(問題)

2019年度

(H31131112)

## 注 意 事 項

- 1. 試験開始の指示があるまで、問題冊子および解答用紙には手を触れないこと。
- 2. 問題は  $2 \sim 11$ ページに記載されている。試験中に問題冊子の印刷不鮮明、ページの落丁・乱丁及び解答 用紙の汚損等に気付いた場合は、手を挙げて監督員に知らせること。
- 3. 解答はすべて、HBの黒鉛筆またはHBのシャープペンシルで記入すること。
- 4. マーク解答用紙記入上の注意
  - (1) 印刷されている受験番号が、自分の受験番号と一致していることを確認したうえで、氏名欄に氏名を記入すること。
  - (2) マーク欄にははっきりとマークすること。また、訂正する場合は、消しゴムで丁寧に、消し残しがないようによく消すこと。

マークする時	●良い	○悪い	◎悪い
マークを消す時	○良い	○悪い	◎悪い

- 5. 記述解答用紙記入上の注意
  - (1) 記述解答用紙の所定欄(2カ所)に、氏名および受験番号を正確に丁寧に記入すること。
  - (2) 所定欄以外に受験番号・氏名を記入した解答用紙は採点の対象外となる場合がある。
  - (3) 受験番号の記入にあたっては、次の数字見本にしたがい、読みやすいように、正確に丁寧に記入すること。

数字見本 0	1 2 3	4 5	6	7	8	9
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(4) 受験番号は右詰めで記入し、余白が生じる場合でも受験番号の前に「0」を記入しないこと。

		万	千	百	十	
(例)	3825番⇒		3	8	2	5

- 6. 解答はすべて所定の解答欄に記入すること。所定欄以外に何かを記入した解答用紙は採点の対象外となる場合がある。
- 7. 試験終了の指示が出たら、すぐに解答をやめ、筆記用具を置き解答用紙を裏返しにすること。
- 8. いかなる場合でも、解答用紙は必ず提出すること。

#### READING/GRAMMAR SECTION

ેંદ્રમાં

### All answers must be indicated on the MARK SHEET.

### I Read the passage and answer the questions below.

- ① In the late 1940s, the United States Air Force had a serious problem: its pilots could not keep control of their planes. The accidents were so frequent and involved so many different aircrafts that the Air Force had an alarming life-or-death mystery on its hands. At first, the military brass blamed the men in the cockpits, citing "pilot error" as the most common reason in crash reports. This judgment certainly seemed reasonable, since the planes themselves seldom malfunctioned. Engineers confirmed this time and again, testing the planes and finding no defects. Pilots, too, were <u>baffled</u>. The only thing they knew for sure was that their piloting skills were not the cause of the problem. If it wasn't human or mechanical error, what was it?
- ② After multiple investigations ended with no answers, officials turned their attention to the design of the cockpit itself. Back in 1926, when the army was designing its first-ever cockpit, engineers had measured the physical dimensions of hundreds of male pilots (the possibility of female pilots was never a serious consideration then), and used this data to standardize the dimensions of the cockpit. For the next three decades, the size and shape of the seat, the distance to the pedals and control stick, the height of the windshield, even the shape of the helmets were all built to conform to the average dimensions of a 1926 pilot.
- ③ Now military engineers began to wonder if the pilots had gotten bigger since 1926. To update their assessment of pilot dimensions, the Air Force authorized the largest study of pilots that had ever been undertaken. In 1950, researchers at Wright Air Force Base in Ohio measured more than 4,000 pilots on 140 dimensions of size, including thumb length, crotch height, and the distance from a pilot's eye to his ear, and then calculated the average for each of these dimensions. Everyone believed this improved calculation of the average pilot would lead to a better fitting cockpit and reduce the number of crashes—or almost everyone. One newly hired twenty-three-year-old scientist had doubts.
- 4 Lieutenant Gilbert S. Daniels was not the kind of person you would normally associate with the masculine culture of aerial combat. He was slender and wore eyeglasses. He enjoyed flowers and landscaping. When he joined the Aero Medical Laboratory at Wright Air Force Base out of college, he had never even been in a plane before. But it didn't matter. As a junior researcher, his job was to measure pilots' limbs with a tape measure. It was not the first time Daniels had measured the human body. As a major in physical anthropology, a field that specialized in the anatomy of humans, Daniels had written a graduation thesis on the study of 250 male classmates' hands. Unexpectedly, he had found that their hands were not similar at all, even though the students came from very similar ethnic and sociocultural backgrounds. So when the Air Force put him to work measuring pilots, Daniels harbored a private conviction about averages that rejected almost a century of military design philosophy. As he sat in the lab measuring pilots, he kept asking himself the same question in his head: How many pilots really were average?
- (5) He decided to find out. Using the size data he had gathered from 4,063 pilots, Daniels calculated the average of the ten physical dimensions believed to be most relevant for design, including height, chest circumference, and sleeve length. These formed the dimensions of the "average pilot," which Daniels generously defined as someone whose measurements were within the middle range of values for each dimension. So, for example, even though the precise average height from the data was 175 cm, he defined the height of the average pilot as ranging from 170 cm to 180 cm. Next, Daniels compared each individual pilot, one by one, to the average pilot.
- 6 Before Daniels crunched his numbers, his colleagues anticipated that the vast majority of pilots would fall within the average range on most dimensions. After all, the pilots had already been preselected because they appeared to be average sized. The scientists also expected that a sizable number

