氏 名 受 験 番 号

藤田保健衛生大学

平成30年度

一般後期入学試験

英 語

注意:第1問から第3問まではマークシートに解答しなさい。

第4問と第5問は記述用解答用紙に解答しなさい。

- マークシートの記入について(注意事項)

- 1. 解答の作成には、H、F、HBの鉛筆を使用して正しくマークすること。 よい解答例 ● (正しくマークされている)
 - 悪い解答例

 (マークが部分的で解答とみなされない)
- 2. 解答を修正する場合は、必ず「プラスチック製消しゴム」であとが残らないように完全に消すこと。
 - 鉛筆の色が残っていたり、「 」のような消し方などをした場合は、 修正したことにならないので注意すること。
- 3. 解答用紙は、折り曲げたりメモやチェック等で汚したりしないよう 特に注意すること。
- 4. 受験番号欄の記入方法《受験番号記入例(右図)参照》
 - ① 受験番号を数字で記入する
 - ② 受験番号の数字を正しくマークする 正しくマークされていない場合、採点できないことがあります。

一 受験番号記入例 ー 受験番号1001の場合

受 験 番 号 欄						
千位	百位	十位	一位			
1	0	0	1			
0			0			
	0	①	•			
2	0	0	(2)			
3	3	3	3			
(4	4	4			
(3)	(3)	(3)	(3)			

注:選択する数字は『O』から 順番に並んでいます。

	から第3問では、問 る。該当する問番号		内の数字はマークシ ーク しなさい。	ノートの問番号を示			
第1問		空所 [1]~[6 び、その番号をマー] に入れるのに最 ^い -クしなさい。	も適切なものを (1)			
問 1.	It can be difficult to te	ll whether all your effo	orts are actually [1]	off.			
	(1) cutting	(2) paying	(3) setting	(4) turning			
問 2.	I'm sorry to have kept you waiting, but it'll take us [2] few days to let you know the result of the X-ray examination.						
	(1) another	(2) less	(3) more	(4) other			
問 3.	This preserved food w						
	(1) few	(2) little	(3) many	(4) much			
問 4.	A joke, if [4] to	A joke, if [4] too far, can end up hurting someone's feelings.					
	(1) carried	(2) carries	(3) carry	(4) carrying			
問 5.	I would like to [5] the larger bill into	smaller ones.				
	(1) break	(2) deposit	(3) exchange	(4) pay			
問 6.	John is stuck in a traffic jam, so he is [6] to be late.						
	(1) bound	(2) eager	(3) inclined	(4) reluctant			

第2問	(7) の語句	~4 においては、それぞれ を並べかえて空所を補い、 ~[14] に入れるものの	最も適切な文を完成	成させなさい。解答		
問 1.	彼の言ったこと	こをあまり気にしすぎないほ	ほうがよい。			
Ž	You	[7]	[8] wh	at he said.		
	(1) better	(2) had	(3) make	(4) much		
	(5) not	(6) of	(7) too			
問 2.	彼はまるで医者になるために生まれてきたかのようだった。					
	He [9] [10] a doctor.					
	(1) been	(2) cut	(3) have	(4) out		
	(5) seemed	(6) to	(7) to be			
問 3.	当分はその件にふれないことにしよう。					
	Let's [11] [12] being.					
	(1) as	(2) for	(3) is	(4) it		
	(5) leave	(6) the matter	(7) the time			
問 4.	政府の市場介入はむしろ迷惑であると考える人もいる。					
	Some consider the government intervention in the market [13]					
	[14]					
	(1) a help	(2) a hindrance	(3) be	(4) more		
	(5) of	(6) than	(7) to			

第3間 次の英文を読み、後の問いに答えなさい。

There is one question that most parents seem to dread more than any other when it comes to talking to their kids about money. Can you guess what that might be?

If you say "How much money do you make?", you are exactly right, according to Jayne Pearl, author of several books about what she calls financial parenting.

Pearl said she (A) was caught off guard when her own son, now grown, asked her that question at the age of 8. "I was initially like, Ahhh. I write a lot about personal finance and I wasn't prepared for this question," she said during an interview. She eventually answered her son's question, but focused on the (b) of the household to make the case (B) that the amount she made covered most of their costs and that the money left over either went into the bank or could be used to pay for additional things they might want or need.

There are two main reasons why more parents don't talk to their kids about money, says Pearl. For one, they're terrified they're not good role models when it comes to money, she says. "Many of us make a lot of mistakes with money, or spend too much, or will say, 'I need a new pair of shoes' when you really don't," she says.

