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平成24年度
入学試験問題

英 語

注意：答えはすべて解答用紙に記入しなさい。

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第1問 次の英文を読んで設問に答えなさい。

The 2003 WHO report concluded that the benefits of acupuncture were either ‘proven’ or ‘had been shown’ in the treatment of ninety-one conditions. It was mildly positive or equivocal about a further sixteen conditions. And the report did not exclude the use of acupuncture for any conditions. The WHO had given acupuncture a ringing endorsement, reinforcing their 1979 report.

It would be natural to assume that this was the final word in the debate over acupuncture, because the WHO is an international authority on medical issues. It would seem that acupuncture had shown itself to be a powerful medical therapy. In fact, the situation is not so clear cut. (ア), as we shall see, the 2003 WHO report was shockingly misleading.

The WHO had made ^[A]two major errors in the way that it had judged the effectiveness of acupuncture. The first error was that they had taken into consideration the results from too many trials. This seems like a perverse criticism, because it is generally considered good to base a conclusion on lots of results from lots of trials involving lots of patients — the more the merrier. If, however, (イ), then those particular results will be misleading and may distort the conclusion. Hence, (ウ) had it implemented a certain level of quality control, such as including only the most rigorous acupuncture trials. Instead, the WHO had taken into consideration almost every trial ever conducted, because it had set a relatively low quality threshold. Therefore, (エ).

The second error was that the WHO had taken into consideration the results of a large number of acupuncture trials originating from China, whereas it would have been better to have excluded them. At first sight, this rejection of Chinese trials might seem unfair and discriminatory, but there is a great deal of suspicion surrounding acupuncture research in China. For example, let’s look at acupuncture in the treatment of addiction. Results from Western trials of acupuncture include a mixture of mildly positive, equivocal or negative results, with the overall result being negative on balance. By contrast, (オ). This does not make sense, because (カ). Therefore, (キ). The crude reason for blaming Chinese researchers for the discrepancy is that their results are simply too good to be true. This criticism has been confirmed by careful statistical analyses of all the Chinese results, which demonstrate beyond all reasonable doubt that Chinese researchers are guilty of so-called ^[B]publication bias.

Before explaining the meaning of publication bias, it is important to stress that this is not necessarily a form of deliberate fraud, because it is easy to conceive of situations when it can occur due to an unconscious pressure to get a particular result. Imagine a Chinese researcher who conducts an acupuncture trial and achieves a positive result. Acupuncture is a major source of prestige for China, so the researcher quickly and proudly publishes his positive result in a journal. He may even be promoted for his work. A year later he conducts a second similar trial, but on this occasion the result is negative, which is obviously disappointing. The key point is that this second piece of research might never be published for a whole range of possible reasons: maybe the researcher does not see it as a priority, or he thinks that nobody will be interested in reading about a negative result, or he persuades himself that this second trial must

have been badly conducted, or he feels that this latest result would offend his peers. Whatever the reason, the researcher ends up having published the positive results of the first trial, while leaving the negative results of the second trial buried in a drawer. This is publication bias.

When this sort of phenomenon is multiplied across China, then we have dozens of (ク) positive trials, and dozens of (ケ) negative trials. Therefore, when the WHO conducted a review of the (コ) literature that relied heavily on Chinese research its conclusion was bound to be skewed — such a review could never take into account the (サ) negative trials.

(Simon Singh & Edzard Ernst, *Trick or Treatment?*)

注 acupuncture : はり治療 equivocal : はっきりしない ringing endorsement : 明確な是認
reinforce : 強化する perverse : ひねくれた distort : ゆがめる rigorous : 厳格な
threshold : 閾値、最低基準 discriminatory : 差別的 addiction : 中毒、依存症
discrepancy : くい違い fraud : 詐欺行為 skew : ゆがめる

問 1. 空所 (ア) に入る表現を (a)~(f) の中から 1 つ選び、その記号を答えなさい。

- (a) As a rule (b) Continuously (c) For instance
(d) Fortunately (e) Regrettably (f) Sooner or later

問 2. 空所 (イ) ~ (エ) にはそれぞれ次の 3 つのいずれかが入る。各空所に入るものの記号を答えなさい。

- (a) some of the trials have been badly conducted
(b) the final report was heavily influenced by untrustworthy evidence
(c) the sort of overview that the WHO was trying to gain would have been more reliable

問 3. 空所 (オ) ~ (キ) にはそれぞれ次の 3 つのいずれかが入る。各空所に入るものの記号を答えなさい。

- (a) Chinese trials examining the same intervention always give positive results
(b) either Eastern researchers or Western researchers must be wrong — as it happens, there are good reasons to believe that the problem lies in the East
(c) the efficacy of acupuncture should not depend on whether it is being offered in the Eastern or Western hemisphere (注 efficacy : 効力)