of pilots would be within the average range on all ten dimensions. But even Daniels was stunned when he tabulated the actual number: zero. Out of 4,063 pilots, not a single airman fit within the average range on all ten dimensions. Even when Daniels picked out just three of the ten dimensions of size, less than 3.5 percent of pilots were average-sized on all three dimensions. Daniels' finding was clear and incontrovertible. There was no such thing as an average pilot. If you've designed a cockpit to fit the average pilot, you've actually designed it to fit no one.

- The old Air Force designs were all based on finding pilots who were similar to the average pilot," Daniels would later explain. "But once we showed them the average pilot was a useless concept, they started fitting the cockpit to the individual. That's when things started getting better." The Air Force altered its design philosophy to one based on a new guiding principle: individual fit. Aeronautical engineers quickly came up with solutions that were both cheap and easy to implement. They designed adjustable seats, adjustable foot pedals, adjustable helmet straps and flight suits. Pilot performance soared and the U.S. Air Force became even more powerful.
- ® Imagine the good that would have resulted if our society had followed suit. Rather than comparing people to a misguided ideal, we could have seen them—and valued them—for what they are: individuals. Instead, most schools, workplaces, and scientific institutions continue to believe in the reality of "the average pilot." They design structures and conduct their research around an arbitrary standard—the average—compelling us to compare ourselves and others to a phony ideal. From the cradle to the grave, you are measured against the ever-present yardstick of the average, judged according to how closely you approximate it or how far you are able to exceed it. The concept of average has been so thoroughly ingrained in our minds that we rarely question it seriously. Despite our occasional discomfort with the average, we accept that it represents some kind of objective reality about people. What if I were to tell you that this form of measurement is almost always wrong? That when it comes to understanding individuals, the average is most likely to give incorrect and misleading results? What if, like the cockpit design, this ideal is just a myth?

[Adapted from Todd Rose, The End of Average (2016).]

## (1) Choose the best way to complete the following sentences about Paragraphs ① to ⑧.

- 1 In Paragraph ①, the author mainly
- 5 In Paragraph 5, the author mainly
- 2 In Paragraph 2, the author mainly
- 6 In Paragraph 6, the author mainly
- 3 In Paragraph 3, the author mainly
- 7 In Paragraph 7, the author mainly
- 4 In Paragraph (4), the author mainly
- 8 In Paragraph ®, the author mainly
- A compels us to resist the idea of average because it perpetuates important individual distinctions.
- B credits a mid-century innovation in Air Force design philosophy as having brought about corresponding advances in society at large.
- C describes one researcher's attempt to systematically resolve his own doubts about a basic premise in the Air Force's thinking.
- D explains that initial aeronautical designs championed the notion of statistical average, which then governed subsequent efforts for many years.
- E identifies a troubling issue and how initial suspicions regarding its cause all seemed off the mark.
- F illustrates how Daniels' conclusion induced a paradigm shift in the Air Force, and how cockpits came to better accommodate individual particulars.
- G indicates that most researchers, with one notable exception, continued to assume that conventional wisdom could be used to enhance cockpits.
- H introduces a skeptic whose past experience led him to wonder whether a prevailing norm was truly valid.
- I presents Gilbert Daniels as the lone military scientist who refused to believe that American pilots' bodies could have changed so much in just thirty years.
- J problematizes how society habitually obeys the notion of average despite its flaws and artificiality.
- K shows that the Air Force's anatomical data had become outdated and that the size of American pilots had grown significantly between 1926 and 1950.
- L suggests that the frequency of U.S. Air Force accidents was due to falsified data regarding cockpit dimensions taken back in 1926.
- M tells us how unlikely it had seemed to the participants, until they learned otherwise, that a common belief about pilot size would prove unfounded.

