

2020 年度 明治大学

【総合数理学部】

解答時間 70分

配点 120点



ま

英 語 問 題

注意事項

はじめに、これを読みなさい。

1. この問題用紙は 15 ページあります。ただし、ページ番号のない白紙はページ数に含みません。
2. 解答用紙に印刷されている受験番号が正しいかどうか、受験票と照合して確認しなさい。
3. 監督者の指示にしたがい、解答用紙の氏名欄に氏名を記入しなさい。
4. 解答は全て解答用紙の所定欄に記入またはマークしなさい。解答欄は裏にもあります。
5. 1 問につき 2 つ以上マークしないこと。2 つ以上マークした場合には、その解答は無効になります。
6. 解答は必ず鉛筆またはシャープペンシル(いずれも HB・黒)で記入しなさい。
7. 訂正する場合は、消しゴムできれいに消し、消しくずを残さないこと。
8. 解答用紙は、絶対に汚したり折り曲げたりしないこと。
9. 解答用紙は持ち帰らず、必ず提出しなさい。
10. 問題用紙は必ず持ち帰ること。
11. 試験時間は 70 分です。
12. マークシート記入例

良い例	悪い例
	



[I] 次の英文を読んで設問に答えなさい。

A lost ancient forest now sitting at the bottom of Lake Superior may become a unique source of rare wood for musical instruments, particularly violins. Superior Water-Logged Lumber Co. says there may be millions of large logs suitable for instrument production just waiting to be harvested.

“We expect to revolutionize the musical instrument-making industry,” said Scott Mitchen, a professional underwater treasure hunter and the president of Superior Water-Logged Lumber. His company recovers logs from Lake Superior and elsewhere that sank after becoming waterlogged while they were being floated to sawmills* during the lumbering era, which began in the early 1800s and peaked from the 1870s to the 1890s. Because of the low water temperatures, the logs did not rot. [ア]

The “Jurassic Park of wood,” as Mitchen describes the sunken logs, includes birch, oak, maple, ash, pine, and other types of wood. The recovered logs are dried and cut.

So far, (A) . For instrument production, maple logs must be at least a yard in diameter, said Joseph Nagyvary, a biochemist at Texas A&M University who studies and makes violins. Nagyvary has examined samples of maple recovered from Lake Superior and thinks the water-soaked wood could produce musical instruments of similar quality to the famous violins of Antonio Stradivari. “The important practical (B) is how many logs are down there. The company may be too optimistic about the number of maples,” Nagyvary said. The wood from water-soaked, old-growth maples is similar to the wood used by Stradivari to make his violins nearly 400 years ago, according to Nagyvary. The instruments were made from wood that had been soaked for long periods. [イ]

In a biochemical analysis of maple wood recovered from Lake Superior, Nagyvary found strong similarities between it and the wood used by Stradivari,

he said. "These results make me _____ (C) _____ that a major improvement in violin-making could be achieved if this quality wood could be found in large enough pieces," Nagyvary said in a letter to the company.

Instrument maker Chris Hinton, who works at Superior Water-Logged Lumber, said the instruments' unique sound results from the bacterial removal of gums and resins* in the cells of the wood while under water. "The recovered maple is specifically suited to violins. You don't find wood like this anymore," Hinton said. [ウ]

Many maple logs would be necessary to establish a credible wood supply for the instruments. So far, two acoustical instruments have been manufactured — a guitar made from red birch, which will be given to singer Johnny Cash next month, and a dulcimer, a type of musical instrument.

How much success Superior Water-Logged Lumber Co. enjoys will depend on both the number of logs in the lake and finding more uses for the lumber. Superior Water-Logged Lumber, however, has yet to make a profit. Stock in its parent company, Enviro-Recovery Inc., has been available over the counter for two months, selling in the \$3.50 range. [エ]

Nobody knows how many logs sank into the depths of Lake Superior, the other Great Lakes, inland lakes, or rivers. Also, estimates depend on whom you ask. Some who are familiar with the lake are skeptical, while Tony Kopp, who uses sonar* to find logs for Superior Water-Logged Lumber, estimates "millions and millions."
(D)

(Adapted from 'An Underwater Treasure in Timber for Violins?')

