

2024

薬学部
I期

英語問題

解答はすべてマーク式で解答用紙に記入して下さい。
解答用紙のみ提出して下さい。

2024年1月25日(木)実施

マーク式解答用紙記入上の注意

- [1] 解答用紙はすべて**HBの黒鉛筆**で記入して下さい。(万年筆・ボールペン・シャープペンシルなどは使用できません。)
- [2] 解答用紙は折りまげたり、破ったり、汚したりしないで丁寧に取り扱いして下さい。
- [3] 解答は解答用紙の指定された解答欄に記入し、その他の部分には何も書いてはいけません。
- [4] 氏名を記入して下さい。
- [5] 受験番号を記入し、さらにその下のマーク欄にマークして下さい。
- [例] 受験番号が0010123のときは
- [6] 解答科目欄から**解答する科目**を1つ選び、科目の右の○にマークして下さい。マークされていない場合、または複数の科目にマークされている場合は、0点となります。
- [7] 解答番号は から まであります。

氏名
鈴木一郎

受験番号						
0	0	1	0	1	2	3
0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

- [7] 解答番号は から まであります。
- マークの記入方法は、例えば、 と表示のある問に対して③と解答する場合は、次の[例]のように**解答番号10の解答欄に③**とマークして下さい。

[例]

解答番号	解答欄
10	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- [8] 一度記入したマークを訂正する場合、消しゴムで**完全に消してから**記入しなおして下さい。
- [9] 解答がおわったら、解答用紙に付着している消しゴムの消しくずをきれいに取り除いて下さい。

(注) ① と ② のマーク間違いに注意して下さい。

- 1 次の文章は、対話型 A.I.(人工知能)「ChatGPT(チャット GPT)」など、A.I.を司法・法律分野に応用した「A.I.裁判官(A.I. Judge)」の可能性と課題について調査した研究グループの記事である。これを読み、下の設問1)~5)に答えよ。(解答番号 ~)

Artificial intelligence(A.I.)judging has become a reality. Last month, a Colombian judge used ChatGPT to create part of his judicial* opinion. Colombia is not alone. Estonia has piloted a robot judge, and the United States and Canada increasingly use A.I. tools in law.
(A)

These recent events have sparked a debate about “unethical*” uses of A.I. in the judiciary*. As the technological hurdles to A.I. judging lower, the remaining barriers are ones of law and ethics.
(ア)

Would it be fair to citizens for an A.I. judge — an algorithmic* decision-maker — to resolve disputes? This is a complex legal and ethical question, but one useful piece of data is the views of citizens themselves. We conducted experiments on a representative sample of 6,000 U.S. adults to examine this question. And the results are surprising: Citizens (a) always see A.I. in the courtroom as unfair.

This result — human judges are not always seen as fairer than A.I. judges — challenges conventional wisdom. Commentators have long seen the administration of justice as a distinctively* human enterprise. The task of judging calls (b) for knowledge and accuracy but also a respect for the dignity of the parties involved. If A.I. were incapable of conveying such an attitude, then human judges would have a unique procedural* justice advantage over machines.
(B)

At first sight, our results support this intuition* that human judges are fairer. Ordinary citizens generally evaluate A.I. judges as *less fair* than human judges. In our first study, participants evaluated one of three scenarios*: a contract dispute, bail* determination, or criminal sentencing*. Summing across all scenarios of the first study, human judges received an average procedural fairness score of approximately 4.4 on a 7-point scale. A.I. judges scored very slightly below 4.
(イ)

We call this perceived difference (c) the “human-A.I. fairness gap.” All else equal, people evaluate legal procedures before a human judge as fairer than legal procedures before an A.I. judge. The human-A.I. fairness gap persists across diverse legal areas and issues.

However, we also discover that this human-A.I. gap can be partially offset* by increasing the A.I. judge’s interpretability* and ability to provide a hearing*. A hearing affords a party the opportunity to speak and be heard. A decision is interpretable if it can be presented in a logical

form and if it is possible to understand how changes in inputs affect outcomes. Both a hearing and an interpretable decision help ordinary judgments of fairness, whether the decision-maker is a human or an A.I. Strikingly, a human-led procedure that does *not offer a hearing* and makes *uninterpretable* decisions is not seen as being fairer than an A.I.-led procedure that offers a hearing and makes interpretable decisions.

