-gather societies continue to exist in parts of the world
  - d. to illustrate that the number of conflict deaths in modern hunter-gatherer societies is small
41. Why does the author include the number of deaths in World War II in paragraph 3?
- a. to question the accuracy of the figures the declinists' use
  - b. to provide additional evidence for the declinists' argument
  - c. to show that the declinists overstate the significance of the war
  - d. to demonstrate that the declinists' method of analysing data is problematic

42. According to paragraph 4, which of the following statements is true?
- a. Modern societies are more likely to accurately document civilian war deaths than military war deaths.
  - b. Data regarding the number of casualties in wars should be excluded from studies into war death trends.
  - c. The number of fatalities resulting from the conflict in Iraq was originally significantly overestimated.
  - d. It is very difficult to accurately count the number of civilian deaths during a conflict in a less developed country.
43. Which of the following would most effectively conclude paragraph 4?
- a. Therefore, the declinists' argument can only be applied to more recent conflicts.
  - b. Therefore, one must question whether it is possible to draw clear conclusions from the available data.
  - c. Therefore, it is also necessary to examine how medical advances may have affected war-related death rates.
  - d. Therefore, there is a significant chance that many more civilians died in the Peloponnesian War than was previously estimated.
44. Which of the following examples would NOT effectively support the claim made in paragraph 5?
- a. There have been significant technological developments in reducing blood loss.
  - b. Combatants suffering from serious burns are much more likely to survive today.
  - c. Advances in protective body armour have led to fewer and less serious battlefield injuries.
  - d. Prior to the discovery of antibiotics, a soldier could die as a result of minor injury becoming infected.
45. What is the author's message in paragraph 6?
- a. The decline of violence theory is still very controversial.
  - b. Recognising the enduring threat of war may help prevent it.
  - c. There is not enough evidence to understand the risks of war.
  - d. The declinists' hypothesis should bring us a feeling of comfort.
46. Which of the following would be the most appropriate title for this text?
- a. The Declinists' Perspective on the Likelihood of War
  - b. A Historical Comparison of the Number of War Deaths
  - c. Doubts Regarding the 'Decline of War Deaths' Argument
  - d. Declining War Deaths as a Reflection of Declining Violence

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### Text 3

1. In early 2015, U.S. President Obama launched the Precision Medicine Initiative (PMI) during his State of the Union Address. The vision of this initiative was to usher in a new era of healthcare and disease treatment that considers individual differences in genes, lifestyle and environment. The PMI led to the creation of *All of Us*, a research programme in the U.S., in 2016. It aims to collect health-related data, including DNA sequencing, from one million Americans, and track the volunteer participants over time. By collecting and analysing genetic, lifestyle and environmental data from large populations like this, research can help further our understanding of health and disease, and develop more customised care tailored to individual patients or groups of similar patients. This approach is known as precision medicine.
2. One area where precision medicine is likely to have a significant effect is in the fight against cancer. Like treatment for many diseases, cancer therapy has often been developed based on standard tests and standard drugs for the average patient. Treatments, such as surgery, radiation therapy and chemotherapy, have been given to patients with the same type of cancer at the same stage of development. This one-size-fits-all approach may work well for some patients, but not others. Unlike this generic approach, precision medicine provides tailored cancer treatment determined by the genetic changes in an individual's cancer. Sequencing and analysing the DNA of a patient's cancer cells and finding the unique genetic abnormalities of tumours helps predict which treatments are most suitable for the patient. This helps to avoid the administration of unnecessary therapies and the unpleasant side effects they can cause.
3. The benefits of precision medicine to groups of similar patients can be seen in a study carried out in the U.K. examining the most common form of early breast cancer. Standard care for most patients with this type of breast cancer has involved a combination of chemotherapy and hormone therapy. However, by genetically testing over 10,000 women in the study, the researchers were able to determine those with a high risk of recurrence and found that only this subgroup would benefit from chemotherapy. Just 30% fell into this category. Studies such as this, which reduce the need for chemotherapy, will not only spare patients the side effects of the treatment, such as nausea, vomiting, fatigue and hair loss, but will also massively reduce the costs of providing unnecessary chemotherapy.
4. Precision medicine can also promote more personalised treatment for individual cancer patients. A tumour profile created by reading and analysing the DNA of a patient's tumour cells can be used to search for appropriate treatments. In a recent study in the U.S., over 3,700 cancer patients who had not responded well to treatment underwent genetic sequencing, and 1,307 were found to have a known mutation. From this group, 711 patients were treated according to their genetic profile, while the rest received traditional treatment. The results of the study showed that the patients who received the tailored treatment were six times more likely to survive for ten years than the patients who received general treatment. This shows the power of precision medicine to identify distinctive mutations in a patient's tumour and tailor individual treatment. The hope for precision medicine is to allow the right treatment to be given to the right patient at the right time and in the right dose, regardless of what type of cancer they have.

