2023年度　入学試験問題(前期日程)

英　　語

試験時間　120分

医学部：医学科

問題冊子　　**問題……** 1 ～ 5　**ページ……** 1～15
記述用解答用紙… 4枚
マークシート…… 1枚

配　　点……表記のとおり

注　意　事　項

1. 試験開始の合図まで，この問題冊子を開かないこと。
2. 試験中に，問題冊子・解答用紙（記述用，マークシート）の印刷不鮮明，ページの落丁・乱丁及び下書用紙の不備等に気付いた場合は，手を挙げて監督者に知らせること。
3. 各記述用解答用紙の上に受験番号を記入する欄があります。試験の合図後，表紙と4枚の解答用紙すべてに受験番号を記入してください。また，マークシートの番号欄にも受験番号を右詰で記入し，該当番号をマークしてください。なお，記述用解答用紙，及びマークシートには，必要事項以外は記入しないこと。
4. 設問によって，記述用解答用紙に記入する場合とマークシートにマークする場合があります。解答は，必ず記述用解答用紙，及びマークシートの指定された箇所に記入，マークすること。
5. 記述用解答用紙の各ページは，切り離さないこと。
6. 配付された記述用解答用紙，マークシートは持ち帰らないこと。
7. 試験終了後，問題冊子は持ち帰ること。
8. 試験終了後，指示があるまでは退室しないこと。

1 次の1～10の文中の(　　)に入れる最も適当なものを①～⑤から選び，マークしなさい。(30点)

1. 1. Thanks for joining this teleconference. I am Taro. Nice to (　　) from you.
   ① have　② hear　③ meet
   ④ see　⑤ come

2. 2. When asking why they came to Japan in polite English, you can say, "(　　) you come to Japan?"
   ① How would　② How could　③ Why did
   ④ What made　⑤ What brought

3. 3. If you (　　) up in another country, you might have different beliefs.
   ① grew　② had grown　③ would grow
   ④ will have grown　⑤ are growing

4. 4. Due to (　　) the famous artist's collection in the window, the department store attracted a lot of customers.
   ① display　② displays　③ displayed
   ④ displaying　⑤ will display

5. 5. (　　) the order has been sent to the distribution center, it cannot be modified or cancelled without the approval of the administrator.
   ① Even though　② Because　③ Once
   ④ Therefore　⑤ Nevertheless

6. 6. This wine will be a perfect (　　) to the social gathering at the end of next month.
   ① complain　② complement　③ complete
   ④ comply　⑤ compliment

7. 7. As soon as he purchases the computer, Mr. Tom (　　) the 3D monitor.
   ① to connect　② connect　③ connecting
   ④ connected　⑤ will be connecting

8. 8. Dr. Green is concerned (　　) creating medical devices that are affordable for clinics with smaller budgets.
   ① in　② for　③ of
   ④ on　⑤ with

9 9. The principal investigator met with the new medical technicians to discuss ( ) problems.

① about ② on ③ for

④ with ⑤ their

10 10. The good effect of drug administration reduced his blood pressure ( ) 140/70 mmHg on the graph.

① by ② down ③ in

④ to ⑤ up

2 次の１～５が適切な意味になるように(　　)内の単語を正しく並べかえなさい。ただし，文頭に来るものも小文字で示している。なお，解答は記述用の用紙に記載すること。(30 点)

1. One (awake, can, even, keep, the, sleeping, of, problems, when, you) you want to sleep.
2. Artificial intelligence (at, coming, good, humans, like, with, ideas, is, new, not, up) are.
3. Let me talk about the confusion (another, company, with, from, to, to, going, job-hoppers, one, regard).
4. (able, allows, be, different, having, perspectives, to, to, us) make new products.
5. (a, better, for, in, obtain, of, order, our, to, understanding, you) training, we have summarized the outline.

