医学部予備校アイメディカ
2019年度入学説明会

2月

日	月	火	水	木	金	土
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

3月

日	月	火	水	木	金	土
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24 31	25	26	27	28	29	30

ピンク色部分が説明会を実施する日程です。**上記日程以外**にも個別でのご相談を承っております。お気軽にお問い合わせください。

説明会スケジュール

入学説明会 – 13:30 ～ 14:30
医学部入試の傾向と対策・アイメディカのシステム（少人数制・RWT etc.）
入学金・授業料・入学方法
4 月までの勉強について（無料個別指導・無料先取り講習）

個別相談会 – 14:30 ～ 16:30
ご希望により体験授業（数学）・個別の質問・相談・ご要望がございましたら、この時間に承ります。

お電話にてご予約ください。03-6661-8324（9 時～ 20 時）

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医　学　部

2018年度一般入学試験(前期)

英　　語　(問　題)

注　　意

1)　英語の問題冊子は16ページあり，問題は4問である。白紙・空白の部分は下書きに使用してよい。

2)　別に解答用紙1枚があり，解答はすべてこの解答用紙の指定欄に記入すること。指定欄以外への記入はすべて無効である。

3)　**解答用紙の所定欄に受験番号を記入せよ。氏名を記入してはならない。**

なお，記入した受験番号が誤っている場合や無記入の場合は，英語の試験が無効となる。

また，＊印の欄には何も記入してはならない。

4)　問題冊子，解答用紙はともに持ち出してはならない。

5)　試験終了時には，問題冊子の上に解答用紙を裏返しておくこと。解答用紙，問題冊子の回収後，監督者の指示に従い退出すること。

I *Select the best response to the following questions or statements and answer by the letter 'ア' through 'エ'.*

① We won't be allowed any mistakes in this case. Make sure you leave no stone unturned.

ア I got it. I'll leap from stone to stone.

イ All right. I'll do everything I can think of.

ウ Roger. It's not carved in stone.

エ No problem. I'll give them a stone for bread.

② For almost two hours now we've just been spinning our wheels, accomplishing nothing.

ア Let's call it a day and work on this again tomorrow.

イ There might be some problems with the wheels.

ウ We'd better buy a new car.

エ How about spinning in the opposite direction?

③ I just moved here a week ago.

ア So you don't know your way around here yet, do you?

イ So you worked your way through college, didn't you?

ウ So you're not street-smart yet, are you?

エ So you're downhill all the way, aren't you?

④ I can't believe it! He just sat on his hands when I asked him for help!

ア I know how you feel. He always goes hat in hand to you.

イ I know how you feel. You shouldn't lead him by the hand.

ウ I know how you feel. I've been there.

エ I know how you feel. I've been better.

⑤ Oh, are you still thinking about the answer for the quiz?

ア Yeah. It's on the tip of my tongue, but I have a finger stuck in that.

イ Yeah. It's on the tip of my tongue, but I can't cross my fingers.

ウ Yeah. It's on the tip of my tongue, but it's a cool hand on a fevered brow.

エ Yeah. It's on the tip of my tongue, but I can't put my finger on it.

⑥ Have you already heard about another tax raise? What's your take on that?

ア As much as 25 dollars!

イ Oh, I'm definitely furious about that.

ウ Only my car tax, actually.

エ I'll take it from here.

⑦ I've finished all the work you told me to do. Am I all set?

ア You are all set.

イ Set the alarm for 7 o'clock.

ウ No, you're the second.

エ Ten of these make a set.

⑧ You know what, Pat said she's going to quit school and get a job. I have no idea where she's coming from.

ア She's from Arizona, I guess.

イ Me neither. What a surprise!

ウ She's from the same junior high as mine.

エ She comes from a big family.

⑨ I'm sorry I've kept you in the dark about that.

ア Turn the light on right now! I hate darkness!

イ I've been in the depth of dark despair all the while.

ウ Never mind. Everybody takes a leap in the dark sometimes.