問 4. 空所 (ク) ~ (サ) にはいずれも 'published' か 'unpublished' のいずれかが入る。'published' が入る空所名をすべて○で囲みなさい。

問 5. WHO が 2003 年に発表した報告書に関して適切なものを次の中から 1 つ選び、その記号を答えなさい。

- (a) 1979 年の報告書の結論をくつがえして、はり治療が多くの症状に有効であることを認めた。
- (b) 1979 年の報告書にも述べられていたはり治療に対する懐疑的な態度を、より明確な否定にまで強めた。
- (c) 従来 of 多くの研究を検討した結果、はり治療の有効性は広範に認められるという肯定的な評価を下した。
- (d) はり治療の効果を強調しすぎる傾向に対して、有効ではないケースがあることを示して注意を喚起した。
- (e) はり治療はどのような症状に対して有効であり、どのような症状に対しては有効ではないかを示した。

問 6. 下線部 A の「2 つの間違い」とは何か。次の中から 2 つ選び、その記号を答えなさい。

- (a) 行われた研究の質を十分考慮することなく、ただ数を多く集めて結論を出してしまったこと。
- (b) 肯定的な結果だけを重視して、否定的な結果を軽視してしまったこと。
- (c) 欧米で行われた研究を重視して、中国での研究を十分に考慮しなかったこと。
- (d) 中国で行われた研究を欧米で行われた研究と平等に扱ってしまったこと。
- (e) わずかな数の研究の結果から性急に一般的な結論を導き出してしまったこと。

問 7. 下線部 B の publication bias とはなにか。次の中から適切なものを 1 つ選び、その記号を答えなさい。

- (a) 同じ内容の論文でも、有力な雑誌に発表されると高く評価され、無名の雑誌に掲載されると無視されてしまう傾向。
- (b) 肯定的な結果が出た場合には論文として発表されるが、否定的な結果が得られた場合には発表されずに終わってしまうという傾向。
- (c) 肯定的な内容の発表は注目されるが、否定的な内容の発表は無視されがちであるという傾向。
- (d) 最初に行った研究の結果は発表するが、確認のために二度目に行った研究の結果は発表されないことが多いという傾向。
- (e) 雑誌の編集者の考えが影響して、掲載される論文の内容に偏りが生じてしまうという傾向。

空白ページ

第2問 次の英文を読んで設問に答えなさい。

Hara hachi bu, the Okinawan people's habit of eating only till they are 80 percent full, is thought to be one of the secrets of their extraordinary health and longevity. (ア) having one of the highest percentages of people in the world who live past 100, Okinawans [A] appear to be less prone to heart disease, diabetes and obesity.

Indeed, ever since it was discovered in the 1930s that laboratory rats fed a caloric-restricted (CR) diet 《 あ 》, scientists have [B] pursued caloric restriction research in the hopes of finding novel strategies for extending human life and preventing disease. Given the growing older population at risk for memory problems and the rising rates of obesity, the role of diet in maintaining peak brain performance has taken on added importance.

(イ) the links between caloric restriction and longevity are still not fully proven in humans, short-term human trials have clearly shown that CR can improve many vital surrogate health markers, such as body weight, blood pressure, blood sugar and insulin levels, blood cholesterol and triglyceride levels, and measures of inflammation. High insulin levels and inflammation have both been linked to cognitive problems. In mice, reducing calories also promotes neurogenesis and slows certain Alzheimer's-related changes in parallel with reductions seen in blood insulin and inflammation. (ウ), there is great interest in examining the effects of CR on brain health in humans and in comparing its effects with those of other diets (for example, diets rich in healthier unsaturated fats) that may also help memory.

A recent study on caloric restriction and memory led by the neurologist Agnes Floel and her colleagues at the University of Munster took the first step in examining this issue. They recruited 50 older (ages 50 to 80 years) adults with a normal memory. Subjects on average were slightly overweight. The researchers [C] assigned the volunteers to three groups, based on their age, gender and weight. Group 1 got a diet with 30 percent reduced daily calories and normal levels of other essential nutrients; the minimal level was set at 1,200 calories daily to [D] prevent malnourishment. Group 2's diet had 20 percent increased unsaturated fatty acids with no increase in total fat — thus boosting the ratio of healthy (unsaturated) to unhealthy (saturated) fats. The control was Group 3 — who had a diet as usual. None of the participants were advised to change their exercise habits. The researchers gave subjects in the first two groups individualized dietary plans and monitored their diet via self-reports. All subjects underwent memory and blood tests before and after the three months in the trial.