3 次の英文を読んで設問に答えなさい。(90点)

"The moon is hot again," Jack Burns, the director of the NASA-funded Network for Exploration and Space Science (NESS), told me. NESS's headquarters are at the University of Colorado, Boulder, which has educated nineteen astronauts(注). (Boulder was also the setting for the television sitcom(注) *Mork & Mindy*, in which Robin Williams played an alien from the planet Ork.) Part of NESS's mission is to dream up(注) experiments to be done on the moon. An informational poster at the entrance reads "Challenges of Measuring Cosmic Dawn with the 21-cm Sky-Averaged, Global Signal." In the decades since Apollo 11, NASA has invented Earth-mapping satellites, launched the Hubble Space Telescope(注), collaborated on the International Space Station, and studied Mars(注). But none of these projects have generated the broad and childlike(注) wonder of the moon.

Burns, who is sixty-six years old, remembers the Mercury, Gemini, and Apollo missions—the Cold War-era efforts, beginning in the late fifties, that put men in space and finally landed them on the moon. He teaches a course on the history of space policy. "The U.S. had already (11) the start of the space race," he said, of the origins of Apollo. "The Soviet Union was first with a (12) in space. They were first with an astronaut in space." Yuri Gagarin's (13) into outer space took place (14) April 1961. President John F. Kennedy (15) his moon-shot speech the following month, and Congress eventually allocated(注) 4.4 percent of the national (16) to NASA. "But, if you live by (17) motivations, you die by (17) motivations," Burns said. "Apollo died. Nixon (18) the program." Only twelve people have (19) on the moon, all of them (20) the summer of 1969 and Christmas 1972. All the moon-walkers were men, all were American, all but one were Boy Scouts, and almost all listened to country-and-Western music on their way to the moon; they earned eight dollars a day, minus a fee for a bed on the spacecraft(注). Since the last moon-walk, (A) (orbited, that, moon, crafts, launched, have, humans, have, the), crashed probes(注) into it, and taken increasingly detailed photos of it. But no one has been back.

The planetary scientist Bruce Hapke, who has a yellowish, opaque(注) lunar mineral—hapkeite—named for him, said, "Almost every president since Nixon proposed going back to the moon." (President Obama focused instead on studying an asteroid(注) near Earth and working toward the distant goal of sending astronauts to Mars.) "But the money was never allotted. Congress decided we couldn't have guns and the moon at the same time." The Department of Defense's budget is now nearly $700 billion, whereas NASA's funding is $21.5 billion, or around half of 1 percent of the national budget. The U.S. is still believed to spend more on space programs than the rest of the world combined. (China's budget, however, is

unknown.) Hapke said, "The trouble is, there was always some kind of emergency, always some war going on. Though that Cold War mentality also got us to the moon."

Hapke recalls being told by several scientists and NASA employees that, "when the moon landing was first conceived, it was a strictly political stunt(注): go to the moon, plant the flag, and come back to Earth." The (31) design of the spacecraft allotted(注) little to no room for scientific payloads(注). "When the scientific (32) got wind of(注) this, they (33) out strongly to NASA all the fantastic science that could be done, and the whole tone of the (34) was changed," he said. Hapke was then at Cornell, where he and his lab mates (35) what the lunar soil might be like; the moon's characteristic reflectivity helped them deduce(注) that the surface must be a fine dust. For Hapke, the Apollo era (36) the most exciting time in his scientific life. He also (37) "the widespread puzzlement(注) in both Congress and the general populace(注) after the first (38): 'We beat the Russians. Why are we going back?' "

Burns said, "This time we need a more sustainable(注) set of goals and reasons" for going to the moon. He meant a science mission, or a business mission, or both. "We don't like to say we're going back to the moon," but forward, he added. "Our objectives are different. Our technology is different. Apollo had five kilobytes of RAM. Your iPhone is millions of times more powerful." Watching the footage(注) of Neil Armstrong's first steps, it takes a moment for one's eyes to make sense of the low-resolution image, which could easily be overexposed film or a Robert Motherwell painting. "It's amazing they made it."