エ That's OK. Everybody has something to hide.

⑩ You shouldn't accuse me of coming late. You do that all the time. Look who's talking!

ア Now you're talking!

イ I am!

ウ You're right. Sorry about that.

エ You don't say.

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Ⅱ *Answer the following questions.*

(1) *Below are two mathematical questions* (【Question 1】 *and* 【Question 2】) *and their solving methods* (【How to solve 1】 *and* 【How to solve 2】). *Fill in the blanks marked* (①) *through* (⑫) *below with the most suitable Arabic number* (ex.) 1, 2, 3. . .) *or English word. The same answer is inserted in the blanks marked with the same number, while the blanks marked with different numbers do not necessarily mean different answers.*

【Question 1】

There is a job that takes 20 days to do alone by Taro or 30 days to do alone by Jiro. At first Taro works by himself for 5 days and after that Taro and Jiro work together and finish the job. All together, how many days does it take to complete the job?

【How to solve 1】

Taro finishes 1 over (①) of the whole job in 1 day. If Taro works for 5 days, he finishes 1 over (②) of the job. Jiro finishes 1 over (③) of the whole job in 1 day. If Taro and Jiro work together, they finish 1 over (④) of the whole job in 1 day. The job left over after Taro works alone is 3 over (⑤) of the total job, therefore the number of days they work together is (⑥) days. Therefore, the number of days it takes to finish the job is, (⑦) days.

【Question 2】

It is Wednesday, March 5 of a certain year. What day of the week is August 22 of this year?

【How to solve 2】

Because March has 31 days, including March 5, there are (⑧) days left in March. There are 30 days in April, 31 days in May, 30 days in June, and 31 days in July. From March 5 to August 22, there are (⑨) days. 1 week has 7 days. (⑨) divided by 7 equals (⑩) with (⑪) days remaining. Therefore, (⑨) days are (⑩) weeks and (⑪) days. If we think of the days from Wednesday to next Tuesday as one set, August 22 becomes (⑫).

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(2) *Fill in the blanks marked* (⑬) *through* (⑮) *below with the most suitable word or phrase. The same answer is inserted in the blanks marked with the same number.*

The group of living things in a defined area and the environment they exist in are collectively called the ecosystem. Within this ecosystem "the relationship connecting the eaters and the eaten" is called the (⑬). The (⑬) begins with photosynthesizing plants. Plants are eaten by small herbivores. Herbivores are eaten by small carnivores, and then they are eaten by large carnivores. Plants make organic matter from (⑭) matter and are called producers. Animals eat plants and other animals and, therefore, are called (⑮). Within the ecosystem, plants which form the starting point of the (⑬) are greatest in number while large carnivores are fewest in number.

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Ⅲ *Read the following passage and answer the questions that follow.*

As an emergency physician, I'm always engaging in a fast-tempo, often awkward, all too stressful dance with strangers. Lately, though, I've noticed a particular gap in my own medical education and training, as well as (①) that of my colleagues, that's further tripping up our steps: how to provide optimal health care for transgender patients.

The gap is amplified in the emergency room, where even under the best of circumstances the interaction we have with patients is typically rushed and never entirely comfortable—and (②：w) I'm usually meeting a patient for the first time and don't have the patient's medical history at my fingertips. Because transgender people are less likely to have health insurance and ③[are / four / likely / more / times / to] live in poverty compared to the general population, the emergency room serves as a particularly important safety net for these patients.

Sometimes the patient is registered as the wrong gender immediately from triage, resulting in a strained communication from the get-go. Other times, a staff member lets out a surprised gasp as a patient undresses for a physical exam. Then there are the moments when providers call a patient a "he/she" or "they" on rounds. Private rooms are also hard to come by in busy, overcrowded emergency rooms, and patients may be inappropriately clustered by gender.

For the most part, ④[is / none / of / of / out / this] malice. Instead it's because of our own ignorance—and stems from our lack of education and training on providing sensitive and evidence-based care for transgender patients.