Parents can also learn alongside their kids. "You don't have to just say 'I don't know.' You can say, 'I need to learn more about this too, so let's sit down and learn about it,' " says Pearl. If you start with financial literacy web sites that are geared for kids, you're probably going to be learning at your level as well, she adds.

If you get past your insecurities about money and eventually talk to your kids, they'll definitely benefit, says Pearl. Kids are ultimately going to need to know how to handle their own money when they get older so better for them to learn when the stakes are low. "It's better that they should make \$20 mistakes than \$20,000 mistakes when they're older," she says.

Talking with your kids about money also allows you to impress your financial values on your kids, says Pearl. Those values dictate a lot about how we live and how we interact with the world. They include understanding the differences between wants and needs and learning how to make tradeoffs, she says. "You can't have everything. You can have this or you have that, and these are opportunities to teach your kids how to do (2) that by giving them tradeoffs, discreet decisions (3) that they can make around things that get bought for them."

Pearl says parents shouldn't hesitate to talk to their kids about the mistakes they've made, and (4)that includes talking about the perils of credit card debt, something I will tell my kids I learned

about all too well during my 20s when I was working as a reporter and having trouble making ends meet.

She's also a big believer in giving kids allowance, but not connecting the weekly money to grades and behavior. The goal of allowance, she believes, is to start teaching kids about financial responsibility.

Pearl says parents know their kids and know when they are ready to talk about finances. "If your kid is ready to have a conversation, you can try to have a conversation. If it bombs, you can try again in a few months or next year, but I think it's never too early to try . . . and if you miss the boat and your kid is 17 and going off to college next year, don't throw your hands up and say, 'I missed the boat.' Start whenever you can."

http://edition.cnn.com/2017/09/13/health/money-talking-to-kids-parenting/index.html (改変あり)

- 問 1. 下線部《A》と最も近い意味を表わすものを (1) ~ (4) から 1 つ選び、その番号を [15] にマークしなさい。
 - (1) was arrested
- (2) was busy
- (3) was calm
- (4) was surprised
- 問 2. 空所 (あ) に入れるのに最も適切なものを (1) \sim (4) から 1 つ選び、その番号 を [16] にマークしなさい。
 - (1) deficits
- (2) expenses
- (3) interests
- (4) loans
- 問 3. 下線部《B》の'that'と同じ用法の'that'を下線部 (1) ~ (4) から1つ選び、その番号を [17] にマークしなさい。
- 問 4. 空所 (い) に入れるのに最も適切なものを (1) \sim (4) から 1 つ選び、その番号 を [18] にマークしなさい。
 - (1) confidence
- (2) excuse
- (3) responsibility
- (4) worry

- 問 5. 親が子どもにお金の話をする時機についての Pearl 氏の見解に合致するものを (1) \sim (4) から 1 つ選び、その番号を [19] にマークしなさい。
 - (1) お金の話ができるほどに子どもが成長したのなら、子どもとその話をしてみてもよい。
 - (2) 子どもからお金に関する質問をされるまではその話をするのを待つべきだ。
 - (3) 子どもが高校を卒業する間際になってお金の話をしてもすでに手遅れでなので、その話をするのはあきらめるべきだ。
 - (4) 子どもにお金の話をするのは経済学の博士号を取得できるほどの知識を得てからのほうがよい。
- 問 6. お金に関して本文で勧められている子育ての方法を $(1) \sim (4)$ から 1 つ選び、その番号 を [20] にマークしなさい。
 - (1) 現金を使わずにインターネット上で買い物ができることを子どもに教える
 - (2)子どもがよい学業成績を収めたときには、お小遣いを与えてさらに意欲を引き出す
 - (3)子どもに小遣い帳をつけさせて、親が子どものお金の使い方を把握できるようにする
 - (4) 自分が過去に犯したお金に関する過ちもためらわずに子どもに話す

この後の第4間と第5間は記述用解答用紙に解答しなさい。

第4間 次の英文を読み、後の問いに答えなさい。

It's a good thing that Neanderthals didn't have tartar-control toothpaste. What looks to us like unsightly buildup has turned out to be a goldmine for microbiologists who study human evolution. Hardened plaque harvested from Neanderthals is loaded with genetic material from plants and animals these prehistoric hominins ate, as well as remnants of microbes that reveal a surprising amount about how they lived and even what made them sick.

(A) Researchers extracted the ancient DNA and bacteria from the jaws of three Neanderthal individuals from Belgium and Spain, and described the results in a paper published today in the journal *Nature*. The Belgian individuals ate a heavily meat-based diet, indicated by DNA from wooly rhinoceros and wild sheep. Meanwhile, the Spanish Neanderthal seemed to have eaten mostly vegetable material, including moss, pine nuts, and mushrooms.