Burns told me that advances in engineering could turn the moon into a way station for launching rockets and satellites farther into the solar system, to Mars and beyond. (The weak gravity on the moon dramatically eases launches.) Lunar construction projects now look feasible(注). "Down the hall, we have a telerobotics(注) lab," Burns said. "You could print components of habitats(注), of telescopes. You use the lunar regolith(注)"—the dust of the moon—"as your printing material. You could print the wrench(注) you need to fix something." Fifteen years ago, the moon was believed to be a dry rock; now we know that there's water there. Both private industry and national agencies regard the mining(注) of water and precious materials as something that's not too far off. There's space tourism too, though the quiet consensus among scientists seems to be that the idea is goofy(注) and impractical.

(Rivka Galchen, "The Eighth Continent", *The Best American Science and Nature Writing 2020*, 2020 より，出題の都合上一部改変)

(注) astronaut：宇宙飛行士　　sitcom：(ラジオ・テレビの)連続ホームコメディー
dream up：考え出す　　Hubble Space Telescope：ハッブル宇宙望遠鏡
Mars：火星　　childlike：無邪気な　　allocate：配分する
spacecraft：宇宙船　　probe：宇宙探査用装置　　opaque：不透明な
asteroid：小惑星　　stunt：離れ技　　allot：割り当てる
payload：搭載荷重　　get wind of：かぎつける　　deduce：推測する
puzzlement：困惑　　general populace：一般大衆　　sustainable：持続可能な
footage：映像　　feasible：実行可能な　　telerobotics：遠隔制御ロボット
habitat：生息地　　regolith：表面を覆う砂　　wrench：スパナ，レンチ
mining：採掘　　goofy：まぬけな

設問 1. 本文中の(11)～(20)にあてはまるものとして最も適切なものを①～⓪から選び，マークしなさい。ただし重複はしない。

① political　② satellite　③ in　④ lost　⑤ killed
⑥ delivered　⑦ journey　⑧ budget　⑨ between　⓪ walked

設問 2. 本文の内容を踏まえ，下線部(A)が最も適切な意味になるように(　　)内の単語を並べ替えなさい。解答は記述用の用紙に記載すること。

設問 3. 本文に基づき，次の 1 ～ 10 の内容について，①～③の中で該当するものを選び，マークしなさい。

① 本文で述べられている内容と一致している。

② 本文で述べられている内容と一致していない。

③ 本文で述べられている内容では判断できない。

21 1. Space tourism is thought by most scientists to be a very reasonable idea.

22 2. The Cold War prevented the U.S.A. from spending as much as they would have liked to spend on the moon landing.

23 3. NASA's Network for Exploration and Space Science likes to make it known that they are now planning on 'going back' to the moon.

24 4. The Hubble Space Telescope and the International Space Station are the two projects that have generated the most wonder.

25 5. The lunar material called hapkeite is named after a rare species of desert bird, because of the yellow coloration of this material.

26 6. The weak gravity on the moon means that it could become a way station for launching rockets and satellites further into the solar system.

27 7. War situations have made it easier to spend more money on space programs.

28 8. The 'lunar regolith' is a structure that scientists would like to build to dramatically ease launches from the moon's surface.

29 9. NASA would like to establish a permanent presence on the moon.

30 10. The Jupiter, Gemini, and Apollo missions put men into space, and finally landed them on the moon.

設問 4. 本文中の(31)～(38)にあてはまるものとして最も適切なものを①～⑧から選び，マークしなさい。ただし重複はしない。

① studied ② recalls ③ community ④ landing

⑤ project ⑥ original ⑦ remains ⑧ pointed

設問 5. 本文の内容を踏まえ，以下の質問に英語の文で答えなさい。解答は記述用の用紙に記載すること。

1. Which American presidents have proposed returning to the moon? Why was the money not available for the moon project?
2. What things are different about the current goals and reasons for going to the moon compared with the original reasons for going to the moon back in the 1960s?
3. What events led to the start of America's quest to put a man on the moon? Why did America decide to stop moon missions after the U.S.A. succeeded in the first one?