Currently, American medical schools' curriculums are not sufficiently addressing the health needs and concerns of the lesbian, gay, bisexual and transgender community. A comprehensive survey of schools in the United

States and Canada revealed that less than five hours in medical schools are devoted to L.G.B.T. health over all; some medical schools reported zero hours of training. While I (⑤ : d) learn about providing health care for lesbian, gay and bisexual patients when I went to medical school over a decade ago, I didn't receive any special education on the particular health needs and concerns of the estimated 1.4 million adults living in the United States who identify as transgender.

In one study, half of these patients had to teach their doctors about transgender health issues at some point. A Twitter hashtag #transhealthfail started trending in August of 2015, when transgender patients shared stories about their negative experiences with the health care system. Patients continue to use the hashtag today.

These holes in medical education and training can cost lives. Over 70 percent of transgender people nationwide say they have experienced serious discrimination in a health care setting. A third of transgender people postpone — or completely avoid — seeking health care because of the fear of discrimination. ⑥One in five have yet to disclose their transgender status to any medical provider.

Though still in the nascent stages, our medical education system may be on the cusp of changing. The Association of American Medical Colleges released its first medical education guidelines for L.G.B.T. health in November 2014. The University of Louisville School of Medicine became the national pilot site to implement a new model of physician training. The initiative, called the eQuality Project, was fully integrated into the curriculum this ⑦academic year.

Dr. Amy Holthouser, the associate dean for medical education at Louisville, explained that one way the program is unique is (⑧) instead of having an isolated module designated for learning about L.G.B.T. health, the issues pertinent to L.G.B.T. patients are integrated into the entire curriculum. In the pharmacology block, for instance, students may learn about hormone

therapies used for transitioning, in the same way (⑨) they might learn about medications to treat high blood pressure. When students are educated about routine pap smears, the importance of screening transgender men is also taught; the same goes for prostate exams and transgender women.

Some schools make the commendable effort of allocating hours to L.G.B.T. health, but often they focus too narrowly on subjects like sexually transmitted infections and H.I.V., Dr. Holthouser explained, (⑩) can further stigmatize patients. "Instead, we want to teach students how to provide all aspects of patient care," she said.

All in all, the school now has revised about 50 hours of its curriculum to include L.G.B.T. health—(⑪) puts it far ahead of the curve. The medical colleges' association's standards are not mandatory. But Dr. Holthouser predicts that "once they start putting questions specific to L.G.B.T. health on board exams and require them in reports for accrediting bodies, schools will quickly catch up."

At New York University School of Medicine, Richard Greene, the director of gender health education, is working on incorporating L.G.B.T. education into both undergraduate medical education and residency training. For all medical students and those residents training to become primary-care physicians, he has already implemented standardized patient exams—simulated clinical scenarios in which actors play patients—that test candidates' competency with transgender health issues. He is working on expanding this across all residency training programs, regardless of the specialty.

Dr. Greene's efforts have been met with enthusiasm. "I find young learners, like new medical students and new residents, are really excited to learn about transgender health. I'm really optimistic about the next generation," he told me. "Senior providers don't know what they know."

For doctors like me who didn't get the training in our earlier years, there are easily accessible learning resources. The National LGBT Health Education

Center, a part of the Fenway Institute, provides free web-based interactive modules, which I recently took. The University of California-San Francisco and the World Professional Association for Transgender Health also have extensive online resources and learning modules. Conferences and webinars are routinely available for physicians to attend and learn more about providing health care to the L.G.B.T. community.

But the first step is simply recognizing our own deficiencies — and realizing that learning about transgender health is as pressing as mastering dosages of the newest cholesterol-lowering drug or memorizing the latest protocol for resuscitating a patient from cardiac arrest. "This is ⑫[away / going / is / not / something / that]," Dr. Greene said. "In fact, it's becoming more urgent."

(New York Times, April 13, 2017. "A Transgender Learning Gap in the Emergency Room" By Helen Ouyang, M.D.)

