令和7年度一般選抜 個別学力試験問題(前期日程)

英 語

学 部	問 題
法文学部, 人間科学部, 総合理工学部, 生物資源科学部	1, 2, 4
医学部医学科	1, 2, 3, 5

注 意

- 1. 問題紙は指示があるまで開いてはいけません。
- 2. 問題紙は12ページ,解答用紙は法文学部,人間科学部,総 合理工学部,生物資源科学部受験生は1枚,医学部医学科受 験生は2枚です。指示があってから確認し,解答用紙の所定 の欄に受験番号を記入してください。
- 3. 法文学部, 人間科学部, 総合理工学部, 生物資源科学部受験生は 1, 2, 4 の問題を, 医学部医学科受験生は 1, 2, 3, 5 の問題を解答してください。
- 4. 答えはすべて解答用紙の所定のところに記入してください。
- 5. 解答用紙は持ち帰ってはいけません。
- 6. 試験終了後、問題紙は持ち帰ってください。

1

Have you ever wondered what it would be like to work with zoo or aquarium animals? Meet Kylene, an animal care specialist from SeaWorld in San Diego. She cared for the African penguins at SeaWorld for many years.

These penguins live on the southern tip of Africa. Over the past several years, the South African penguin population has greatly declined. A hundred years ago, there were about 1 million African penguins, but since that time, their population has decreased to under 100,000, and scientists predict the population could fall as low as 50,000 over the next 20 years if we don't do something.

No matter the reasons, South African penguin populations are falling, and scientists need to find a way to stop the decline. Some of them think the changing ocean temperatures have caused the penguins' food supply to disappear. Humans have also disturbed the penguins' wild habitat and collected their eggs.

Kylene wanted to help protect the South African penguins. Working with other zoos in the country, Kylene learned there was still a lot the researchers didn't know about the penguins, including how they moved from island to island and how many returned to their nesting areas each year.

Scientists working in South Africa and at the zoos agreed that the best way to figure out this mystery was to put small tags under the skin of the penguins in different breeding colonies. Then they would track their movements by walking up to the penguins and scanning them with portable readers. They could then follow their movements by inputting the data into a computer program. These small tags are the same ones that people use for their pet dogs and cats in case they get lost.

Gathering this data was important for scientists to gain a better understanding of African penguin longevity, survival rates, and other important information. This important data is needed to make informed decisions about penguin breeding colonies.

Kylene flew to South Africa and met with animal protection groups and other

zoos and aquariums working on this effort. After spending a few days working with penguins in a rescue center, Kylene travelled out to one of the islands where the penguins were nesting. One by one, she went to a penguin nest, picked up one of the penguins, and used a small tool that looks like a pointed tube to insert one of the tags under the penguin's skin. Then, she used the portable reader to scan the penguin and made sure the tag worked. Kylene and the other conservationists spent several hours tagging penguins each day. Their goal was to tag 10 percent of all the penguins over the next few months. While she was tagging, Kylene also looked for any penguins that were entangled in garbage or had injuries that needed examination back at the rescue facility.

When Kylene returned to SeaWorld, she was very inspired from her trip, but her work wasn't done. She started working on faster and easier ways to tag the penguins and started to educate the people who visited SeaWorld on how they could help save South African penguins. She put together videos and a journal of her experience, and taught students visiting SeaWorld about the research being done on these penguins and how they could get involved. She even began organizing a trip to go back and tag more penguins the following year.

Through Kylene's efforts and the efforts of the people like her at many penguin conservation organizations in South Africa, these little penguins have a chance for a better future.

(Chicken Soup for The Soul: Humane Heroes Volume III より 一部改変)

[注] aquarium 水族館

SeaWorld 米国カリフォルニア州南西 San Diego にあるテーマパーク African penguin / South African penguin ケープペンギン