# (2) Choose FOUR sentences that are NOT correct according to the passage. You may NOT choose more than FOUR statements.

- A Contrary to the author's wishes, society values the idea of average in a way that he believes is unwarranted.
- B Daniels was surprised to learn that only three out of every ten airmen could have been considered average-sized.
- C In his 1950 study, Daniels defined average as a single value rather than a numerical range.
- D It took nearly three decades for the Air Force to realize that cockpits had become too small for its pilots.
- E The Air Force was reluctant to answer Daniels' call to abandon average-based standardization.
- F The willingness to overturn conventional thinking served the U.S. Air Force well.
- G Using a statistical average to satisfy everyone can end up satisfying no one.
- H What Daniels had learned as a student was later confirmed in his professional life.
- When the Air Force undertook its study in 1950, it still followed a premise established back in 1926.

(3)	Choose	the best	way to	compl	ete	each	of	these	ser	itences,	which	relate	e to	th
	underlined words in the passage.													
1	Here "ba	ffled" means	S											
	A certain	. В	confusin	g.	С	curiou	s.	Ε	o p	uzzled.	E	susp	ected.	
2	Here "to	conform to"	means to											
	A correct.	. В	insist.		С	measu	re.		) p	ursue.	E	suit.		
3	Here "ge	nerously" m	eans											
	A compre	hensively.		В	libe	erally.				C	nume	rically.		
	D strictly			E	uni	ilaterall	y.							
4	Here "inc	controvertibl	e" means											
	A imagin	able.		В	inc	onclusiv	æ.			C	incre	lible.		
	D undeni	able.		E	unj	predicta	ble.							
5	Here "ph	ony" means												
	A fake.	В	final.		С	person	al.		) s	mart.	E	unfa	ir.	

## (4) Choose the ONE sentence that BEST summarizes the author's main idea in the passage.

- A As desirable as the concept of average is, it is inferior to that of individuality, which allows us to better appreciate differences in personality.
- B It takes an unlikely and unusual innovator like Gilbert Daniels to reaffirm the true value and utility of the concept of average.
- C Society should be more suspicious of false ideals such as average because they often emerged from dubious military thinking of the early twentieth century.
- D The dominance of average can have unwanted consequences, and thus we should shift our societal focus from standardization to individualization.
- E The social prevalence of individualization is such that even cutting-edge military researchers often could not help but be deceived by it.

### II Read the passage and answer the questions below.

"What's the best way to escape from prison?" asks the ex-convict on the other end of the phone. He told me via email that he'd been released four weeks before our phone call, but I'm starting to wonder whether I might have stumbled into an entirely different story.

"Well, I'm not really sure, to be honest with you, Matt." I stutter down the line. "I assume the Shawshank thing doesn't work?"

"The best way to escape prison is with a book, Sophie. And no, the Shawshank thing would never work. I'm not on the run either, if that's what you're thinking."

When Matt went into prison aged twentyone, he'd never read a book in his life. Now, four years later, he reckons he's finished over a thousand.

Matt's venture into literary escapism started, like many others, with *Shantaram* by Gregory David Roberts. "My cellmate had been reading this book for about six months. It's a thick book you know—over 900 pages—so it takes you a while to get through it. When he finished with it he gave it to me. I hadn't read anything longer than a text message in my life and had no interest in reading, but when you're that bored you'd be surprised at the things you'll try."

