

YCU

横浜市立大学 YOKOHAMA CITY UNIVERSITY

2023(令和5)年度 一般選抜 入学試験問題 外国語(英語)

理学部・データサイエンス学部

■ 2023 (令和 5) 年度入試の主な変更点

理学部

▶募集区分の追加

● 一般選抜 後期日程を新たに導入します。

▶一般選抜前期日程における教科・科目等の変更

- 大学入学共通テストについて、【B方式】を3教科5科目型に変更し、従来の5教科7科目型【A方式】と併用します。 ※出願時の方式選択は不要・本学で自動判別
- 2次試験の科目は、「外国語」(新規導入)+「数学」+「理科」となります(【A 方式】・【B 方式】共通)。

データサイエンス学部

▶一般選抜前期日程における2次試験科目の変更

● 2次試験の科目は、「外国語」(新規導入)+「数学」+「総合問題」となります。

■ 2023(令和 5)年度 入試制度・募集人員

選抜区分		理	学 部	データサイエンス学部	
一般選抜〔前期日程〕		A方式	45名	402	
		B方式	20名	40名	
一般選抜〔後期日程〕		新規 10名		5名	
公募制学校推薦型選抜		10名		_	
指定校制学校推薦型選抜		35名		10名	
総合型選抜		若干名		5名	
海外帰国生特別選抜		若干名		若干名	
国際バカロレア特別選抜		若干名		若干名	
科学オリンピック特別選抜		若干名		若干名	
外国人留学生特別選抜	第1期	若干名		若干名	
	第2期	若干名			
社会人特別選抜		若干名		若干名	
	120名		60名		

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□ 2023(令和 5)年度 項	理学部、データサイエンス学部 一般選抜前期日程 個別学力検査(第2次試験)出題科目	1
ロ サンプル問題 外国	語(英語)	
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■ 2023 (令和 5) 年度 理学部・データサイエンス学部 一般選抜 前期日程 個別学力検査(第2次試験) 出題科目

理学部【A方式·B方式 共通】

教 科	試験時間	備考
外国語	90 分	『コミュニケーション英語Ⅰ・コミュニケーション英語Ⅱ・ コミュニケーション英語Ⅲ・英語表現Ⅰ・英語表現Ⅱ』(必須)
数学	-60 分 120	『数学Ⅰ·数学Ⅱ·数学A·数学B』(必須)
理科	-90 分 180	『物理基礎・物理』、『化学基礎・化学』、『生物基礎・生物』 から2科目選択

- (注) ◆数学Ⅰ・数学Ⅱ・数学Ⅱ・数学Aの出題範囲は全範囲です
 - ◆数学Bの出題範囲は、数列、ベクトルです。
 - ◆『物理基礎・物理』の出題範囲は全範囲です。
 - ◆『化学基礎・化学』の出題範囲は全範囲です。
 - ◆『生物基礎・生物』の出題範囲は全範囲です。

データサイエンス学部

科目	試験時間	備考
外国語	90 分	『コミュニケーション英語Ⅰ・コミュニケーション英語Ⅱ・ コミュニケーション英語Ⅲ・英語表現Ⅰ・英語表現Ⅱ』(必須)
数 学	120 分	数学Ⅰ・数学Ⅱ・数学Ⅲ・数学A・数学B 〔必須〕 (数学Ⅰ・数学Ⅱ・数学A・数学B)から2題 〔選択〕 (数学Ⅰ・数学Ⅱ・数学A・数学B)、(数学Ⅲ)、 (確率分布と統計的な推測)から1題
総合問題	90 分	図表データ、文章等の情報を与え、それに基づいた論説能力等を問う

(注) ◆数学 I · 数学 II · 数学 II · 数学 A · 数学 B の出題範囲は全範囲です。 〔必須〕および〔選択〕の数学 B の出題範囲は、数列、ベクトルです。

[I] 次の文章を読んで、設問に答えなさい。 *がついている語句には本文の後ろに注があります。



More and more companies from fields other than medical services are entering the market for *genetic testing, which makes it possible for people to easily find out the risks of their developing certain types of diseases such as cancer and diabetes.

It is necessary for people to correctly understand the nature of genetic testing available, including its accuracy, before they decide to undergo the tests.

Recent *entrants into the market include Internet firms like Yahoo! and DeNA. The number of companies offering genetic testing services more than doubled from 340 in 2009 to around 740 in 2012. Many more companies are planning to enter the business because genetic testing services are not a medical activity and does not require a license.