Milwaukee Journal Sentinel, September 14, 1997)

*sawmills 製材所 *resins 樹脂 *sonar 音波探知機

1. 次の各問の答を①～④の中から1つずつ選び、その番号を解答欄にマークしなさい。

(1) 空欄(B)に入る最も適切なものは次のどれか。

- ① solution ② issue ③ system ④ meaning

(2) 空欄(C)に入る最も適切なものは次のどれか。

- ① desperate ② pessimistic ③ hopeful ④ specific

(3) 下線部(D)の具体的な内容に最も近いものはどれか。

- ① Millions and millions of logs
② Millions and millions of dollars
③ Millions and millions of violins
④ Millions and millions of experts

2. 本文の内容について、次の質問に対するもっとも適切な答を①～④の中から1つずつ選び、その番号を解答欄にマークしなさい。

(1) According to the passage, what kinds of wood are suitable for violins?

- ① Birch trees that were lost in the lumbering era
② Maple logs that have been under water for a long time
③ Wood abandoned in Lake Superior by Superior Water-Logged Lumber Co.
④ Materials containing certain bacteria and resins

(2) According to the passage, Joseph Nagyvary

- ① wrote a letter to Enviro-Recovery Inc.
② is a world-class violin player.
③ searched for logs in Lake Superior to make quality violins.
④ compared recovered maple trees and Stradivari's violins.

(3) According to the passage, which of the following seems to be true?

- ① There are different opinions regarding how many logs are available for instrument production.
- ② So far two logs have been recovered from the lake area and made into violins.
- ③ Scott Mitchen predicted that violin prices would go down with the use of lumber from the lakes.
- ④ In the 18th century, the logging industry was prosperous around Lake Superior.

3. この英文に次の1文を入れるのに、最も適切な場所はどこか。

But Mitchen said one or two good contracts to supply wood will get the firm, which has 25 employees, into the black.

- ① [ア] ② [イ] ③ [ウ] ④ [エ]

4. 空欄(A)には、(a)~(i)の語句全てを用いて並び替えた英文が入る。3番目と6番目にくる単語および語句の組み合わせで適当なものを1つ選び、その番号を解答欄にマークしなさい。

(a) large enough	(b) a maple log	(c) the wood
(d) has not	(e) to provide	(f) found
(g) for	(h) a complete violin	(i) been

- ① 3番目 (c) 6番目 (i)
- ② 3番目 (e) 6番目 (h)
- ③ 3番目 (f) 6番目 (a)
- ④ 3番目 (d) 6番目 (i)

〔Ⅱ〕 次の英文を読んで設問に答えなさい。

According to UNESCO, the United Kingdom (the UK) is the second most popular study destination for international students after the USA, while Australia is the third most popular. This analysis compares Australian higher education enrolments with UK higher education student data. The top 10 source countries for the UK (Figure 1) made up 50% of all international higher education students in 2016-17, while the top 10 source countries for Australia's higher education sector (Figure 2) were 81% of all enrolments in 2017.

Approximately 30% of the UK's international student population comes from other European Union (EU) countries. Nonetheless, China is the UK's largest student source country, _____ (A) 31% of international students coming from outside the EU and 21% of total international students. Between 2015-16 and 2016-17, the UK's total international student numbers grew by 1%, though mostly due to 6% growth in EU students. Non-EU students declined by 1%, _____ (B) China one of the few major non-EU countries to show growth (4%) in this period.

Figure 1: International higher education students in the UK

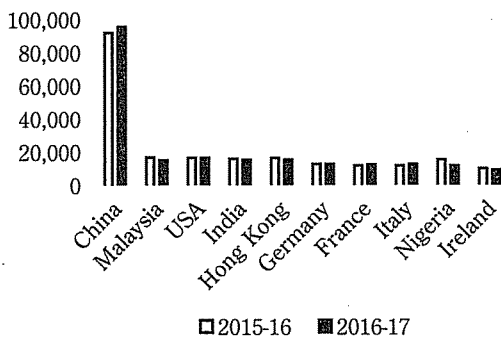
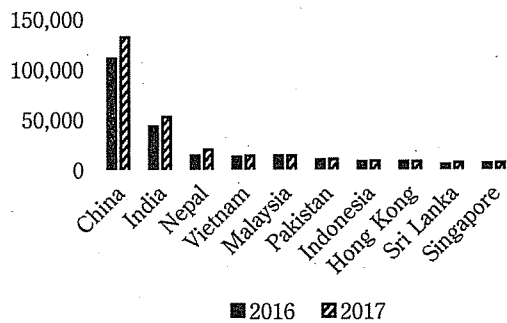


Figure 2: International higher education students in Australia



On the other hand, Australia saw strong overall growth in international higher education between 2016 and 2017 (15%), which incorporated consistent

_____ (C) _____ from its major source countries, particularly China and India. For other common student source countries such as Malaysia, Hong Kong and Singapore, the UK saw moderate declines from these countries although it continued to host a larger number of students from these countries. However, Australia saw moderate growth. The UK had a substantial _____ (D) _____ in student numbers from Nigeria (21%) in 2016-17 and, although Nigeria is a small student source country for Australia, numbers grew by 18% in 2017. Australia remains a popular destination for higher education students from India, with 22% growth in 2017, while the numbers of Indian higher education students studying in the UK have declined considerably in the last five years, including a further 1% decline from 2015-16 to 2016-17.