5. Furthermore, precision medicine techniques have contributed to clinical trials to find new customised therapies for cancers for which previous treatments have failed. This can be illustrated by the experimental therapy that saved the life of Judy Perkins, the first woman to be cured of late-stage breast cancer by immunotherapy. Her tumour DNA was sequenced and analysed, and a number of mutations were identified. Tests were also carried out on cells of her own immune system, called tumour-infiltrating lymphocytes, to find which were most effective in recognising the key mutations in her cancer cells. These lymphocytes were then isolated and cultured in a laboratory and replicated to produce billions of customised cells that were infused back into her body. The cells attacked and killed her cancer cells, leading to her complete recovery. While this is still an experimental approach, it again shows the vast potential of precision medicine.
  6. There are, however, concerns over the use of precision medicine. One issue is protecting the privacy of participants in programmes such as *All of Us*, and ensuring they understand both the risks and benefits of participating. In addition, although the cost of DNA sequencing is rapidly decreasing, precision medicine is not going to be cheap. Whether this kind of treatment will be available to everyone in the future through health insurance is an important ethical and social question. For example, currently, in Japan, sequencing an individual's cancer tumour and searching for appropriate treatment is covered by health insurance in only 1% of cases. Without insurance it costs between half a million and a million yen. However, taking into account the obvious benefits of a precision medicine revolution, it seems inevitable that we are indeed ushering in an exciting new era of healthcare.
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47. Which of the following is the best definition of precision medicine?
  - a. A new approach that precisely predicts different patterns of disease development for cancer patients.
  - b. A new approach to medicine which can revolutionise healthcare by collecting data from large populations.
  - c. A new approach to the treatment of cancer in which treatment can be tailored to subgroups of patients, or even individual patients.
  - d. A new approach for disease treatment that takes into account individual differences in genes, environment and lifestyle for each person.
48. Which of the following is NOT a characteristic of precision medicine for cancer treatment based on the information in paragraph 2?
  - a. It can identify new types of cancer at an early stage.
  - b. It can reduce the need for unnecessary cancer treatment.
  - c. It can customise treatment for individual cancer patients.
  - d. It can create a genetic profile of an individual's cancer cells.

49. Which of the following is the best definition of the underlined word generic as used in paragraph 2?

- a. traditional
- b. non-brand
- c. customised
- d. non-specific

50. What can be inferred from the study in paragraph 3?

- a. Chemotherapy is an inexpensive treatment for cancer.
- b. Chemotherapy is not beneficial for many participants.
- c. Chemotherapy is more reliable than hormone therapy.
- d. Chemotherapy is not likely to prevent cancer recurrence.

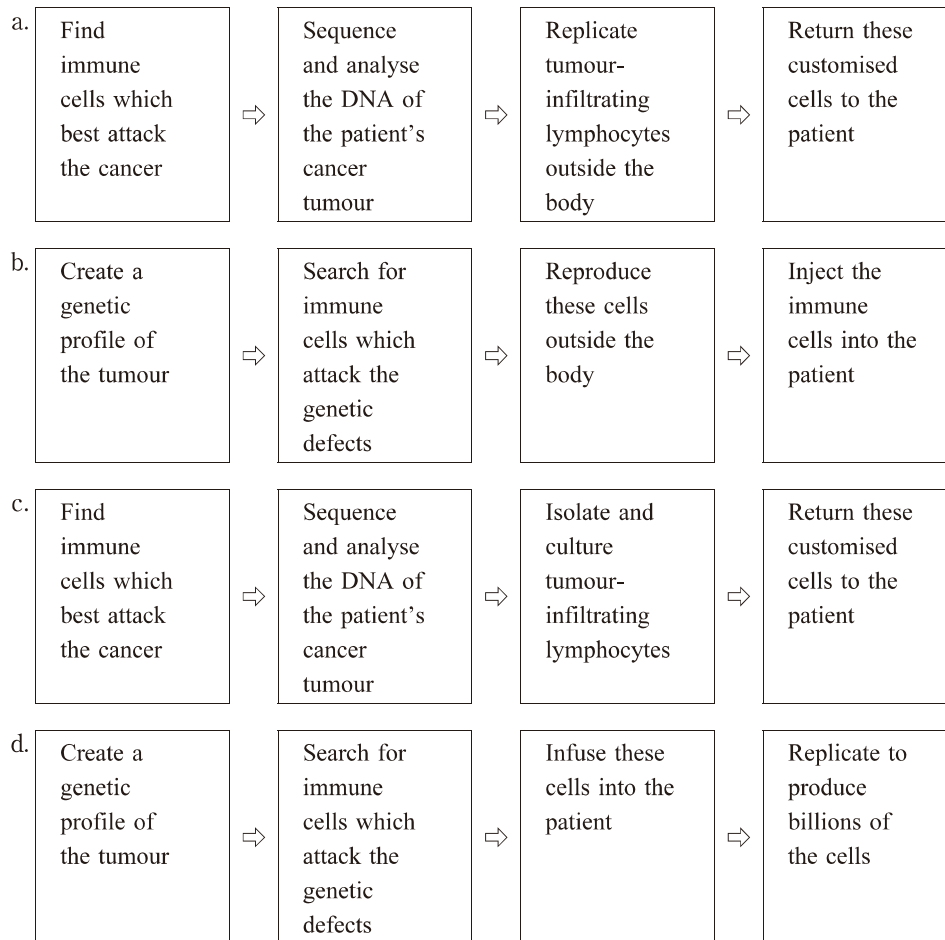
51. Which of the following statements about the study in paragraph 4 is true?