By the time Matt was released, he thinks that the copy of *Shantaram* that made him fall in love with reading had been read by at least eight other inmates. The sharing of books opened up conversations and debates. It gave the inmates in the category B jail he was serving in something other than their crimes to discuss.

Katy Oglethorpe runs prison book groups, facilitated by Prison Reading Groups. "In my book club at HM Prison Wandsworth, we recently read Boy in Striped Pyjamas by John Boyne," says Katy. "It provoked a really interesting discussion about the Holocaust leading on to further conversation about personal trauma and modern right-wing politics. There is a huge range in the book club, from someone who holds an MA and has written three novels, to someone who left school at fourteen and is tentatively discovering Harry Potter. But perhaps because everyone enjoys reading, and because the opportunity to sit

and discuss literature (or anything) is rare, the atmosphere is a relaxed and collaborative one—albeit a few heated discussions about the merits of female versus male writers with one of the older members of the group."

Katy said that books that hold pertinent messages of transformation, like *Shantaram*, are particularly popular. "I met an ex-prisoner recently who was expelled from school at thirteen and went on to get a degree while serving a life sentence," Katy says. "Along the way he read biographies of people who had also served sentences—Nelson Mandela, Malcolm X, Aung San Suu Kyi, Tupac—whose stories helped him craft a new identity and convince him of the possibility of not only surviving but even thriving within his environment."

Other books that are often read include stories of self-improvement and practical guides on subjects like starting a business. *Rich Dad Poor Dad* by Robert Kiyosaki is a particularly popular choice. Katy says that the most requested book is the dictionary.

The Prisoners' Education Trust says that as a charity, they've seen a surge in reading, poetry writing, and letter writing in prisons from its population of 85,523 (as of February 10), the members of which might not have picked up a book since primary school.

Rod Clark, Chief Executive of Prisoners' Education Trust, says, "a seemingly simple book can be incredibly valuable to someone serving a prison sentence—from teaching him or her to read, to developing a love of learning, to feeling empathy for characters, to encouraging people to tell their own stories."

Echoing Matt's notion of escapism, Clark says that, "for people we fund to take courses in their cells, freedom doesn't have to begin when those gates are flung open in the distant future. It can begin now and be found within the pages of a book."

Aside from the freedom that reading permits, it opens opportunities for conversations prisoners wouldn't have otherwise been able to engage in. Jordan, a current inmate, is reading *The Road Less Travelled* by M. Scott Peck. He's reading the

book at the same time as his girlfriend, and they discuss it during her visits to him. He says that, on occasion, the book leads them to have deeper conversations that they wouldn't otherwise have.

"It's teaching me about love—both the physical and emotional side—which is something I could do with learning about. It's teaching me to examine myself and my past behavior."

Literature may encourage self-reflection and open new doors to inmates, but <u>as it stands</u> there have been no targeted studies into whether there is any correlation between improved literacy levels in inmates and reoffending. However, research into the Prisoners' Education Trust's courses by the Ministry of Justice's Data Lab found a 25 percent reduction in recidivism among inmates who took a distance learning course. These courses, seventy of which the Prisoners' Education Trust funded in 2016, include English Literature and Creative Writing.

While inmates like Jordan take comfort in the conversations that reading offers, another current inmate, Edward, likes to read to distract himself from the chatter around him. For Edward, fiction isn't as enticing. He enjoys non-fiction because "you hear a lot of gossip in prison, but when you read a book you know it for yourself." He says that reading has saved him from a fight with his cellmate many times. The pair are supposed to share a TV, but his cellmate doesn't like to share; they often disagree about what to watch and when. "When I have a book, I can become lost inside this world."

Despite the obvious benefits of reading in prisons, a controversial "book ban" was introduced in November 2013 as part of an "incentives and earned privileges" regime. Under the plan, prisoners were unable to receive packages of books from the outside. The ban was reversed in 2015, and the judge, Mr. Justice Collins, said, "a book may not only be one which a prisoner may want to read but may be very useful or indeed necessary as part of a rehabilitation process."

"I've been inside for eight years, so the book ban hit me pretty hard," says James.