UK commentators have attributed the UK's decline in non-EU student numbers in recent years to immigration reforms, including student visa restrictions and changes in post-study work opportunities. It may be that Australia's introduction of post-study work visas for international higher education graduates in 2013 has positioned Australia to be perceived as not only a quality study destination, with opportunities for working both during and after study, but also as a more welcoming destination for international students.

(Adapted from 'Comparison between the UK's and Australia's international education sectors', Australian Government, Department of Education and Training, June, 2018)

1. 次の各問の答を①～④の中から1つずつ選び、その番号を解答欄にマークしなさい。

(1) 空欄(A)に入る語として最も適切なものは次のうちのどれか。

- | | |
|----------------------|----------------|
| ① represent | ② representing |
| ③ having represented | ④ represented |

(2) 空欄(B)に入る語として最も適切なものは次のうちのどれか。

- ① as ② for ③ in ④ with

(3) 空欄(C)と(D)に入る組み合わせとして最も適切なものは次のうちのどれか。

- ① (C) growth (D) growth
② (C) growth (D) decline
③ (C) decline (D) growth
④ (C) decline (D) decline

(4) Figure 1 と Figure 2 から言えることは次のうちのどれか。

- ① Most international students in Australia were from the EU in 2016.
② There were fewer Chinese students in Australia than in the UK in 2016.
③ More Indian students went to Australia to study than to the UK in 2016.
④ Malaysia ranked second in the number of international students in the UK and in Australia.

2. 本文の内容について、次の質問に対するもっとも適切な答を①～④の中から1つずつ選び、その番号を解答欄にマークしなさい。

(1) What do the UK and Australia have in common?

- ① Asian countries such as China, India and Malaysia are major source countries for the UK and Australia.
② European countries made up approximately 30% of the international student population in the two countries.
③ About a third of the international students in the UK and Australia are from non-Asian countries.
④ The number of Indian students in both countries steadily increased in the last five years.

(2) What is a possible reason that the number of non-EU students will increase in Australia?

- ① Because Australia has more visa restrictions for international students.
- ② Because Australia is considered a friendly place to study for international students.
- ③ Because more international students graduate from Australian universities than from universities in the UK.
- ④ Because Australia recently revised regulations about people from other countries.

(3) According to the passage, which of the following is true?

- ① The number of Malaysian students is static in Australia.
- ② The UK has more source countries of international students than Australia does.
- ③ The number of Nigerian students in the UK is expected to grow in the near future.
- ④ China accounted for about half of the international students in the UK in 2015-2016.

3. 本文に関連した以下の英文を読んで設問に答えなさい。

For ambitious young Asians, studying in the U.S. has long been a natural choice. They venture across the vast Pacific to pursue degrees with global reputation and, perhaps, take a shot at the American dream. Increasingly, though, the region's students are making a radical decision: They are staying (a) to home.

A Singaporean student, Leo Sylvia Han Yun, opted for a university in Tokyo. The 23-year-old, who has a sister who was born with a physical health condition, chose to focus on clinical biology in the hope of contributing to stem cell therapy for children.

Untold numbers of Indian students still aspire to careers in Silicon Valley, where they might follow in the footsteps of Google CEO Sundar Pichai or Microsoft CEO Satya Nadella. Some parents mortgage their homes to pay for their children's education in the U.S. But Siddhartha, a student from India, did not want to put that weight on his parents' shoulders and chose to study in Tokyo.

While some students like Siddhartha are (①) to go abroad, (②) find (③) educational opportunities within their own countries. “More students are staying in their home countries for higher education and reaping the benefits, often, of (b) education,” the British Council said in a report published in February 2018. “Students face increasing choice as high-quality provision of higher education is more (c) and accessible,” the council noted. “As a result, the market share of international students globally is dispersing and diversifying.”