The companies, which are providing what is considered to be an information service, *entrust the job of actual examination of genes to testing institutes.

Still, *commercialization of the services carries some problems. The selling point of commercial genetic testing is that by sending a mouth *swab sample to a testing institute, one can know his or her risks of developing various diseases. The biggest issue is the accuracy of such tests.

A genetic testing venture 23andMe, in which Google has invested, has started offering the Personal Genome Service to "provide health reports on 254 diseases and conditions" for slightly less than \$100. But the U.S. Food and Drug Administration in November 2013 ordered the company to halt the sales of its *saliva collection kit due to concerns over the accuracy of its genetic examinations.

People need to be aware that the results of genetic testing only have a high degree of correlation with the risks for certain diseases. (ア)遺伝子に加えて、食事、喫煙、飲酒、ストレス、睡眠不足、運動不足といった後天的要素が、癌を含むいくつかの病気の原因である。

Users of genetic testing services should know that the discovery in genetic examinations of the presence of irregularities that raise the risk of developing certain diseases does not necessarily mean they will develop them.

So, it is not wise to rely solely on genetic testing. The results of testing may cause some people to be *unduly pessimistic about their future. The providers of genetic testing services must be careful when explaining test results to people.

The providers also should handle data on individual *examinees' genes with *utmost care because they are personal information. *Leakage of such data must be prevented at any cost. There are moves among testing institutes to use data from genetic testing for research

purposes. There must be no *lapses in the management of data.

The government needs to quickly set down rules to ensure the reliability of commercial genetic testing. At the very least, providers of such services should be required to make clear to users the purpose and limits of tests, their possible disadvantages and the scientific grounds of their clinical usefulness, as well as company policy on handling personal information including genetic data acquired from the test and the relevant information on testing institutes.

(出典 Pros and cons of genetic testing (Editorial), The Japan Times, July 11, 2014)

Notes

genetic: relating to genes or heredity.

entrant: a person that enters or takes part in something.

entrust: to make somebody responsible for doing something.

commercialization (n) < commercialize (v): to use something to try to make a profit, especially

in a way that other people do not approve of.

swab: a piece of soft material used by a doctor, nurse etc. for taking a sample for testing.

saliva: the liquid that is produced in the mouth.

unduly: excessively, inappropriately.

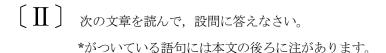
examinee: a person who is being tested or who is taking an exam.

utmost: greatest, most extreme.

leakage: the spreading of secret information.

lapse: a small mistake caused by forgetting something or by being careless.

- (1) 遺伝子検査の最大の利点と最大の問題点を本文に即して日本語でそれぞれ1つずつ挙げなさい。
- (2) 遺伝子検査を提供する業者が留意すべき事を本文に即して日本語で3点挙げなさい。
- (3) 下線部(ア)を英訳しなさい。





After many years of living in Japan, our family has *acclimated and adopted many of these ways, and when we find ourselves outside Japan we often grumble and *cringe about others'*slack ways. (ア) しかし、日本で受け入れられている方法が私たちを困惑させたことが何度かあった、and we have dared to be defiant ... and sometimes even a *tad *deviant. Yes, we have misbehaved.

As a dentist's daughter, I tend to feel I have a good handle on tooth brushing—appropriate timing, frequency, method, and duration—but in group overnight situations for work or volunteer activities in Japan, I have sometimes been scolded for not brushing my teeth at the proper time—before eating. Not one to make waves, I have learned to fall in, fetch my tooth-brushing cup, toothbrush and toothpaste, and *queue up with others at the *spigot to (4) dutifully brush my teeth—minutes prior to eating breakfast. Later, after my meal, I've been known to sneak back to the spigot to (4) *surreptitiously brush again.

Our family's passive approach to ear cleaning—the "never put anything smaller than your elbow into your ear" approach—has also gotten us in trouble. Our active, healthy daughter failed an elementary school health physical. The reason? We hadn't scraped the earwax out of her ears with the traditional bamboo *mimikaki* tool. We complained—(x)mind your own *beeswax, I wanted to say—but the school nurse was unmoved. So, we took our protest to our Japanese *pediatrician, who agreed this was a case of cultural difference, that earwax indeed protects the inner ear, and he signed the form for school.

