

# 令和5年度入学者一般選抜入学試験問題

(A日程 国際経済学部)

## 英 語

### 注意事項

- 1 試験時間は、午前10時から午前11時30分までである。
- 2 試験開始の合図があるまで、問題冊子を開かないこと。
- 3 この試験では、問題冊子（7ページ）、解答用紙2枚及び下書き用紙1枚を配付する。
- 4 試験開始の合図があつてから、解答用紙に受験番号を必ず記入すること（氏名の記入は不要）。解答用紙は2枚あるので、必ず2枚すべてに記入すること。
- 5 解答は、解答用紙の所定の欄に横書きで記入すること。所定の解答欄以外に記入した解答は無効である。
- 6 問題冊子及び解答用紙にページの欠落や印刷不鮮明な部分等がある場合は、手をあげて、試験監督者がそばに来てからその旨申し出ること。
- 7 原則として、試験時間中の途中退室は認めない。  
ただし、具合が悪くなった場合、トイレに行きたくなった場合等は、手をあげて、試験監督者がそばに来てからその旨申し出ること。
- 8 試験終了の合図があつたら直ちに筆記用具を置くこと。
- 9 試験終了の合図があつて筆記用具を置いたら、机の上に問題冊子と下書き用紙を重ねて置き、その上に表にした解答用紙を問①の解答用紙が上になるように重ねて置くこと。
- 10 試験監督者の許可があるまで退室しないこと。

※ 解答は解答用紙に書きなさい。

1

Read the following article and answer the questions below.

### Beijing Winter Olympics a Cautionary Climate Tale, Expert Says

- 1 Several miles outside the Chinese city of Zhangjiakou, a series of narrow white strips\* streak\* across the landscape of barren\* brown mountains. Zhangjiakou's mountain region, located about 110 miles northwest of Beijing, is hosting one of three outdoor venues\* for this year's Winter Olympics. However, because the region doesn't receive much precipitation\* during the winter months, Chinese officials have blanketed numerous slopes with artificial snow. This year's Olympics is the first of its kind to rely completely on artificial snow, which according to one NC State\* expert, signals that the ideal conditions for winter sports are becoming increasingly scarce\* as climate change progresses. Earth's average global temperature has increased by a little more than 2 degrees since 1880, with the last eight years marking the eight hottest on record, according to calculations by NASA\* and the National Oceanic and Atmospheric Administration\*. "The warmer temperatures are causing shorter winters and reducing the amount of time snow is on the ground, so it's definitely possible that participation\* might decline in some winter sports," said Jonathan Casper, an associate professor\* of parks, recreation\* and tourism\* management.
- 2 Winter sports generate\* \$887 billion in economic revenue and support 7.6 million jobs in the United States, according to Protect Our Winters, an advocacy group\*. They also provide millions of people with the mental and physical health benefits of outdoor recreation. Many winter sports, including snowboarding and skiing, require an ample\* amount of snow on the ground. However, as temperatures continue to rise, natural snow is becoming less reliable. Casper, whose research focuses on sport and the natural environment, said the warmer temperatures are already limiting the places where athletes\* can train and compete. A recent study published in the journal *Current Issues in Tourism*, for example, projects that only one of the past 21 Winter Olympic cities will reliably\* provide safe and fair conditions for athletes by the end of the century if greenhouse gas\* emissions\* continue to increase. As a result, winter sports could become more expensive and exclusive, with both elite\* and recreational\* athletes forced into spending more money and time to find reliable locations. The warmer temperatures could also impact the next generation of athletes as they might not have enough snow to develop their skills, according to Casper. "If the sport isn't as available as it once was, there's a good chance the number and quality of athletes is going to decline," Casper said.