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1 *Fill in the blanks marked* (①), (②), *and* (⑤) *with the most suitable English word to complete each sentence. If a certain letter is written in a parenthesis, the answer starts with that particular letter.*

2 *Rearrange the words in the brackets marked* ③, ④, *and* ⑫ *to make correct sentences. On your answer sheet, write the word which comes to the* ＊ *positions below.*

③ [＿＿＿ ＿＿＿ ＿＿＿ ＊ ＿＿＿ ＿＿＿]

④ [＿＿＿ ＿＿＿ ＿＿＿ ＊ ＿＿＿ ＿＿＿]

⑫ [＿＿＿ ＿＿＿ ＿＿＿ ＿＿＿ ＊ ＿＿＿]

3 *Translate the underlined phrases marked* ⑥ *and* ⑦ *into Japanese.*

4 *Fill in the blanks marked* (⑧) *and* (⑨) *with the same English word.*

5 *Fill in the blanks marked* (⑩) *and* (⑪) *with the same English word.*

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Ⅳ *Read the following passage and answer the questions that follow.*

Gulping down an artificially sweetened beverage not only may be associated with health risks for your body, but also possibly your brain, a new study suggests. Artificially sweetened drinks, such as diet sodas, were tied to a higher risk of stroke and dementia in a study published in the American Heart Association's journal Stroke on Thursday.

The study sheds light only on an association, as the researchers were unable to determine an actual cause-and-effect relationship between sipping artificially sweetened drinks and an increased risk for stroke and dementia. (①), some experts caution that the findings should be interpreted carefully.

No connection was found between those health risks and other sugary beverages, such as sugar-sweetened sodas, fruit juice and fruit drinks.

"We have little data on the health effects of diet drinks and this is problematic because diet drinks are popular amongst the general population," said Matthew Pase, a senior research fellow in the department of neurology at Boston University School of Medicine and lead author of the new study. "More research is needed to study the health effects of diet drinks (②) consumers can make informed choices concerning their health," he said.

The new study involved data on 2,888 adults older than 45 and 1,484 adults older than 60 from the town of Framingham, Massachusetts. The data came from the Framingham Heart Study, a project of the National Heart, Lung, and Blood Institute and Boston University. In the older-than-45 group, the researchers measured for stroke and in the older-than-60 group, they measured for dementia.

"The sample sizes are different because we studied people of different ages," Pase said. "Dementia is rare in people (③) the age of 60 and so we focused only on those aged (④) 60 years for dementia. Similarly, stroke

is rare in people aged under 45 and so we focused on people older than age 45 for stroke."

The researchers analyzed how many sugary beverages and artificially sweetened soft drinks each person in the two different age groups drank, at different time points, between 1991 and 2001. Then, they compared that with how many people suffered stroke or dementia over the next 10 years.

Compared to never drinking artificially sweetened soft drinks, those who drank one a day were almost three times as likely to have an ischemic stroke, caused by blocked blood vessels, the researchers found. They also found that those who drank one a day were nearly three times as likely to be diagnosed with dementia.

Those who drank one to six artificially sweetened beverages a week were 2.6 times as likely to experience an ischemic stroke but were no (⑤) likely to develop dementia, Pase said. "So, it was not surprising to see that diet soda intake was associated with stroke and dementia. I was surprised that sugary beverage intake was not associated with either the risks of stroke or dementia (⑥) sugary beverages are known to be unhealthy," Pase said.

In response, Lauren Kane, a spokeswoman for the American Beverage Association, issued a statement from the group that said low-calorie sweeteners found in beverages have been proven safe by worldwide government safety authorities. "The FDA, World Health Organization, European Food Safety Authority and others have extensively reviewed low-calorie sweeteners and have all reached the same conclusion — they are safe for consumption," the statement said.