habitat 生息地 tag 所在を追跡する電子タグ;電子タグを付ける longevity 寿命 conservationist 環境保護論者

entangle からませる

- 1. What do scientists think could happen to (1) "the South African penguin population" if people don't do something?
 - (a) The population could decrease.
 - (b) The population could increase.
 - (c) The population could stay the same.
 - (d) It is not mentioned.
- 2. According to the third paragraph, what are (2) "the reasons"? Answer in English.
- 3. Why did scientists decide to (3) "put small tags under the skin of the penguins"?
 - (a) to keep the penguins healthy and monitor their diet
 - (b) to make it easier to raise the penguins
 - (c) to prevent the penguins from getting lost
 - (d) to track their movements and gather important data
- 4. Write down the order of Kylene's actions using (a) to (d).
 - (a) inserted tags
 - (b) left SeaWorld for South Africa
 - (c) scanned the tags
 - (d) travelled to the island
- 5. Which was NOT mentioned as (4) "her work"?
 - (a) She educated the visitors of SeaWorld on how to save the penguins.
 - (b) She put together videos and a journal.
 - (c) She went back to the island to finish her research.
 - (d) She worked on faster ways to tag the penguins.
- 6. What is the best title of this passage?
 - (a) Kylene, an Animal Care Specialist
 - (b) Saving South Africa's Penguins
 - (c) Tagging Penguins in South Africa
 - (d) Working with Zoo and Aquarium Animals

2

My favorite Wikipedia entry begins: "Ronald Read was an American philanthropist, investor, janitor, and gas station attendant."

Ronald Read was born in rural Vermont. He was the first person in his family to graduate high school, made all the more impressive by the fact that he hitchhiked to campus each day.

Read died in 2014, age 92. That is when the humble janitor made international headlines. 2,813,503 Americans died in 2014. Fewer than 4,000 of them had total assets of over \$8 million when they passed away. Ronald Read was one of them. In his will the former janitor left \$2 million to his stepchildren and more than \$6 million to his local hospital and library. Those who knew Read were confused. Where did he get all that money?

It turned out there was no secret. There was no lottery win and no inheritance. Read saved what little he could and invested it in stocks. Then he waited, for decades, as tiny savings totaled to more than \$8 million. That's it. From janitor to philanthropist.

A few months before Ronald Read died, another man named Richard was in the news. Richard Fuscone was everything Ronald Read was not. A Harvard-educated Merrill Lynch executive with an MBA, Fuscone had such a [B] career in finance that he retired in his 40s to become a philanthropist. Former Merrill CEO David Komansky praised Fuscone's "business wisdom, leadership skills, sound judgment and honesty." A business magazine once included him in a

list of famous businesspeople.

But then everything fell apart. In the mid-2000s, Fuscone borrowed heavily to expand an 18,000-square foot home in Greenwich, Connecticut that had 11 bathrooms, two elevators, two pools, seven garages, and cost more than \$90,000 a month to maintain.

Then the 2008 financial crisis hit. The crisis hurt virtually everyone's finances. It apparently turned Fuscone's into dust. High debt and assets that he could not sell left him with no money. "I currently have no income," he told a judge in 2008.

First his Palm Beach house was taken. In 2014, it was the Greenwich mansion's turn. Five months before Ronald Read left his fortune to charity, Richard Fuscone's home was sold in an auction for 75% less than an insurance company figured it was worth.

Ronald Read was [①]; Richard Fuscone was [①]. That's all it took to cover the massive education and experience gap between the two. The lesson here is not to be more like Ronald and less like Richard—though that's not bad advice.

The interesting thing about these stories is how unique they are to finance. In what other industry does someone with no college degree, no training, no background, no formal experience, and no connections greatly perform better than someone with the best education, the best training, and the best connections? I struggle to think of any.

It is impossible to think of a story about Ronald Read performing a heart surgery better than a Harvard-trained doctor, or designing a high-rise building superior to the best-trained architects. But these kinds of stories do happen in investing.

The fact that Ronald Read and Richard Fuscone can both exist has two explanations. First, financial outcomes are driven by luck, independent of intelligence and effort. That's true to some extent. Second, that financial success

is not a hard science. It's a soft skill, where how you behave is more important than what you know. I call this soft skill the psychology of money.

(Morgan Housel, The Psychology of Money より 一部改変)

- [注] philanthropist 慈善家janitor 用務員lottery 宝くじinheritance 遺産Harvard 米国のハーバード大学Merrill Lynch 米国の大手証券会社MBA 経営学修士
- 1. Ronald Read の経験について、以下の空欄①~⑤に本文にそって適切な<u>日本</u> 語を入れて説明を完成させなさい。

「Ronald Read は Vermont の(①)で生まれ、家族の中で初めて(②)を卒業した。彼は 25 年間(③)で車の修理をし、17 年間デパートで働いた。38 歳の時に家を買い、50 歳の時に妻を(④)。彼の趣味は薪(まき・たきぎ)を(⑤)ことだったと言われている。

