

## 英語

(90分) 環境 科学 部 (環境政策・計画学科) (環境建築デザイン学科) 工学 部 (電子システム工学科) 工学 部 (電子システム工学科) 人間 文化学 部

## 注意事項

- 1. 解答開始の合図があるまで、この問題冊子および解答冊子の中を見てはいけません。
- 2. 問題は3題で、13ページあります。
- 3. 解答開始後,解答冊子の所定欄に受験番号,氏名をはっきり記入しなさい。
- 4. **解答は、問題ごとに、解答冊子の指定された箇所に記入**しなさい。解答に関係のないことを書いた答案は無効にすることがあります。
- 5. 解答冊子は、どのページも切り離してはいけません。
- 6. 試験終了後、問題冊子は持ち帰りなさい。解答冊子を持ち帰ってはいけません。

Read the text and answer the questions below. Write your answers on the answer sheet.

(次の英文を読んで、後の問いに答えよ。答えは解答用紙に記入せよ。)

I believe that when people come together, it's a beautiful thing. And when someone who can't do something tries to do it and everyone else helps, that is a great moment.

One beautiful sunny day, I had a Little League baseball game. At the time it was very important to me, and I was really focused on doing well, as were the other seven-year-olds. It was our last game of the season, and we were all trying to have fun and to end it with a bang the best we could.

As the game (1) progressed the score got close. When we had our final chance to win at the end of the last inning, it was my turn to bat. I looked over at my coach, who was talking to my dad about something – probably the stock market or something like that. As I stepped into the batter's box, my coach called me back to the dugout. He asked me a strange yet interesting question. He asked if it would be all right if my brother hit for me.

My brother wasn't on the team. He had never even played baseball due to his disability. He couldn't stand, and he certainly couldn't hit. But (2) I responded very maturely for a kid my age. "Of course he can hit for me," I said. I was still puzzled as to (3) how, though. Thoughts ran through my mind, such as: Would the kids make fun of him? Would he hit the ball?

As my dad carried him to the plate, I realized that without his wheelchair he would have to be held up. The joy on his face couldn't be traded for anything in the world. Just being on the field (4)[all the happiness / gave / he needed / him]. What will the other kids think? I wondered.

I heard someone call out, "C'mon, hit it outta here." Then came another, "You can do it!" These words of acceptance showed me how great the moment really was. On the first swing, which was pretty much my dad holding Sam's hands around the bat and my dad swinging, he – or they – hit the ball. The kids on the other team did something amazing then, something seven-year-olds should never know how or why to do. But in the spur of the moment, these seven-year-olds did. They purposely

overthrew the ball. Three times.

Sam had hit his first and only home run. And as my dad carried him around the bases, I knew this memory would stick with me and everyone else there forever.

I've seen it with my own eyes. When people come together, it's a beautiful thing.

Josh Stein, This I Believe.org

- Q1. According to the second paragraph, which statement is true? Choose the best answer.
  - ① The writer tried hard to finish the last game of the season as soon as possible.
  - ② The writer wanted to enjoy the beautiful weather rather than play the game.
  - ③ The writer was an enthusiastic seven-year-old baseball player.
  - 4 The writer was coaching a Little League baseball team.
- Q2. Choose the closest meaning for underlined word (1).
  - (1) averaged
- 2 began
- 3 developed
- 4 stood
- Q3. According to the third paragraph, which statement is true? Choose the best answer.
  - ① Before he could bat, the writer was asked to talk to the coach.
  - ② It was clear which team was going to win.
  - ③ Near the end of the game, the writer's team was far ahead.
  - 4 The coach turned to talk to the writer about the stock market.
- Q4. Choose the best Japanese translation for underlined section (2).
  - ① 私は大人ぶって、子どもに自分の年齢を教えた。
  - ② 私は同い年のとても大人っぽい子どもに答えた。
  - ③ 私は同じ年頃の子どもに対して、とても大人じみた答えを返した。
  - ④ 私はその時の年齢を考えると、とても大人びた返事をした。