At the end of three months, the reduced-calorie diet group showed a small reduction in body weight (by 2.4 kilograms), whereas the other two diet groups showed a slight increase in weight (by about one kilogram). There was, however, a highly significant (about 20 percent above baseline) improvement in the CR group's ability to recall words they had on a list (called delayed recall), and they also made fewer errors. Their memory improvement tended to be correlated with reductions in blood insulin and markers of inflammation (C-reactive protein and TNF-alpha). Memory did not change in the other two diet groups.

This study is commendable because it is the first prospectively planned trial in older adults to demonstrate memory benefits of a low-calorie diet. The replication in humans of some of

the findings seen in earlier animal studies provides an important proof of concept step that will encourage and guide the design of larger future studies. (エ), it demonstrated improvements in the type of memory (delayed recall) that is typically the first to fail in very early stages of Alzheimer's disease.

As with any single center pilot study, this study also has some limitations (many of which the authors acknowledge), such as: small sample size, considerable differences in baseline characteristics of the three groups, unreliability of diet self-reports, the possibility of chance findings from multiple comparisons, greater social contact with subjects in diet groups, and highly variable adherence to diet as evidenced by the small weight loss in the CR group. (オ), the results should be considered preliminary, but promising.

(<http://www.scientificamerican.com/article.cfm?id=caloric-restriction-intelligence>)

注 longevity: 長寿 prone to: ~に罹りやすい diabetes: 糖尿病 obesity: 肥満
 surrogate: 代理の inflammation: 炎症 cognitive: 認知の neurogenesis: 神経発生
 unsaturated fat: 不飽和脂肪 neurologist: 神経学者 malnourishment: 栄養不良
 boost: 押し上げる commendable: 称賛に値する replication: 再現 adherence: 厳守

問 1. 空所 (ア) ~ (オ) に入れるのに最もふさわしい語句を選び、それぞれ番号で答えなさい。

- ア: (1) As for (2) Because of (3) In addition to (4) In spite of
 イ: (1) Although (2) As (3) Because (4) If
 ウ: (1) For instance (2) Fortunately (3) However (4) Thus
 エ: (1) Further (2) In other words (3) Nevertheless (4) Unfortunately
 オ: (1) All the same (2) For these reasons (3) Similarly (4) Sooner or later

問 2. 下線部 A~D の各語について、次に指示するそれぞれの形を書きなさい。

A: appear の名詞形

B: pursue の名詞形

C: assign の名詞形

D: prevent の形容詞形

問 3. 空所 《 あ 》 には次の 6 つを並べ替えた表現が入る。(1)~(6) の番号を適切な順序に並べなさい。

- (1) almost (2) as long as (3) lived
 (4) their (5) twice (6) well-fed counterparts

問 4. 二重下線部の 'this issue' が指していることは何かを述べた次の記述の空所に入る適当な日本語を答えなさい。ただし空所 (a) には5~10文字、空所 (b) には5文字まで、空所 (c) には5~10文字の表現を入れること。

人間の場合、(a) は (b) に対してどのような影響を与えるのか、そしてその影響は (c) の場合にも同じかどうか、という問題

問 5. Agnes Floel らの実験結果をまとめた次の表の (1)~(6) の欄を埋めて完成させたい。その効果が見られた欄には○を、見られなかった欄には×を記入するものとしたとき、○の入る欄の番号をすべて答えなさい。

	体重の減少	記憶力の向上
Group 1	(1)	(2)
Group 2	(3)	(4)
Group 3	(5)	(6)

空白ページ

第3問 次の英文を読んで設問に答えなさい。

Although it's risky and hard, seek first to understand, or diagnose before you prescribe, is a correct principle manifest in many areas of life. It's the mark of all true professionals. It's critical for the optometrist, it's critical for the physician. You wouldn't have any confidence in a doctor's prescription unless you had confidence in the diagnosis.

When our daughter Jenny was only two months old, she was sick one Saturday, the day of a football game in our community that dominated the consciousness of almost everyone. It was an important game — some 60,000 people were there. Sandra and I would like to have gone, but we didn't want to leave little Jenny. Her vomiting and diarrhea had us concerned.

The doctor was at that game. He wasn't our personal physician, but he was the one on call. When Jenny's situation got worse, we decided we needed some medical advice.

Sandra dialed the stadium and had him paged. It was right at a critical time in the game, and she could sense an officious tone in his voice. "Yes?" he said briskly. "What is it?"

"This is Mrs. Covey, Doctor, and we're concerned about our daughter, Jenny."

"What's the situation?" he asked.

Sandra described the symptoms, and he said, "Okay. I'll call in a prescription. Which is your pharmacy?"

When she hung up, Sandra felt that in her rush she hadn't really given him full data, but that what she had told him was adequate.

"Do you think he realizes that Jenny is just a newborn?" I asked her.