3        Amid declining conditions, many businesses and other stakeholders\* in the winter sports industry are taking drastic measures to ensure training and competitions can take place. Since it was introduced at the 1980 Winter Olympics in New York, artificial snow has been increasingly used by the industry to compensate\* for the lack of natural snow. However, it's often criticized as not only being unsafe\* for athletes but also harmful to the environment. Casper said the snow-making process is especially water- and energy-intensive\*. In China, for example, officials estimate that snow-making at this year's Winter Olympics will use 49 million gallons\* of water — the equivalent of 74 Olympic-sized swimming pools. Snow-making is also expensive, according to Casper. And while Olympic hosts usually have enough money to fund the process — China is spending approximately \$4 billion — many businesses in the winter sports industry are struggling to afford it. Unfortunately, as natural snow becomes less reliable, the demand and cost for its artificial counterpart will only increase. This could force some winter recreation areas, such as ski resorts, to close due to increased operational\* costs.

4        Artificial snow is likely to become more common as some winter sports may have to move indoors to accommodate the warmer temperatures, according to Casper. In fact, some U.S. states already host indoor facilities for certain sports, including cross-country skiing. Indoor facilities aren't a catch-all\* solution, however. For example, because there are only a few of these facilities around the world, athletes have to compete for training spaces. And if additional facilities are constructed, they're likely to impact the environment. Casper said sustainability\*-focused practices, including recycling, energy efficiency, water conservation\*, waste reduction and Leadership in Energy and Environmental Design (LEED)\* certification\*, can offset\* certain environmental impacts associated with\* sport facilities. "It's never going to be perfect. But there are ways — if you have people in leadership who value and support sustainability — to counter some of the negative impacts associated with the construction and operation of these facilities," Casper said.

5        Ultimately, the future of winter sports relies on the world reducing the greenhouse gas emissions fueling climate change. It also relies on industry stakeholders, such as the International Olympic Committee\*, using the latest science to make smarter decisions. The International Olympic Committee has faced backlash\* from athletes and spectators alike\* for its decision to host this year's Winter Olympics in Beijing and its surrounding regions, both of which already receive very little precipitation. Casper said he expects the International Olympic Committee and other organizers to host winter sporting events in northern locations as temperatures continue to rise. "I think it's important to remember there will still be winter seasons with a lot of snow," he said. "But with conditions being so variable, I think it's safe to say that the chances of the Winter Olympics being held in Canada again are pretty high."

Source: Andrew Moore (2022), "Beijing Winter Olympics a Cautionary Climate Tale, Expert Says," *CNR News*, February 10, 2022, NC State University College of Natural Resources,  
<https://cnr.ncsu.edu/news/2022/02/beijing-winter-olympics-a-cautionary-climate-tale-expert-says/>.

- \* strip : (紙・土地・布・板などの) 細長い一片、きれ
- \* streak : 筋 [しま] がつく、筋 [しま] になる
- \* barren : 殺風景な、退屈な
- \* venue : (コンサート・競技・会議などの) 開催地
- \* precipitation : 降水
- \* NC State : ここではノースカロライナ州立大学 (North Carolina State University) のこと。
- \* scarce : 乏しい、不十分な、供給の少ない
- \* NASA : アメリカ航空宇宙局 (National Aeronautics and Space Administration)
- \* National Oceanic and Atmospheric Administration : アメリカ海洋大気庁
- \* participation : participate の名詞形。
- \* associate professor : 准教授
- \* recreation : レクリエーション、休養、気晴らし
- \* tourism : 観光、観光旅行、観光事業
- \* generate : 発生させる、生み出す
- \* advocacy group : 利益団体、支持団体
- \* ample : 広大な、(余るほど) 十分な
- \* athlete : 運動選手、スポーツマン
- \* reliably : reliable の副詞形。
- \* greenhouse gas : 温室効果ガス (特に二酸化炭素など)
- \* emission : 放出、排出
- \* elite : 精鋭の、エリートの