Our son ran into trouble in elementary *P.E. class. Boys changed into gym clothes in one classroom and girls in another, so when our son undressed, he took off his pants, then his shirt, and, standing in his underwear, prepared to put on his gym clothes. Everyone yelled at him. So he tried taking off his shirt first, then his pants. Still everyone yelled at him. Finally the teacher contacted me. "Would you please teach your son the proper way to change clothes?" Then she explained: shirt off, gym shirt on, pants off, gym shorts on. Never all off, then all on. Never stand half naked in your underwear.

Our son grumbled every gym day and went on and on about how absurd it was—to have (4) a proper way for putting on gym clothes. In defiance, he taught his classmates what fun it was to play his own superhero game—showing off your *biceps while standing in your underwear and shouting, (4) "Have no fear! Half-Naked Man is()!"

Yes, there was another call from the teacher.

(出典 Holly Thompson, "There's Always a Way" in Wingspan, November 2016)

Notes

acclimate: to become accustomed to a new climate or new conditions; adjust.

cringe: to feel and show distress in one's face.

slack: doing something poorly because one is not putting enough care or effort into it.

tad: a very small amount.

deviant: different from what most people consider to be normal and acceptable.

queue: to stand or wait in a line.

spigot: a device that controls the flow of water from a pipe.

Surreptitiously (adv.) < surreptitious (adj.): done secretly or quickly, in the hope that other people will not notice.

beeswax: a yellow sticky substance that is produced by bees and is used especially for making candles and polish for wood.

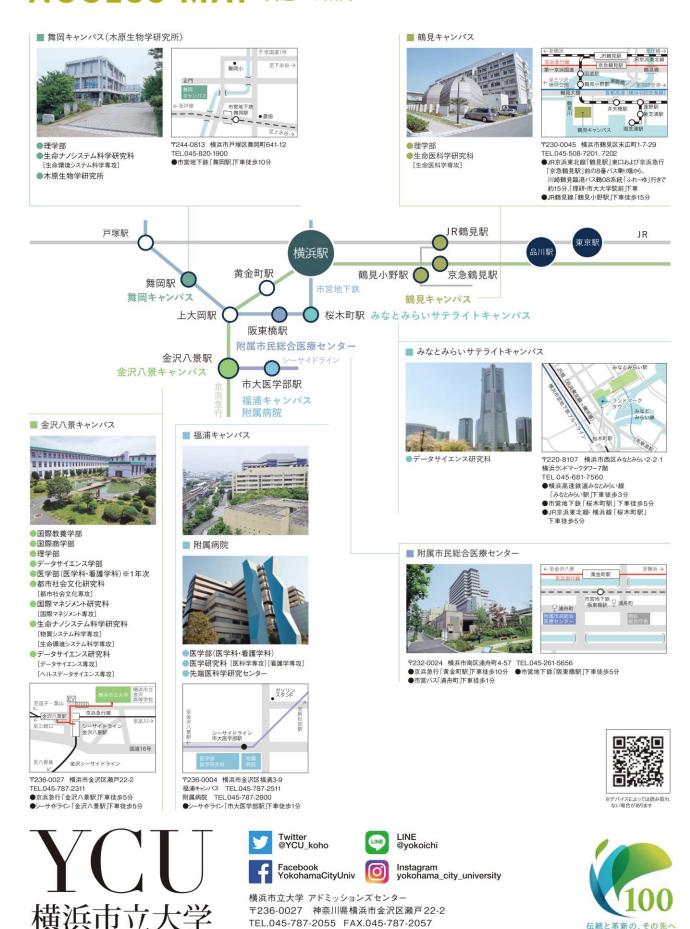
pediatrician: a doctor who studies and treats the diseases of children.

P.E.: physical education (sport and exercise that is taught in schools).

biceps: 上腕二頭筋, 力こぶ

- (1) 下線部(ア)を英訳しなさい。
- (2) 筆者が下線部(イ),下線部(ウ)のようにした理由をそれぞれ日本語で述べなさい。
- (3) 下線部(エ)は "mind your own business" という慣用句を基にした表現である。ここでは 筆者のどのような感情を表しているのか、日本語で具体的に説明しなさい。
- (4) 下線部(オ)で示されている手順とはどのようなものか、日本語で具体的に説明しなさい。
- (5) 下線部(カ)の空欄に入れるのに最も適切なものを、次の選択肢から一つ選び、スーパーヒーロー登場の決まり文句を完成させ、番号で答えなさい。
 - 1. there
- 2. me
- 3. coming
- 4. here

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