This is surprising since one might have believed a hearing in front of (d) to be meaningless. For ordinary citizens to feel they have been listened to seems to require a decision-maker possessing the uniquely human capacity for empathy*. Yet, we find that a machine described as being able to recognize speech and facial expressions and trained to detect emotions can help people's perceptions of procedural justice.

Similarly, much of the legal-ethical discussion over A.I. has been centered around interpretability of algorithms. Often, the debate implies that comparable decisions by humans *are* interpretable. However, commentators have noted that humans are typical black boxes*. Human decision-making is not always clear to the decision-maker, never mind other humans. And we find that people do care about the interpretability of both human and A.I. decision-making.

How do we get from these findings to the conclusion that the human-A.I. fairness gap might one day be offset? Well, even today, full hearings in front of human judges are not always provided because of resource limitations. For example, an asylum hearing* will often only last several minutes. The same is true for bail hearings. Similarly, human judicial decisions are not perfectly interpretable. Human legal opinions vary in their readability, and A.I. tools can already provide highly readable text. It is not clear that A.I. tools can currently produce more interpretable judicial opinions than humans, but their ability to pass as legal reasoners* is impressive. For example, ChatGPT recently passed four Minnesota Law School exams.

Finally, our studies suggest that the human-A.I. fairness gap is mainly driven by the belief that human judges are still more accurate than machines. However, (e) are and increasingly will be domains* where machines will be demonstrably* more accurate than humans, such as tumor* classification. And experts predict that A.I. will exceed human performance in other fields over the next century.

Adapted from an article by Alexander Stremitzer, Benjamin M. Chen, and Kevin Tobia,
February 28, 2023, *Slate*

Notes:

judicial = 司法の
unethical = 非倫理的な < ethics 倫理
judiciary = 司法制度
algorithmic = アルゴリズムの, 演算方式の
distinctively = 明確に
procedural = 訴訟手続き上の
intuition = 直観
scenario = シナリオ
bail = 保釈
sentencing = 刑の宣告
offset = 相殺する, 埋め合わせる
interpretability = 解釈可能性
hearing = 聴取
empathy = 共感
black box = 中がわからないもの
asylum hearing = 難民認定申請者への聴取
reasoner < reason 論理的に考える
domain = 領域, 分野
demonstrably = 明らかに
tumor = 腫瘍

設 問

1) 二重下線部分(A), (B)の単語と, 下線部分の発音が同じ単語をそれぞれ①~④から一つ選べ。

(A) law

- | | |
|------------------|----------------|
| ① <u>thought</u> | ② <u>robot</u> |
| ③ <u>out</u> | ④ <u>tough</u> |

解答番号

(B) wisdom

- | | |
|---------------------|------------------|
| ① <u>decision</u> | ② <u>dispute</u> |
| ③ <u>perception</u> | ④ <u>design</u> |

解答番号

3) 下線部分(ア)~(エ)の意味に最も近いものをそれぞれ①~④から一つ選べ。

(ア) barriers

① technologies

② hurdles

③ judges

④ judgments

解答番号

(イ) approximately

① about

② relatively

③ more than

④ less than

解答番号

(ウ) capacity

① space

② intuition

③ size

④ ability

解答番号

(エ) only last several minutes

① be held in the last few minutes

② be held only for a few cases

③ be very short

④ be quite random

解答番号

4) 本文の内容と合致するものを①～⑦から三つ選べ。ただし、解答の順序は問わない。

- ① It is conventionally assumed that A.I. judges are not as fair and accurate as human judges.
- ② A way to decrease the human-A.I. fairness gap is yet to be discovered.
- ③ The ability of A.I. to deal with people's feelings can give them an impression of a fair judicial procedure.
- ④ A.I. judges' legal decisions are more difficult to read and understand than those of human judges.
- ⑤ Human judges' decision-making may not be well understood by other human judges on the same case.
- ⑥ A current A.I. judge cannot even be regarded as good as any law school students.
- ⑦ A.I. will be unable to do anything better than human doctors.