- 2. 下線部(1)はどのような内容だったと考えられるか、最も適切なものを次の (a)~(d)の中から選びなさい。
 - (a) The Ianitor Who Became a CEO
 - (b) The Janitor Who Died with No Money
 - (c) The Janitor Who Left Millions to a Hospital and a Library
 - (d) The Janitor Who Won the Lottery
- 3. 下線部(2)に対する解答を、本文にそって日本語で説明しなさい。
- 4. 下線部(3)を, It の具体的内容を示しながら, 本文にそって<u>日本語で</u>説明しなさい。
- 5. 本文の空欄(A)~(D)に入れるのに適切な語を次から選び、解答しなさい。ただし、同じ語を複数回使わないこと。

[greedy, patient, simple, successful]

- 6. 下線部(4)の具体的内容を本文にそって日本語で説明しなさい。
- 7. 下線部(5)を日本語に訳しなさい。

The rapid progress of generative artificial intelligence (AI)—like ChatGPT, capable of holding realistic conversations, or others creating realistic images and videos from simple prompts—has renewed interest in AI's potential to change various fields, including health. However, it has also raised concerns. In July, UN Secretary General António Guterres addressed the UN Security Council, highlighting the "horrific levels of death and destruction" that the malicious use of AI could cause. How can the medical community overcome AI's significant challenges to realize its health potential?

AI in medicine is not a new concept. Non-generative machine learning can perform specific tasks, such as interpreting medical images. A medical journal recently published a study on AI-assisted mammography, demonstrating that the cancer detection rate was similar to that of unassisted reading and that the workload associated with screen reading was nearly halved. AI has driven progress in infectious diseases and molecular medicine and improved diagnostic tools used in the field. However, the potential applications of generative AI in the medical field remain largely hypothetical at this stage. Automation of evidence synthesis and identification of new drug candidates could advance clinical research. AI-generated medical notes could ease the administrative burden for healthcare workers, allowing more time to see patients.

These advances come with serious risks. AI works best at well-defined tasks and when models can enhance rather than replace human judgment. Applying generative AI to diverse data is complicated. The complicated nature of many models makes it challenging to evaluate their suitability. Generative AI can make mistakes easily missed by humans or generate non-existent sources. Transferring personal data to technology companies without proper regulation could compromise patient privacy. Health equity is a particularly serious concern. Algorithms trained on healthcare data reflecting biased healthcare spending have

worsened racial disparities in healthcare access. Most health data come from highincome countries, potentially biasing models and worsening injustice and discrimination when used elsewhere. These issues could lead to a loss of patient trust.

How can AI be a positive force in medicine? The scientific community plays a key role in rigorously testing and monitoring AI. The UN is forming an advisory body to build global capacity for trustworthy, safe, and sustainable AI. The WHO is collaborating with a global team on digital health and AI research to help low-income and middle-income countries (LMICs) participate in managing safe and ethical AI in healthcare through cross-border collaboration and common guidance. However, without investment in local infrastructure and research, LMICs will remain dependent on AI developed in high-income countries, and costs could be very expensive without open-access options. At present, the pace of technological progress far exceeds the guidance, and the power imbalance between the medical community and technology companies is growing.

Allowing private companies too much influence is dangerous. The UN Secretary General has urged the Security Council to help ensure transparency and accountability of AI. Regulators must act to ensure safety, privacy, and ethical practices. The EU's AI Act, for example, will require high-risk AI systems to be assessed before approval and subjected to monitoring. Regulation should be a key concern of the first major global summit on AI safety which is being held in the UK later this year. Although technology companies should be part of the regulatory conversation, there are already signs of resistance. Amazon and Google have objected to proposed rules to regulate AI in health technologies. The conflict between commercial interests and transparency risks compromising patient well-being, with minority groups suffering first.

There is still time to create the future we want. All could continue to bring benefits if integrated cautiously. It could improve practice as an aid—not a replacement—for doctors. Doctors cannot ignore Al. Medical educators must

prepare healthcare workers for a digitally enhanced future. Policymakers must work with technology firms, health experts, and governments (equity / to / that / priority / remains / a / ensure). Above all, the medical community must strongly advocate for strict regulation.