Perhaps more intriguing, though, were the microbial riches Weyrich's team found preserved in the calcified plaques: The team recovered DNA from these prehistoric individuals' microbiomes, communities of bacteria and fungi living on and inside their bodies. "It gives us a picture of a wide variety of things they were exposed to in their daily lives, including diseases and the medicines they were using to treat them," says study leader and University of Adelaide microbiologist Laura Weyrich.

For instance, the individual from El Sidrón, Spain, seems to have had some bacterial strains that gave him a hard time, and it's possible (B) the hominin turned to botanicals to treat them. The Spanish Neanderthal was suffering from a dental abscess, possibly caused by a subspecies of the bacterium *Methanobrevibacter oralis*. Poplar found in the sample likely provided salicylic acid—the active ingredient in aspirin—for pain relief.

[*b*]

The idea of looking at tooth plaques for clues about life in ancient times has been around for decades; study co-author Keith Dobney has been working on some form of the technique since the 1980s. But it wasn't until the advent of super high-powered microscopy and precision genetics tools that researchers were able to drill down into prehistoric plaques to really perceive what might be lurking there. Worse, says Weyrich, until the last 10 to 15 years, calcified tartar would routinely be cleaned away from new specimens at museums and labs, because scientists then were more interested in growth and wear patterns on the teeth themselves.

[1

The idea that Neanderthals ate both meat and vegetables or self-medicated with plants isn't strictly new. This study backs up results from earlier examinations of nitrogen isotopes found in tooth enamel and physical plant remains found jammed between their teeth.

[5]

What the various groups were eating may be the key to these differences. And with this ancient reference point, scientists can now better track the way diet impacts the microbiome over time, and how those effects have shaped our evolution.

【 え 】

"(C) Looking at how dietary changes cause changes in the microbiome is really hard to do with modern medicine—you'd have to get millions of people eating the same thing for months on end," Weyrich says. "But using Neanderthals as a model—people who are stuck in one place and limited to the food sources those places provide—we can determine what they were doing that might have caused a change in their microbiome."

[お]

Dobney, an archaeologist with the University of Aberdeen, says he's hopeful that being able to compare post-agricultural biomes with those of prehistoric people can offer ideas for how to combat modern dietary blights. "Microbiomes have evolved over millions of years with us, and we can't live without them," Dobney says. "Obesity, diabetes—these don't come out of nowhere. This will give us some serious insight on how changes in migration and diet have impacted human society."

[力·]

The work could even offer fresh clues to why Neanderthals ultimately died out. "The [Belgian] Neanderthals we looked at were some of the last that existed, so if there's a signal in the changes in their microbiome that contributes to their health, then these are the ones we'd want to look in," Weyrich says.

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Weyrich's group also sequenced the entire genome of the gum-disease causing Methanobrevibacter bacteria—at 48,000 years old, it's by far the oldest bacterial genome sequenced to date. They found that the Neanderthal strain originated around 125,000 years ago, at the time when Homo sapiens and Neanderthals are thought to have been interbreeding. The modern form of this bacterium is transmitted from person to person via saliva, so the find raises interesting questions about how humans and Neanderthals may have interacted during such intimate moments.

"Breeding encounters have often been thought of as brash, rough events, but these are oral microorganisms, transferred through kissing or food-sharing," Weyrich says. "That we're finding them in the mouths of these Neanderthals tells us more about how they would have potentially gotten along with humans. And that's just one microorganism in the mouth."

While there's more work to be done to determine exactly how the bacterium moved across populations, the concept intrigues Lawrence Straus, a University of New Mexico anthropologist who has studied European Neanderthals for 45 years. "It would be truly fantastic to see evidence of the passing of specific bacteria from Neanderthals to Homo sapiens," says Straus. He is also excited to see the advanced toothy techniques applied to other ancient human relatives: "Maybe someone will try to extract bacteria from the calculus of our Red Lady of El Mirón," the famous skeleton of a woman covered in red pigments who died in northern Spain 18,700 years ago.