4 次の英文を読んで設問に答えなさい。(75点)

"I didn't get invited to Julie's party...I'm such a loser."

"I missed the bus...nothing ever goes my way."

"My science teacher wants to see me...I must be in trouble."

These are the thoughts of a high school student named James. You wouldn't know it (A) from his thoughts, but James is actually pretty popular and gets good grades.

It's sad, but when James comes against a problem he makes a common mistake; he falls into what I like to call "thought holes." Thought holes are distorted(注) views of reality. They are negative ideas about a situation based on having a poor understanding. For James, thought holes give him a lot of stress and worry.

Here's (41), all kids take things the wrong way or jump to conclusions at times, but having a distorted view of reality, time after time, is not without its dangers. Studies show that bad thoughts about ourselves (for example, "I'm a loser") can cause negative feelings (pain, stress, tiredness) that, in turn, cause self-defeating actions (acting out, skipping school). If we don't do anything, this habit (B) can also lead to more serious problems, such as depression and powerful stress.

(C). It's time to throw out the idea of positive thinking and introduce the tool of accurate thinking. The lesson begins with an understanding of what causes inaccurate thinking in the first place.

One person walks down a busy street and sees words and pictures painted on the wall, dirt on the walkway, and a couple fighting. (42) person walks down the same street and notices a cool gentle wind, an ice cream shop, and a smile from a stranger. We each take in a small number of images from our environment through which we try to understand what is happening. In short, we create our own reality by that to which we give attention.

① Why don't we just understand what is happening around us by looking at all of the information? ② We can't; there is simply too much data to think through. ③ In fact, our mind can take in 20 million bits of information through the five senses in a single second. ④ This is a mental shortcut. ⑤

Shortcuts keep our minds healthy by keeping us from receiving too much information. Shortcuts help us judge the world around us (43). Shortcuts also, however, leave us open to errors (things, way, see, the, we, in) (D). Because we see reality through just a tiny piece of information, if that information is not balanced (for example, it doesn't include the positive, but only the negative), we are left (44) a distorted view of reality, or a thought hole. Not

only are we in danger of errors in thinking, but we also often make the same errors over and over again.

Once teens understand why they fall into thought holes and that there are several of them that many people fall into, they are ready to start filling them in (45) trying a method called the 3 Cs:

- *Check* for the usual thought holes
- *Collect* more information to paint an accurate picture
- *Challenge* the original thoughts

Let's teach our teens that thoughts, even distorted ones, affect their emotional well-being. Let's teach them to try accurate thinking. Above all, let's teach our teens that they have the power to choose their thoughts.

(An essay by Renee Jain, *Huffington Post*, December 12, 2016. より，出題の都合上一部改変)

(注) distorted：ゆがんだ

設問 1. 下線部(A)は何を指すか日本語で説明しなさい。解答は記述用の用紙に記載すること。

設問 2. [39] 下線部(B)の過程を最も正しく説明しているものを①～⑥から選び，マークしなさい。

① actions → ideas → feelings
② ideas → actions → feelings
③ feelings → ideas → actions
④ ideas → feelings → actions
⑤ actions → feelings → ideas
⑥ feelings → actions → ideas

設問 3. [40] (C)に入る最も適切な表現を①～④から選び，マークしなさい。

① Unfortunately, in a few steps, we can't teach teens how to fill in their thought holes
② Fortunately, in a few steps, we can teach teens how to fill in their thought holes
③ Unfortunately, in a few steps, we can teach teens how to fill in their thought holes
④ Fortunately, in a few steps, we can't teach teens how to fill in their thought holes