Q5.	Which phrase could be substituted for underlined word (3) in the fourth
	paragraph? Choose the best answer.
	① how confused I still was
	② how mature I was for my age
	③ how my brother could hit
	④ how my brother thought
Q6.	Write the words in the correct order for underlined section (4).
	[ all the happiness / gave / he needed / him ]
Q7.	According to the fifth and sixth paragraphs, which statement is true? Choose the
	best answer.
	① Sam looked worried about what the other children would think.
	② The players on the other team intentionally made throwing mistakes.
	③ The seven-year-old kids did not know how to act.
	④ The writer's father pitched the ball to Sam.
Q8.	Choose the best title for the reading.
	① Growing Tough through Exercise
	② Performing Well under Pressure

③ The Benefits of Competition④ The Triumph of Kindness

Read the text and answer the questions below. Write your answers on the answer sheet.

(次の英文を読んで、後の問いに答えよ。答えは解答用紙に記入せよ。ただし、Q12 については、国際コミュニケーション学科の受験者は (A) に、それ以外の受験者は (B) に答えよ。)

Concrete has allowed humans to make great cultural and social achievements. However, the huge amount of the material also damages the health of the earth. Concrete clearly illustrates the urgent problem which humanity faces: in the attempt to make our lives more physically comfortable, healthy, and secure, we actually (1) our very existence – along with all other life on our planet.

As an invention, concrete has been a big success. We humans can build many different things with this remarkable material. It is readily available, can be molded to any shape when wet, and is strong and enduring after drying. Made of cement, sand, gravel, and water, concrete is also relatively cheap. We use it to make roads, sidewalks, buildings, tunnels, bridges, and dams – the list of infrastructure goes on and on. In fact, concrete is the most (2) man-made material in the world.

Exactly when and where concrete was invented is a matter of debate, but we know it has been used since ancient times. The earliest large-scale users of concrete technology were the ancient Romans, who utilized concrete in everything from bathhouses to harbors and stadiums. Many Roman concrete structures are still with us centuries later. Following the collapse of the Roman Empire, the use of concrete became rare for about 1,400 years. But the technology was rediscovered and redeveloped in the 18th and 19th centuries in Britain, and concrete came into widespread usage again. It was later combined with steel rods to create reinforced concrete, which, in the 20th and 21st centuries, allowed skyscrapers and other constructions of a size never before possible.

Although concrete is often associated with huge construction projects, a significant portion of the world's concrete production is actually used by individual, small-scale builders in rural villages and poor areas of cities. People with little professional or technical training can build clean, dry, and comfortable homes with concrete floors. As a result, people in developing countries can lead safer and healthier lives. The material has allowed the democratization of construction.

While concrete has proved to be a phenomenal success as a building material, its widespread use has created serious environmental problems. Concrete production makes up about 8% of global CO<sub>2</sub> emissions, making a direct contribution to global warming and climate change. The production of concrete consumes large amounts of fresh water; concrete production is responsible for almost 10% of global industrial water use. This can cause major problems in regions which suffer from water shortages. Furthermore, the collection of (3)[ concrete / damages / make / sand / to ] beaches and coastal wildlife.

Indirectly, concrete contributes to a loss of biodiversity and to the global mass extinction which is currently underway. We humans destroy natural habitats for urban and infrastructure development. When lands and river banks are cleared and covered in concrete, many plants and animals lose their places to live. This destruction of natural environments is also accompanied by the loss of the essential ecological functions which those environments carry out. These functions, on which human and all other life depend, include the pollination of flowers, oxygen production, and water purification.

(4) Awareness of the problems caused by too much concrete has begun to grow. To deal with these problems, some researchers and engineers are exploring stronger structures so that less concrete is required to do the same job. Others are working on better recycling of used materials and improved maintenance of existing infrastructure. Some governments are introducing new environmental strategies such as putting taxes on concrete use. (5) [a] citizens increasingly participate in activities to protest against [b] political attention to environmental problems, including those in which concrete is involved.

(6) About four tons of concrete are produced annually per person worldwide. In fact, concrete may already outweigh the combined mass of every tree, bush, and shrub on the planet. Global production of concrete has doubled over the past fifteen years and will continue to increase without effective control measures. Concrete demonstrates that we humans face our most important and pressing construction project yet: how to build a sustainable relationship with the natural world.