(The Lancet より 一部改変)

[注] prompt 使用者が AI との対話において、入力する指示や質問
UN Secretary General 国連事務総長 malicious 悪意のある mammography 乳房 X 線検査 diagnostic 診断の evidence synthesis さまざまな研究やデータの結果を系統的に収集、評価、および統合するプロセス algorithms 問題を解くための数学的計算手順 disparity 格差

- 1. 下線部(1)の具体的内容を本文にそって日本語で説明しなさい。
- 2. 下線部(2)の具体的内容として文中で述べられていないものを次の(a) \sim (f)の中から1つ選びなさい。
 - (a) the complexity of using generative AI with diverse data
 - (b) challenges in evaluating AI models due to their complex nature
 - (c) issues with generative AI making mistakes that humans can easily find
 - risks related to patient privacy when personal data is transferred to technology companies
 - (e) concerns over health equity and racial disparities in healthcare access
 - (f) worsening injustice and discrimination through biased healthcare data
- 3. 下線部(3)の問いに対して、世界保健機構が取り組んでいる内容について、本文にそって日本語で説明しなさい。
- 4. 下線部(4)を日本語に訳しなさい。
- 5. 下線部(5)の()内の語句を、本文の文脈に合うように並べ替えなさい。

- 6. 次の英文(a)~(j)のうち本文の内容と一致するものを2つ選びなさい。
 - (a) Al's potential to create realistic images and videos is limited to complex prompts.
 - (b) The UN Secretary General did not express concerns about the potential dangers of AI during his address to the UN Security Council.
 - (c) AI has had no impact on progress in infectious diseases and molecular medicine.
 - (d) The passage suggests that AI works best when it can enhance human judgment rather than replace it entirely.
 - (e) According to the passage, the transfer of personal data to technology firms without regulation poses no risks to patient privacy.
 - (f) Algorithms trained on biased healthcare data have improved racial disparities in healthcare access.
 - (g) Health equity concerns related to AI are not mentioned in the passage.
 - (h) The WHO is involved in efforts to promote safe and ethical AI use in healthcare across international borders.
 - (i) According to the passage, Amazon and Google are in favor of stricter regulations for AI in health technologies.
 - (j) Medical educators need to prepare healthcare workers for a future without digital enhancements.
- 7. この英文のタイトルとして最もふさわしいものを次の(a)~(f)の中から1つ選びなさい。
 - (a) Advancements in Machine Learning for Medical Imaging
 - (b) AI and the Future of Drug Discovery
 - (c) AI in Medicine: Creating a Safe and Equitable Future
 - (d) Enhancing Doctor-Patient Communication Through AI
 - (e) The Role of AI in Modern Healthcare Assessments
 - (f) The Use of AI in Medical Education: Personalized Learning and Automated Grading Systems

4 次の英語の指示に従って<u>英語で</u>答えなさい。なお、解答用紙の指定した ()欄に、使用した語数を記入すること。ただし、コンマやピリオドなどの 記号は語数に入れない。(法文学部、人間科学部、総合理工学部、生物資源科学 部用問題)

The table below shows a survey in Japan when Japanese parents first bought a smartphone for their children. In about 70 words, describe what you notice from the data below, and give the reason (s) for why it happens.

When Japanese parents first bought a smartphone for their children

Before elementary school	5.8%
Elementary school	51.6%
Junior high school	28.5%
High school	12.4%
University and older	1.7%

(Japan Times より 一部改変)

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A. 次の本文の下線部(1), (2)を英語に直しなさい。

チーム医療とは、「医療に従事する多種多様な医療スタッフが、各々の高い 専門性を前提に、目的と情報を共有し、業務を分担しつつも互いに連携・補完 し合い、患者の状況に的確に対応した医療を提供すること」と一般的に理解さ れている。

質が高く、安心・安全な医療を求める患者・家族の声が高まる一方で、医療の高度化・複雑化に伴う業務の増大により医療現場の疲弊が指摘されている。 医療の在り方が根本的に問われる今日、「チーム医療」は、我が国の医療の在り方を変え得るキーワードとして注目を集めている。また、各医療スタッフの知識・技術の高度化への取組や、ガイドライン・プロトコール等を活用した治療の標準化の浸透などが、チーム医療を進める上での基盤となり、様々な医療現場でチーム医療の実践が始まっている。

患者・家族とともにより質の高い医療を実現するためには、1人1人の医療(2) スタッフの専門性を高めつつ、それらをチーム医療を通して再統合していく、 といった発想の転換が必要である。

(厚生労働省「チーム医療の推進について」より 一部改変)

B. 次の英語の指示に従って 80 語程度の英語で答えなさい。なお、解答用紙の指定した()欄に、使用した語数を記入すること。ただし、コンマやピリオドなどの記号は語数に入れない。

Should Japan spend more money on (a) preventive healthcare or (b) advanced medical research? Provide specific reasons for your choice.

[注] preventive healthcare 予防医療