http://news.nationalgeographic.com/2017/03/neanderthals-teeth-diet-medicine-microbiome-humans-science/

tartar: 歯石 注

microbiome: 細菌叢

botanicals: 植物性薬品

salicylic acid: サリチル酸

nitrogen isotope: 窒素同位体

saliva: 唾液

hominin: ヒト族の個体

fungi: fungus(真菌)の複数形

abscess: 膿瘍

advent: 出現

dietary blight: 食生活に起因する健康問題

brash: 荒っぽい

calculus: 結石(歯石)

intriguing: 興味深い

poplar: ポプラ

specimen: 標本

El Sidrón: エル・シドロン洞窟

- 問 1. 下線部《A》のような研究の実施は最近になってようやく可能になったのだが、それはどのような技術的進歩があったためか、本文の内容に即して日本語で答えなさい。
- 問 2. 下線部《B》が述べていることの具体的な内容を本文に即して日本語で説明しなさい。
- 問3. 下線部《C》が述べている内容を日本語で答えなさい。
- 問 4. Weyrich らの研究はネアンデルタール人の絶滅についての新たな手がかりになるかも しれない。その理由を本文の内容に即して日本語で答えなさい。
- 問 5. ネアンデルタール人とホモ・サピエンスとの間には交雑があったと考えられているが、 Weyrich らの研究によって、その交雑の在り方について新しい見解が生まれてきた。 それはどのような見解か、本文の内容に即して日本語で答えなさい。
- 問 6. 次の (1) と (2) の段落はそれぞれ本文のどの位置に置くのが最も適切か、【あ】~【き】 の記号で答えなさい。
 - (1) The individual was also dealing with diarrhea and vomiting caused by a different pathogen, *Enterocytozoon bieneusi*, and may even have turned to antibiotic-producing molds for treatment. Genetic material from *Penicillium rubens* was found on plant matter in this Neanderthal's teeth.

注 diarrhea: 下痢 vomiting: 嘔吐 pathogen: 病原体 mold: カビ

(2) What really grabbed Weyrich and her group in the new data was the fact that the meat-eaters' overall microbiomes differed from the vegetarian's, and that they differed altogether from the microbiomes that live inside modern humans.

第5間 次の英文を読み、下線部 (1)~(4) の日本語の内容を英語にしなさい。

Seasonings make good food taste better, and Japanese kitchens use many. (1) <u>醤油と味噌の</u>製造技法は、日本が変化に富む気候を持ち、その原料の宝庫であることを利用したものである。 *Kombu* seaweed, dried bonito fish and other nutritious foods are used to make various types of stock that have become essential to Japanese cuisine. Seasonings have a long tradition and are still made with care and respect for the past.

Like soy sauce, miso (fermented soybean paste) is a very common flavoring, so common today that it is still used almost every day to make miso soup. In the old days it was made by hand in many homes. It hides the smell of fish or meat while giving the food more punch, and this is why it is often used in pot dishes cooked at the table and in stews.

Miso is made by steaming soybeans, salting and crushing them, then mixing them with a fermenting agent called *koji* mold.

The koji is first cultivated on soybeans, rice, barley or some other grain. The mixture is fermented and aged for several months, or even a year or so.

Miso manufacturing techniques are said to have come from China more than 1,300 years ago, and over the centuries many varieties have been produced throughout Japan. Three major varieties are *kome-miso*, *mugi-miso*, and *mame-miso*.

(2)米味噌は最も広く使われているものだが、地域によって色や味が異なる。In colder parts of the country people tend to prefer a darker color and a higher salt content, while in the warmer south they go for a lighter color and a milder taste. *Shinshu-miso*, made in many places in Nagano Prefecture, sells throughout Japan and has the highest market share—it accounts for more than 30% of national production. It is favored for its pale color and light taste—lighter than you would expect for a fairly salty miso—and it goes well with other types of miso.

Maruyama Takashi is the fourth-generation owner of Maruyama Miso Manufacturing, a traditional maker in Azumino, Nagano Prefecture. He explains, "People say that Nagano's miso tastes best. I suppose that's because the water and air are pure, and because the climate is ideal—we are at a fairly high altitude and surrounded by mountains, so we have cold winters, warm summers, and excellent spring and fall weather."

His company has followed the same manufacturing techniques since it was founded a century ago. (3)大豆は地元の契約農家から仕入れ、ガスや石油は使わずに、初代が作った 竈 (かまど) で薪を焚いて蒸す。"A wood fire gives off a soft, natural heat that lets the soybeans keep their nice flavor. We're just a small business, so I guess that's why we can do it the old-fashioned way," he grins. "(4)私たちは、ずっと変わることのない独自の味の品を作り続けることで、常連のお客様に本当に価値あるものを提供しています。"

http://web-japan.org/nipponia/nipponia36/en/feature/feature05.html

bonito fish: カツオ stew: 煮物 mold: カビ altitude: 標高