(Adapted from Mitsuru Obe, ‘US college degrees lose mystique among Asian students’, *NIKKEI Asian Review*, May 15, 2018)

- (1) 空欄(a)～(c)に入る最も適切な単語を枠内の①～③から1つずつ選び、その番号を解答欄にマークしなさい。ただし、同じものを2度以上使ってはならない。

① affordable	② widespread	③ close
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- (2) この英文のタイトルとしてもっとも適切なものは次のどれか。

- ① Popularity of US Higher Education
- ② Chances and Risks of Higher Education
- ③ Recent Destinations of Asian International Students
- ④ Indian CEOs in Silicon Valley Firms

- (3) 下線の文章は「Siddharthaのように海外に行くことを選んでいる学生もいれば自分の国の中で魅力的な教育の機会を見つけるものもいる。」という意味である。空欄①～③にそれぞれ適当な英語1語を入れなさい。

[IV] 次の会話文を読んで設問に答えなさい。

The Humble OK

Three people have just sat down at a sidewalk cafe for a business meeting.

Waiter: What can I get you folks this afternoon?

Hiro: I'll have an ice coffee, please.

John: Let's (A), and I'll have a piece of your chocolate cake.

Yoshiko: And I'll have a piece of that delicious-looking apple tarte, please, plus a cup of Earl Gray, hot.

Hiro: Hot? Seriously, it must be 35 degrees today, (B)!

Yoshiko: Oh, my father was an afternoon tea drinker. Every day at exactly 3:00 he would make or find a cup of hot tea, and even when he was working with students he (C) for his cup of tea.

John: Ah, he was a professor, right?

Yoshiko: That's right. His area was linguistics.

Waiter: OK, here we are: apple tarte and hot tea for the lady, ice coffee for you gentlemen, and you two can decide who gets the cake.

John: OK, about that business idea ...

Hiro: Sorry (D), but have you ever noticed how often we say OK?

Yoshiko: OK, time (E). I found an interesting book in my dad's collection of books the other day. It was about the history of ... ready? The history of OK.

Hiro: Yeah? Of OK?

Yoshiko: That's right. It began way back in 1839 with a newspaper editor who liked to be playful with words.

John: OK. (*John winks at Hiro.*)

Yoshiko: Acronyms were pretty common then, things like NG for "no good" (just like in Japan now), (F) SP for "small potatoes", and OFM for "our

fine men”.

Hiro: OK, so what happened? (*Hiro winks back at John.*)

Yoshiko: Well, that editor decided “O-L-L K-O-R-R-E-C-T” (all correct) would be a clever way to say that something was good enough, so he wrote OK instead of AC. You guys should be OK with that, right?

John (*laughing*): All correct, ma’am!

Yoshiko (*rolling her eyes*): Thank you, John, and I will now ignore any further remarks that you make.

Hiro: So people just picked it up?

Yoshiko: Ah, (G): about that time the US was approaching a presidential election, but people then did not, of course, have Twitter.

John: What?!? I am shocked!

Hiro: Of course they didn’t, John. (*to Yoshiko*) OK, so what happened?

Yoshiko (*sighs*): How terrible you guys are, OFM! Anyhow, one of the candidates was from a town called Kinderhook, and he (H), so he almost immediately picked up the nickname “Old Kinderhook”.

Hiro: Got it! So his slogan became something like “OK is OK”!

John: How AC you are, Hiro. So did OK win the election?

Yoshiko: Actually, no. President Martin van Buren (J) in early 1841. OK, back to business, you jokers!

1. Why does Yoshiko mention (F) SP for “small potatoes”?

- ① To compare sizes.
- ② Because she likes them.
- ③ To comment on food long ago.
- ④ To provide another example.

2. After explaining O-L-L K-O-R-R-E-C-T, what does Yoshiko suggest she will do?

- ① Decide their business topic.
- ② Call John "Old Kinderhook".
- ③ Not listen to John's remarks.
- ④ Have a bite of the chocolate cake.

3. What does Yoshiko mean when she calls the two men (H) terrible?

- ① She is just commenting on their wordplay.
- ② The two are terrifying.
- ③ She is angry because of all their jokes.
- ④ She really dislikes chocolate cake.

4. 空欄(A)~(E), (G), (I), (J)に入る最も適切なものを①~⑧の中から1つ選び、その解答欄に番号をマークしなさい。ただし、同じものを2度以上使ってはならない。

- ① left office
- ② would drop everything
- ③ the plot thickens
- ④ make that two
- ⑤ to cut in
- ⑥ even in the shade
- ⑦ was getting up in years
- ⑧ for a little aside