解答番号

解答番号

解答番号

5) この記事のタイトルとして最もふさわしいものはどれか、①～⑥から一つ選べ。

- ① How Far Has A.I. Technology Reached? Not at All in the Judiciary
- ② Who Will Be in the Courtroom? No Robots, As You Know
- ③ Would Humans Trust an A.I. Judge? More Easily Than You Think
- ④ Can You Imagine an A.I. Judge? Don't Worry, It Won't Happen
- ⑤ Who Has Ever Been Judged by a Robot? Well, I Am the One!
- ⑥ Why Do We Need Human Judges? Well, A.I. Judges Will Never Listen to Us!

解答番号

3 設問A, Bに答えよ。(解答番号 31 ~ 45)

A 次の1)~5)の日本語の意味を表すように, [] 中の語句を並べ替えて英文を完成し, 空所を埋めるのに最も適当なものをそれぞれ①~⑥から一つ選べ。

1) ここから松山大学に着くのに, 1時間ほどかかるかもしれない。

It _____ 31 _____ 32 _____ get to Matsuyama University from here.

[① might ② about ③ take ④ me ⑤ to ⑥ an hour]

解答番号 31

解答番号 32

2) 先生は, テストを受ける代わりにレポートを提出するよう, 彼女に言った。

The teacher told her to _____ 33 _____ 34 _____ a test.

[① taking ② of ③ report ④ a ⑤ instead ⑥ submit]

解答番号 33

解答番号 34

3) この職員がそのプロジェクトを担当しています。

This officer _____ 35 _____ 36 _____ .

[① charge ② project ③ of ④ in ⑤ is ⑥ that]

解答番号 35

解答番号 36

4) この春に道後温泉を訪れるのが良さそうだ。

Visiting Dogo Onsen this spring _____ 37 _____ 38 _____ me.

[① good ② to ③ sounds ④ idea ⑤ a ⑥ like]

解答番号 37

解答番号 38

5) 歯がひどく痛かったので, 歯医者に診てもらう必要があった。

I had a terrible toothache, so I _____ 39 _____ 40 _____ by the dentist.

[① checked ② to ③ have ④ teeth ⑤ my ⑥ had]

解答番号 39

解答番号 40

B 次の1)～5)の会話の下線部分の中から、**表現に誤りのあるものをそれぞれ①～④から一つ選べ。**

1) A : What's the matter? You look very pale.
①

B : I always get nervous when flying.
②

A : Oh, we'll be fine. According to statistics, airplane travel is much safer than driving.
③

B : I know, but still, I can be sure a heavy mass of metal can stay in the air.
④

解答番号 41

2) A : Welcome to our university. Is this the first time you've been to Japan?
①

B : Yes, I always dreamed of visiting there, but I haven't had the chance.
②

A : I hope you enjoy your stay. Okay, let's get down to business.
③

B : Right. As you know, we have more and more students applying for our exchange
④

program each year.

解答番号 42

3) A : Would you like some tea or coffee, sir?

B : Do you have anything else? My doctor says I should stay away from

drinks containing caffeine.
①

A : Sorry, I'm afraid there is nothing else.
②

B : Then, could you have a glass of water?
③

A : Sure. Just a moment, please. . . Here you are, sir.
④

解答番号 43

4) A : Oh, you are watching tennis? I didn't know you were a fan of the sport.
①

B : No, I'm not. I have nothing to do, and this is the least boring thing on TV.
②

A : Then, you should turn it out. Why don't you come shopping with me?
③

B : Okay, but only if we can get some ice cream after that.
④

解答番号

44

5) A : This part is too difficult for me. It's frustrating.
①

B : Ms. Tate says this tune is the most challenging to play, so take your time.
②

A : I can't. I have an appointment tonight, and the orchestra rehearsal is
tomorrow morning!
③

B : Okay, you teach me a trick: First, play this part very slowly and then faster and faster.
④

解答番号

45