- \* recreational : recreation の形容詞形。
- \* stakeholder : 利害関係者、ステークホルダー
- \* compensate : 補う、補てんする、埋め合わせる
- \* unsafe : 安全でない、危険な
- \* intensive : …集約的な、多量の…を必要とする
- \* gallon : ガロン (液量の単位。米国では約 3.8 リットル。)
- \* operational : 運営上の、経営上の
- \* catch-all : 包括的な
- \* sustainability : 持続可能なこと、持続可能性、サステナビリティ
- \* conservation : 保存、保護、管理
- \* Leadership in Energy and Environmental Design (LEED) : 環境に配慮した建物を評価する認証制度。米国の非営利団体 (グリーンビルディング協会 : USGBC) が開発・運用している。
- \* certification : 証明、認証
- \* offset : 相殺する、埋め合わせる
- \* associated with : …と関連する
- \* International Olympic Committee : 国際オリンピック委員会 (IOC)
- \* backlash : 反発、抵抗
- \* alike : 同様に

From the choices A to D, choose the most appropriate answer to the questions below.

- (1) Which of the following is NOT mentioned in paragraph 1 as a reason why the 2022 Winter Olympics relied on artificial snow?
  - A. During the winter, there is very little snow or rain in the area.
  - B. Less snow has led to rising temperatures and shorter winters.
  - C. Shorter winters have reduced the amount of snow.
  - D. The best conditions for winter sports are limited by climate change.
  
- (2) In paragraph 2, the author mentions "... natural snow is becoming less reliable." Which of the following aspects of snow is discussed here?
  - A. attraction
  - B. economy
  - C. quantity
  - D. safety
  
- (3) The word "Amid" in paragraph 3 can be replaced with which of the following?
  - A. Because of
  - B. Despite
  - C. However
  - D. Since
  
- (4) According to paragraphs 2 and 3, which of the following may happen if global temperature continues to rise?
  - A. Ski resorts will be forced to close due to higher operational costs.
  - B. The cost for artificial snow will decrease.
  - C. The number and quality of winter athletes will increase.
  - D. Winter-sport athletes will have more facilities for practice.
  
- (5) The word "accommodate" in paragraph 4 is closest in meaning to which of the following?
  - A. adjust to
  - B. begin
  - C. improve
  - D. limit

- (6) The word “expects” in paragraph 5 is closest in meaning to which of the following?
- A. denies
  - B. hopes
  - C. predicts
  - D. requests
- (7) Which of the following is NOT implied in the final two sentences of paragraph 5?
- A. It is likely that the Olympic Committee will host the Winter Olympics in cold countries.
  - B. Snow will continue to fall in winter.
  - C. The Olympic Committee will host the Winter Olympics in Canada in the following year.
  - D. The winter conditions in the world may not be stable.
- (8) According to the article, which of the following could cause winter sports to become more expensive and exclusive?
- A. building indoor facilities to accommodate warmer temperatures
  - B. having leaders who value and support sustainability
  - C. hosting the Winter Olympics in northern locations
  - D. using the latest science to make smart decisions
- (9) Which of the following is closest to the view of Jonathan Casper presented in the article?
- A. A decrease in places suitable for winter sports is expected to create competition and thus improve the quality of athletes.
  - B. Environmental protection is a significant factor for the continuation of the Winter Olympics.
  - C. The construction of indoor sports facilities should be avoided because of safety concerns.
  - D. The Winter Olympics should not be continued because the burden on the environment is very large.
- (10) Which of the following is NOT suggested in the article regarding the future of winter sports?
- A. Leaders should focus on the construction and use of more indoor facilities.
  - B. Leaders should make choices based on scientific findings.
  - C. Leaders should make efforts to support sustainable ways of building and using Olympic facilities.
  - D. Leaders should work to limit the environmental impacts of indoor sports facilities.

2

Write a paragraph between 120 and 150 words in English to answer the following question. (語数を記入する必要はありません。)

**Question:** New technologies such as robots, artificial intelligence, and machine learning have a great impact on our lives. How do you think society might change in the future due to new technologies?