設問 4. 本文の内容を踏まえ，下線部(D)が最も適切な意味になるように(　　)内の単語を並べ替えなさい。解答は記述用の用紙に記載すること。

設問 5. 本文中の(41)～(45)にあてはまるものとして最も適切なものを①～⑤から選び，マークしなさい。

41

① a thing　② the thing　③ one thing after another
④ first thing　⑤ thing

42

① the other　② second　③ other
④ another　⑤ two

43

① accidentally　② positively　③ repeatedly
④ negatively　⑤ quickly

44

① to　② out　③ with
④ at　⑤ in

45

① by　② to　③ against
④ at　⑤ on

設問 6. 46 以下の文章が入る最も適切な本文中の場所を①～⑤から選び，マークしなさい。

Data is then reduced so that the mind can focus on only 7 to 40 bits.

設問 7. 本文に基づき，次の 1 ～ 7 の内容について，①～③の中で該当するものを選び，マークしなさい。

① 本文で述べられている内容と一致している。
② 本文で述べられている内容と一致していない。
③ 本文で述べられている内容では判断できない。

47 1. Teenagers should make their own reality different by walking down the street.
48 2. Teenagers should exercise more to walk down a street quickly.
49 3. Teenagers should practice selecting their ideas.
50 4. Teenagers should learn to stop focusing on positive thoughts.
51 5. Teenagers should try to invert their own original thoughts.
52 6. Teenagers should create a shortcut on the desktop.
53 7. Teenagers should jump to conclusions to avoid mental shortcuts.

5 次の英文を読んで設問に答えなさい。(75点)

A Simple Experiment Reveals How Social Media Has Come to Encode a Range of Social Behaviors

Three years ago, on his birthday, a law professor watched his e-mail inbox fill with Facebook notifications indicating that friends had posted messages on his wall. The messages made him sad. The flooded inbox was annoying, but what really upset him was having disclosed his birth date to Facebook in the first place. It's not necessary for social networking or to comply with privacy laws, as some people mistakenly believe. He hadn't paid much attention when he signed up—(54) with most electronic contracts, there was no room for negotiation or deliberation(注) of terms. He followed Facebook's instructions, entered the data and clicked a button.

A few days later, the law professor decided to change the birth date on his Facebook profile to avoid the same situation in the following year. But when the fake date rolled around, his inbox again flooded with Facebook notifications. Two of the messages were from close relatives, one of whom he had spoken with on the phone on his actual birthday!

(A) (that, could, not, how, realize, she) the date was fake?

Our hypothesis: she'd been programmed!

The law professor is one of the authors of this article, and it confirmed his suspicions that most people respond automatically to Facebook's prompts to provide information or contact a friend without really thinking much about it. That's because digital networked technologies are engineering humans to behave like simple stimulus-response machines. This is one of the core arguments he explores with Evan Selinger in *Re-Engineering Humanity*, a new book that examines a wide range of different human-computer interfaces, including social media.

① Social media plays a tremendous role in modern life. ② Facebook, LinkedIn and Twitter have become the primary ways of keeping in touch (55) friends, family, classmates and colleagues. ③ To date, however, researchers have not fully explored the degree to which these systems are literally programming human responses. ④ Social media systems encode a range of social behaviors: Facebook notifies us when it is time to wish our friends a happy birthday; LinkedIn prompts us to congratulate contacts on their work anniversaries; Twitter shows us tweets that many of our friends have liked. ⑤

So we decided to test the hypothesis. In the summer of 2017, after obtaining institutional review board (IRB) approval, we conducted a field experiment to demonstrate the way in which Facebook has re-engineered the practice of wishing people a "Happy Birthday." We

recruited 11 people to change their birth dates on Facebook to a randomly assigned day, and then waited to see if people (56) it. Overall, 10.7 percent of their combined 10,042 friends wished them a happy birthday on their fake date. Another group of people sent texts and direct messages or made phone calls to wish them well. A vanishingly small number of people realized the birth dates were fake. When we compared the rate of fake birthday wishes to those received in 2016 and 2015, the results were statistically indistinguishable. Basically, people get the same number of well-wishes on their real birthdays as the fake ones we assigned.