"(⑦) we respect the mission of these organizations to help prevent conditions like stroke and dementia, the authors of this study acknowledge that their conclusions do not — and cannot — prove cause and effect. And according to the National Institutes of Health (NIH), many risk factors can increase an individual's likelihood of developing stroke and dementia including

age, hypertension, diabetes and genetics. NIH does not mention zero calorie sweeteners as a risk factor," the statement said. "America's beverage companies support and encourage balanced lifestyles by providing people (⑧) a range of beverage choices — with and without calories and sugar — so they can choose the beverage that is right for them."

Separate previous studies have shown an association between the intake of sugar-sweetened beverages and adverse health effects, such as type 2 diabetes, obesity, heart disease, stroke, and possibly even heart failure.

"This article provides further evidence though on artificially sweetened beverages and their possible effects on vascular health, including stroke and dementia," said Dr. Ralph Sacco, professor and chair of neurology at the University of Miami Miller School of Medicine, about the new study. Sacco was a co-author of an editorial published alongside the study in the journal Stroke on Thursday. "We believe the pathways of which artificially sweetened beverages would affect the brain are probably through vascular mechanisms," Sacco said.

"When the authors controlled for hypertension and diabetes and obesity the effects diminish, which implies that some of the effects of artificially sweetened beverages could still be going through a vascular pathway," he said about the new study. "Many strokes are caused by hardening of arteries; and the risk of dementia is also increased by the hardening of arteries in large and small vessels. So, I believe the mechanisms may be through vascular disease, though we can't prove it."

Heather Snyder, senior director of medical and scientific operations at the Alzheimer's Association, called the new study "a piece of a larger puzzle" (⑨) it comes to better understanding how your diet and behaviors impact your brain. "It's actually really more of your overall diet and overall lifestyle that is linked to cardiovascular disease and diabetes risk, and we do know that heart disease and diabetes are linked to an increased risk of dementia," said

Snyder, who was not involved in the new study.

"We know that sugary and artificially sweetened beverages are not great for us. This study adds strength to that, and also says they may not be great for your brain, specifically," she said. "There are alternatives — things we can all do everyday to keep our brains and our bodies as healthy as we can as we age." Alternatives such as regular cardiovascular exercise that elevates heart rate and increases blood flow and doing puzzles and games to activate and challenge the mind. These are recommendations from the Alzheimer's Associations list of 10 lifestyle habits to reduce risk of cognitive decline.

(CNN News, April 20, 2017. "Diet sodas may be tied to stroke, dementia risk" By Jacqueline Howard)

1 *In accordance with the passage, put the letter "O" if each of the following sentences is true, and "X" if it is not on your answer sheet.*

(1) The relationship between the intake of artificially sweetened beverages and a high risk for stroke and dementia is scientifically proven.

(2) According to the studies so far, the intake of ordinary sugary drinks does not cause an increased risk for dementia.

(3) In the new study introduced in this article, the reason why the sample size examined for stroke and that for dementia are different is because the researchers could not find the same number of participants for each illness.

(4) According to the new study introduced in this article, if you drink one artificially sweetened beverage per day, you are almost twice as likely to become demented.

(5) The American Beverage Association does not agree with the results of the new study introduced in this article.

(6) According to Dr. Ralph Sacco, chances are that artificially sweetened drinks have an adverse effect on our brains through our blood vessels.

(7) A researcher in this article suggests that we should care about our overall diet and lifestyle, not just about artificially sweetened beverages.

2 *For the blanks marked* ①, ②, ⑥, ⑦, *and* ⑨, *select the most suitable word or phrase to be filled from the following choices and answer by the letter 'ア' through 'オ'. Use all choices. (No capitalization is done even at the beginning of the sentence.)*

ア so that

イ when

ウ because

エ therefore

オ while

3 *Select the correct word to fill in the blanks marked* ③ *and* ④ *between the two choices below.*

over *under*

4 *Fill in the blank marked* ⑤ *with the most suitable English word to complete the sentence.*

5 *Fill in the blank marked* ⑧ *with the most suitable English word to complete the sentence.*