Q1.	Choose the best word to fill blank ( 1 ).
	① endanger ② guarantee ③ maintain ④ owe
Q2.	Choose the best words to fill blank (2).
	① difficult to find ② environmentally friendly
	③ expensive but crucial ④ widely used
Q3.	According to the third paragraph, which statement is true? Choose the best answer.
	① Concrete has been in continuous widespread usage since the Roman Empire.
	② It was first used by the British over 200 years ago.
	③ Skyscrapers were not possible until the invention of reinforced concrete.
	① The ancient Romans invented concrete and used it extensively.
Q4.	Which statement summarizes the fourth paragraph? Choose the best answer.
	① Concrete is frequently connected to vast global building programs.
	② Even ordinary people can utilize concrete to make their lives better.
	③ People may benefit from concrete structures, but they continue to suffer the effects of poverty.
	④ The material is most effectively used by professionals with technical training.
Q5.	Write the words in the correct order for underlined section (3).
	[ concrete / damages / make / sand / to ]

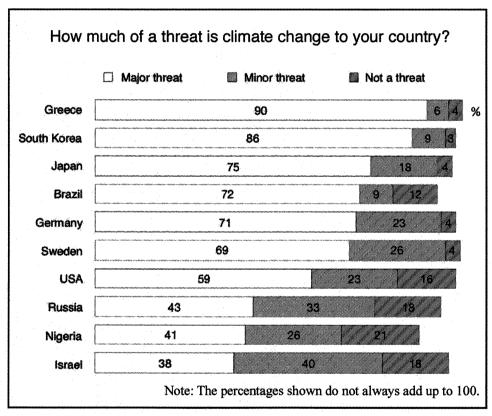
- Q6. Which of the following environmental problems are NOT mentioned in the fifth and sixth paragraphs? Choose <u>two</u> answers.
  - ① damage to healthy natural ecosystems
  - 2 destruction of Earth's protective ozone layer
  - 3 excessive demand on freshwater resources
  - 4 increasing amounts of atmospheric carbon dioxide
  - ⑤ permanent loss of a variety of species of plants and animals
  - 6 the heat island phenomenon in urban areas
- Q7. Translate underlined sentence (4) into Japanese.
- Q8. Choose the best combination of words to fill the blanks of underlined section (5).
  - ① [a] Anxious [b] considerable
  - ② [a] Concerned [b] inadequate
  - 3 [a] Indifferent [b] limited
  - 4 [a] Naive [b] insufficient
- Q9. Choose the best sentence to fill blank (6).
  - ① So far, however, our dependence on concrete remains strong and solid, like the substance itself.
  - ② Thanks to the three R's reduce, reuse, and recycle we have basically gotten our use of concrete under control already.
  - 3 There is not a great deal of concern, globally, about the overuse of concrete and its negative effects on the environment.
  - ④ Up to now, all of these measures have been highly effective in reducing the amount of concrete that we use.

- Q10. Based on the reading, choose the two statements that are true about concrete.
  - ① It cannot easily be made to form specific shapes.
  - ② It has helped to provide homes for various kinds of wildlife.
  - ③ It is currently the target of research which aims to reduce its use.
  - ④ It is not used to any significant degree by individual builders.
  - ⑤ It is used more commonly than water, globally.
  - ⑥ Its ingredients tend to be reasonably priced and easily accessible.
- Q11. What is the main point of the reading? Choose the best answer.
  - ① Concrete has allowed poorer people in developing countries to have better housing.
  - ② Concrete has empowered human cultural advancement while having minimal negative impact on the environment.
  - ③ Concrete has enabled great accomplishments, but its extensive use has created environmental problems which need to be addressed.
  - Concrete has made remarkable contributions to human development globally,
    but it consumes too much water in certain areas.

Q12. 国際コミュニケーション学科の受験者は(A)に、それ以外の受験者は(B)に答えよ。

## (A) [Writing]

(i) Citizens around the world responded to a survey about the danger of climate change. They were asked whether climate change is either *a major threat*, *a minor threat*, or *not a threat* to their country. Look at the results in the chart below. Summarize the information given in the chart. Write about 50 words in English.