"There's something homely about a book that you just don't get when you're watching TV or whatever. I used to love reading books that my wife sent me that she'd read, because I could imagine her reading each page as I was, and it makes me feel more connected with her. When that book ban came into place I lost my lifeline. It was devastating."

James says that the book that changed his life was *The Life of Pi* by Yann Martel. "When I was reading that book, I started to think about all the possibilities that life has to offer and quite often I'd sit there in my cell thinking 'what on earth have I done? What could possibly be worth trading in your whole life?" It was like the lightbulb moment I needed to accept what I'd done. Before I read it, I don't think I really understood the gravity of the crime. That book rocked my world. It changed my life—it made it ten times better."

[Adapted from Sophie Brown, "How to Escape from Prison,"

The Times Literary Supplement (March 10, 2017).]

## (1) Choose the ONE way to complete each of these sentences that is NOT correct according to the passage.

#### 1 Matt

- A believes that the first book he enjoyed reading was also read by other prisoners.
- B didn't think that he would become a book-lover before he was sent to prison.
- C had already been discharged from prison when he talked to the author.
- D had chances to talk with other prisoners about the books they read.
- E was illiterate when he was put in prison.

#### 2 Katy

- A observed that the discussion in the prison book groups extended to a range of related issues.
- B organizes book reading groups that prisoners with different backgrounds can participate in.
- C noticed that older members tend to dominate the discussion in the prison book groups.
- D points out that the books prisoners can sympathize with tend to be popular among them.
- E thinks that the participants in the prison book groups are generally cooperative and have discussions peacefully.

#### 3 Literature

- A allows readers to have a chance to look back on what they did in the past.
- B gives prisoners a sense of freedom even when they are in prison.
- C helps people to have deeper thoughts and share them with others.
- D is one of the subjects prisoners can study while they serve their sentences.
- E stops most prisoners from committing a crime again after they are released.

## (2) Choose FOUR statements that are NOT true according to the passage. You may NOT choose more than FOUR statements.

- A Biographies of famous people who experienced imprisonment are always in the highest demand among prisoners.
- B Prisoners read books not only to socialize with others but also to isolate themselves from others
- C Reading books in prison has helped even an experienced reader acquire a new perspective toward his life.
- D Some prisoners start talking about themselves after reading stories in books.
- E Some studies clearly show that participants in prison book groups are less likely to repeat offenses after they are released from prison.
- F The book ban was overturned by the court because it overlooked the value of book reading in prison.
- G The Ministry of Justice offers distance-learning courses, so that prisoners can earn a degree while they are in prison.
- H The Prisoners' Education Trust planned to increase the number of books they provided for prisoners in 2016.

## (3) Choose the best way to complete each of these sentences, which relate to the underlined phrases in the passage.

1 Here "on the run" means				
A running about.	В	running away.	С	running behind.
D running out.	Ε	running over.		
2 Here "as it stands" means		•		
A in a sense.	В	in reality.	С	on the surface.
D so far as.	Ε	to the contrary.		
3 Here "came into place" means				
A took care.	В	took command.	С	took effect.
D took off.	Ε	took part.		

•	( 4	) Choose the ONE sentence that BEST summarizes the author's main idea in the passage.
		A A primary aim of running book reading programs in prison is to encourage prisoners to
		exchange their views with others and, as a result, build a lively mutual-support community.
		B Book reading is the only effective way to educate prisoners, to urge them to reflect on the
		crimes they committed, and to make them ready for reentry into society.
		C Given the number of successful cases of book-reading rehabilitation programs, it is important
		for society to make them more widely available across prisons.
		D Reading books is not only an enjoyable learning experience but also a valuable opportunity for
		prisoners to feel a bond with others and gain mental freedom from their prison life.
		The same of the sa
		experiencing in prison and even feel like living in an illusionary fictional world.
	/ -	
	( 5	,
		passage. Choose the ONE which is pronounced DIFFERENTLY in each group of five.
		1 A devastating B escapism C identity D incentives E tentatively
	;	2 A convince B facilitated C gossip D literature E privileges
	;	3 A atmosphere B biographies C category D collaborative E practical
${\rm I\hspace{1em}I\hspace{1em}I}$	Cho	oose the underlined section that is INCORRECT grammatically in each
	sen	tence below. If the choices in the sentences are ALL correct, choose E.
	1	Let her know that she ought to leave the house until 3 pm for us to make it
		A B C
		to the show on time.
		D
		E ALL CORRECT
	2	Prior to the meeting, much effort was spent trying to convince people who opposed to this idea
		A B C
		of redeveloping the old part of town.
		E ALL CORRECT
	3	The candidate may seem to be competent at first sight, but he may not at all
		A B C
		if what everyone is saying is true.
		D
		E ALL CORRECT
	4	We could not have dinner at the Italian restaurant you recommended
	7	A B C
		as it was close for the holidays.
		D
		E ALL CORRECT
	5	Whoever helps repair the relationship between the two warring nations is more than likely
		A B C
		to go down in history as a great global leader.
		D
		E ALL CORRECT