- a. More than half of the participants had known mutations.
- b. The participants failed to respond well to tailored treatment.
- c. Almost all the participants with known mutations had tailored treatment.
- d. Genetic profiling led to significantly better outcomes for the participants.

52. What is the main function of paragraphs 3 and 4?

- a. to explain how precision medicine uses genetic testing to create genetic profiles
- b. to illustrate that chemotherapy and other general cancer treatments are not always effective
- c. to explain the potential of precision medicine to fight cancer that has proved difficult to treat
- d. to illustrate how precision medicine can benefit both groups of similar patients and individual patients

53. Which of the following best describes the sequence of Judy Perkins' treatment?



54. Based on the final paragraph, which of the following is most consistent with the writer's overall position on precision medicine?

- It will be made available to everyone in the near future.
- It is highly likely to revolutionise the treatment of cancer.
- It raises serious issues of privacy regarding data collection.
- It has benefits that will outweigh its social and ethical concerns.

## PART II

次の文章には12の空欄（55-66）があり、25ページに各空欄に対する4つの選択肢が与えられています。各空欄に最も適切と思われる答えを1つ選び、解答用カードの相当欄をマークして下さい。

In a globalised world, how can people appreciate a different culture's values? Some people may suggest studying its proverbs (55) \_\_\_\_\_ the ethical, historical, religious and societal essence of the culture. While this can be educational as well as entertaining, it may not be the most effective way. Value Orientations Theory, a cognitive framework proposed by anthropologist Florence Kluckhohn and social psychologist Fred Strodtbeck in 1961, may be a more systematic approach. Although (56) \_\_\_\_\_, it can still be useful for deeper intercultural understanding.

This framework classifies cultural values into five orientations, each of which consists of three variations. One of the five orientations is called human nature, which describes people's (57) \_\_\_\_\_ about other people. The three variations are to consider others as benevolent, malevolent or neutral/mixed. For instance, in a particular culture with the first variation, people may be more likely to go out without locking their doors because they consider others to be (58) \_\_\_\_\_ trustworthy. In contrast, a cultural group with the second variation may live in a home with a security system because they are (59) \_\_\_\_\_ of others.

Another value orientation is the relationship of people to nature: whether people worship, live in harmony with or seek to control it. The first variation might be observed in a culture where people accept that they are (60) \_\_\_\_\_ the mercy of natural forces. Japanese architecture allowing the wind to flow through rooms and Japanese people enjoying the sound of wind-bells to (61) \_\_\_\_\_ the summer heat may be examples of the second variation. The third variation can be observed in a cultural group that tries to master most aspects of nature, such as changing the course of rivers or building flood defences.

A further interesting orientation is related to how people perceive authority in society: lineal, collateral or individualistic. The lineal variation can be found in a collectivistic culture where lines of authority are established clearly, and succession as well as positional order are important. For example, (62) \_\_\_\_\_ the caste system in India, the family people are born into has a significant impact on the power they have in society. On the other hand, Anglo-American culture falls into the third variation because it emphasises the importance of the autonomy of the individual. Between these extremes, there is the second variation in which people tend to make decisions for themselves after they consult with others, such as their family and friends. In this sense, people in this variation can be seen as those who have not only the (63) \_\_\_\_\_ but also the collectivistic aspect.

The Value Orientations Theory is of worth. By employing this framework, people can deepen their understanding about what values people in other cultures may have and analyse why they behave in a certain manner. Additionally, knowing this model will help people to (64) \_\_\_\_\_ from interpreting others' attitudes in light of their own cultural values. Furthermore, the Value Orientations Theory can help people analyse their own cultural values, too. (65 ) \_\_\_\_\_ , it is important to remember there are also some differences among individuals within the same culture and that people's cultural values may differ, influenced by various (66) \_\_\_\_\_ , such as their moods on that day and their interlocutors.

55.	a. reflect b. reflected on c. reflecting upon d. which reflect	56.	a. archaic b. dated c. pioneering d. unfounded	57.	a. assertions b. assumptions c. concentrations d. interactions
58.	a. fundamentally b. nearly c. possibly d. virtually	59.	a. attentive b. conscious c. hesitant d. wary	60.	a. at b. for c. on d. with
61.	a. conquer b. cope with c. entertain d. yield to	62.	a. by b. under c. upon d. with	63.	a. dependent b. hierarchal c. independent d. successive
64.	a. refrain b. restrain c. restrict d. retain	65.	a. However b. In conclusion c. Moreover d. Therefore	66.	a. behaviours b. contexts c. factors d. mindsets