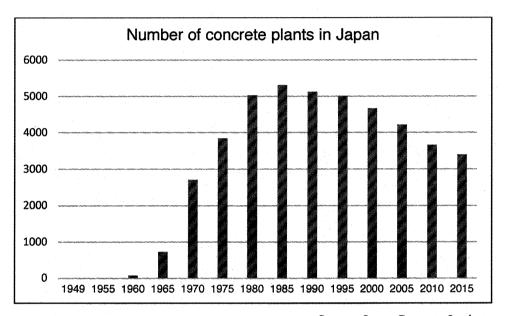


Source: Pew Research Center

(ii) As the chart shows, many Japanese people think climate change is a major threat to their country. What do you think? Is climate change a major threat to Japan? Explain your answer. Write about 70 words in English.

## (B) [Writing]

The graph below shows the number of concrete plants – the places where concrete is produced – in Japan from 1949 to 2015. Describe one interesting change you can see from the graph. Next, explain why you think the change happened. Write about 50 words in English.



Source: Japan Concrete Institute

Read the following conversation from a meeting of a university club. Choose the best expression to fill each blank and write the number on the answer sheet.

(以下はある大学のサークル・ミーティングでの対話である。会話の流れをふまえて空欄  $A \sim F$  に入れるのに最も適切なものを $\mathbb{D} \sim \mathbb{Q}$ から選び、その番号を解答用紙に記入せよ。)

**Lisa:** Okay, so let's begin! The main topic of today's meeting is to decide where to go for our summer excursion. Any ideas?

Dani: I thought we'd already decided on going to watch the Gion Matsuri parade.

Hiro: Yeah, me too.

**Lisa:** Well, A, so we should probably choose something else.

**Dani:** Oh, I see. That's a shame. I was really looking forward to it. Hmm. What else is there...?

**Hiro:** How about a trip to one of the beaches on the other side of the lake? We could go on the Saturday after the exams have finished.

**Lisa:** B Do you have a particular one in mind?

**Hiro:** We could go to Pine Beach. There's plenty of shade under the trees, it's nice for swimming, and there are good facilities, too. The jet bikes are a bit noisy, but it's a fun and lively place. And we're allowed to have a barbecue there.

**Dani:** I like the idea, but it's a bit far, isn't it? C

Lisa: A little, but if you catch an express train, it's not too bad.

**Dani:** Let me check on my phone exactly where it is... Yeah, I guess it doesn't take that long... Oh look at this — on that Saturday, they have a fireworks display!

**Lisa:** Looks like it's destiny! We should definitely go there. It might be our only chance to see fireworks this year.

Hiro: I guess it's decided then. D

**Dani:** I can take care of the barbecue if you like. I still have the set we bought for the last party at my place. I just need to get charcoal etc.

Hiro:	E , so I can grab the food on the way. If everyone chips in about a
	thousand yen, I can buy stuff for the whole group.
Lisa:	Okay, well, I'll send out a LINE to the group and let everyone know the
	plans. We can finalize the details a little closer to the time.
Hiro:	F
Dani:	Yeah, that wouldn't be good. Let's keep our fingers crossed for sun!
A	① a lot of members haven't seen the festival
	② Gion Matsuri is my favorite festival
	③ some members told me they have an exam on that day
	4 the others told me they prefer to go to a beach
В	① But I have to work on that day.
	② Can't be helped.
	③ Sounds fun!
	① That reminds me.
C	① Actually, it makes little sense to me.
	② Ah, wait! I was thinking about a different beach.
	③ Do you have a lot of time?
	④ I heard it's kind of a pain to get there.
D	① Do you mind not having a barbecue?
	② I wish we could watch some fireworks though.
	③ Now let us rearrange our itinerary.
	④ So what do we need to organize?
<b></b>	
E	① And I live right next to a supermarket
	② I can pick up the charcoal if you like
	③ If only I lived a little closer to a supermarket
	④ You know, my family runs a travel agency

- F ① I hope everyone will like the new plan.
  - ② I just hope it won't rain!
  - ③ I think we should make some firm decisions right now.
  - 4 We'll see what would happen.