IV Choose the ONE way	to make each of the	following sentences INCORRECT
grammatically. If none of	f the choices make the	sentence incorrect, choose F.
1 Can you ( ) a suspect	from those user profiles?	
A choose	B identify	C isolate
D name	E recognize	F ALL CORRECT
2 Disorders of the central ne	•	ous mental and physical abnormalities.
A bring about	B cause	C give rise to
D lead on	E result in	F ALL CORRECT
3 It is ( ) that he will g		
A certain	B doubtful	C likely
D regrettable	E unfortunate	F ALL CORRECT
4 This is the last ( ) opt	tion.	
A approved	B available	C existing
D left	E possible	F ALL CORRECT
5 We ( ) our grandfather	r to use a smartphone.	
A convinced	B encouraged	C persuaded
D suggested	E urged	F ALL CORRECT
33	J	
V Choose the best option	from the box to fill ea	ach of the blanks in the passage
<del>-</del>		G. You may use any option more
than once.	cossary, encose option	or rotal many that a many opening many
than once.		
A against B at	C in D on E ou	t F to G NO WORD
A agamst D at	<u> </u>	1 10 G 110 WOLD
<u> </u>		studied to become a painter, like his father,
but abandoned that profession 3 18	886 $4$ favor of literature. He	was heavily involved 5 the movement for
the Irish literary revival and founde	ed the Irish Literary Theatre.	

### WRITING SECTION

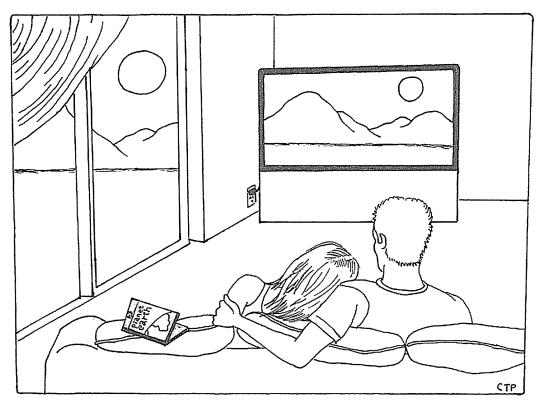
All answers must be written in English in the space provided on the ANSWER SHEET.

VI Use ALL the words provided in the underlined sections to complete the sentences. Change the order and form of the words as necessary. You may NOT include words that are NOT provided.

At the end of the eighteenth century, some philosophers dreamed of perpetual peace. But at the beginning of the twenty-first century, politicians evoke the nightmare of a global civil war in which transnational terrorists can strike anywhere, anytime. Present-day political violence is paradoxical. On the one hand, become / have / increasingly / international / rare / war. In 2015, for instance, there was only one interstate war, a brief clash between India and Pakistan with some thirty casualties. There are large and important regions—North and South America, Western and Central Europe—where the possibility of an armed conflict between states is remote to the point of non-existence. On the other hand, the world is a long way from that condition of perpetual peace which Enlightenment thinkers like Kant a / be / hope / might / of / product modernity.

[Adapted from James J. Sheehan, "Contested Conflicts: The Importance of Civil Wars in the Modern World," *The Times Literary Supplement* (October 6, 2017).]

WI Think about the meaning of the picture below. Explain your thoughts in a paragraph in English.



[Picture available at https://conservationbytes.com/ under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License]

〔以下余白〕