(B) Beyond the initial decision to respond to the notification stimulus, people might stop and think about what to say as they compose a message. Yet even here, it seems Facebook may engineer habitual responses. We observed a remarkable similarity in content, as if people followed standardized scripts. Surprisingly, 27 percent of the messages were nothing more than "HBD" or "Happy Birthday" and didn't even mention the person's name!

Facebook may increase the number of people to (57) we wish a happy birthday with a few clicks of a button; it's not as if we remember the birth dates of that high school classmate or distant cousin. But if it becomes programmed behavior, is it even meaningful? As for people who aren't on Facebook or don't post their birth dates publicly, the control they have over their data comes at a cost: they don't receive scores of well-wishes from far-away contacts. After all, it's still nice to be thought of, even if just once a year.

Our story ends on a sad note: we submitted a grant application to support future studies, but after initial approval we were told that the funder decided to back out. An official explained that funding social media experiments was too risky in the wake of recent scandals surrounding researcher access to people's personal information on social networks. Even though we reminded him that we conducted research approved by our IRB, it was to no avail. This is worrisome for reasons that go well (58) our own research.

Now more than ever, society needs ethical social science at the intersection of technology and humanity. Social network systems are shaping what it means to be human, and we can't rely on the systems to police or research themselves. In the meantime, when your birthday rolls around, enjoy the warm feelings from friends sending their regards—but remember that (C).

(Brett Frischmann and Katherine Haenschen, "How Facebook Programmed Our Relatives", *Scientific American*, 2018. より，出題の都合上一部改変)

(注) deliberation：考慮

設問 1. 本文の内容を踏まえ，下線部(A)が最も適切な意味になるように(　　)内の単語を並べ替えなさい。なお，文頭に来る単語も(　　)内では小文字で示している。解答は記述用の用紙に記載すること。

設問 2. 下線部(B)を和訳しなさい。解答は記述用の用紙に記載すること。

設問 3. 本文中の(54)～(58)にあてはまるものとして最も適切なものを①～⑤から選び，マークしなさい。

54

① however　② so　③ but
④ to　⑤ as

55

① in　② at　③ with
④ on　⑤ to

56

① changed　② deleted　③ realized
④ signed　⑤ received

57

① who　② it　③ whose
④ whom　⑤ them

58

① beyond　② before　③ under
④ behind　⑤ against

設問 4. 59 以下の文章が入る最も適切な本文中の場所を①～⑤から選び，マークしなさい。

As a result, social interactions are often reduced to the click of a button.

設問 5. 60 (　C　)に入る最も適切な表現を①～⑤から選び，マークしなさい。

① they are more than likely to obtain IRB approval in the future
② they can also choose to conduct another field experiment
③ they don't agree with core arguments explored in Re-Engineering Humanity
④ they don't know when your birthday really is any more than you do theirs
⑤ they might have found your birthday by breaking privacy laws

設問 6. 本文に基づき，次の１～７の内容について，①～③の中で該当するものを選び，マークしなさい。

① 本文で述べられている内容と一致している。

② 本文で述べられている内容と一致していない。

③ 本文で述べられている内容では判断できない。

61 1. Facebook reduced the number of people who sent birthday wishes.

62 2. More than 10 percent of people combined their friends with others' friends.

63 3. People's birthday wishes in the field experiment varied.

64 4. The law professor intentionally signed up for Facebook on two occasions.

65 5. The number of birthday wishes in 2017 roughly equaled those in 2015 and 2016.

66 6. Facebook decided not to support the grant application.

67 7. About one thousand friends wished a happy birthday on the fake date in the field experiment.

以下白紙