"I'm sure he does," Sandra replied.

"But he's not our doctor. He's never even treated her."

"Well, I'm pretty sure he knows."

"Are you willing to give her the medicine unless you're absolutely sure he knows?"

Sandra was silent. "What are we going to do?" she finally said.

"Call him back," I said.

"You call him back," Sandra replied.

So I did. He was paged out of the game once again. "Doctor," I said, "when you called in that prescription, did you realize that Jenny is just two months old?"

"No!" he exclaimed. "I didn't realize that. It's good you called me back. I'll change the prescription immediately."

If you don't have ^[A]confidence in the diagnosis, you won't have confidence in the prescription.

This principle is also true in sales. An effective sales person first seeks to understand the needs, the concerns, the situation of the customer. The amateur salesman sells (ア); the professional sells (イ). It's a totally different approach. The professional learns how to diagnose, how to understand. He also learns how to relate (ウ). And, he has to have the integrity to say, "My product or service will not meet that need" if it will not.

(Stephen R. Covey, *The 7 Habits of Highly Effective People*)

注 optometrist：検眼士 prescription：処方 diagnosis：診断 vomiting：嘔吐
diarrhea：下痢 page：呼び出す officious：横柄な briskly：ぶっきらぼうに

問 1. 本文の内容と一致するものを2つ選び、その記号を答えなさい。

- (a) 電話で医師と話したとき伝え忘れたことがあったかと思っただが、医師は分かっていた。
- (b) フットボール場の医師に電話で連絡をして、娘の状態を話して薬を処方してもらった。
- (c) 娘の具合が悪かったので、かかりつけの医師に電話をして薬を処方してもらった。
- (d) 娘の具合が悪かったので、フットボールの試合に行くことをあきらめた。
- (e) 娘の具合は良くなかったが、医師に連絡してからフットボール場に出かけた。

問 2. 本文の内容と一致するものを2つ選び、その記号を答えなさい。

- (a) 調査して考えているばかりではことが進まないの、恐れずに果敢に実践することが必要だ。
- (b) プロの営業マンは、自分の扱う商品が客の求めに合致していない場合には、そのことを客に告げて、無理に売ろうとはしない。
- (c) まず最初に「理解」し、次に「診断」して、最後に「処方」という3段階で進めることが重要だ。
- (d) まず第一に理解することが必要だ、という原則はさまざまな分野に共通して適用可能である。
- (e) 問題点の理解は試行錯誤によって進むので、「診断」と「処方」の繰り返しによって一歩一歩進むことが大切だ。

問 3. 下線部 A の confidence in the diagnosis のために Covey 夫妻がしたことは何か。20 字～30 字の日本語で答えなさい。

問 4. 筆者は、本文中の Covey 夫妻と医師とのやりとりにどのような役割をもたせているか。適切なものを1つ選び、その記号を答えなさい

- (a) 十分な情報がなければ正しい診断を下すことができず、適切な治療ができないことを例に、十分な情報に基づく診断の大切さを述べようとしている。
- (b) 電話での会話であったために医師と患者との間のコミュニケーションがうまくいかなかった例として挙げて、コミュニケーションに必要な要件を説明する導入にしている。
- (c) 夫婦の間での意思疎通がうまくいかなかった例として挙げ、意思疎通をうまくやって人間関係を円滑にする技術を述べようとしている。
- (d) 娘の急病であわててしまい十分な情報を提供することができずに混乱した体験を紹介して、冷静な情報伝達の秘けつを述べようとしている。

問 5. 空所 (ア) ~ (ウ) にはそれぞれ次の3つのいずれかが入る。各空所に入るものの記号を答えなさい。

- (a) people's needs to his products and services
- (b) products
- (c) solutions to needs and problems

問 6. 次の (a), (b) 2つの会話の中から、'diagnose before you prescribe' という原理に則しているものを選び、その記号をすべて書きなさい。ひとつもない場合は「なし」と書きなさい。

- (a) "Put these on," he says. "I've worn this pair of glasses for ten years now and they've really helped me. I have an extra pair at home; you can wear these."

So you put them on, but it only makes the problem worse.

"This is terrible!" you exclaim. "I can't see a thing!"

"Well, what's wrong?" he asks. "They work great for me. Try harder."

"I am trying," you insist. "Everything is a blur."

"Well, what's the matter with you? Think positively."

"Okay. I positively can't see a thing."

"Boy, are you ungrateful!" he chides. "And after all I've done to help you!"

(注 blur : ぼやけた状態 chide : たしなめる)

(Stephen R. Covey, *The 7 Habits of Highly Effective People*)

- (b) "Come on, honey, tell me how you feel. I know it's hard, but I'll try to understand."

"Oh, I don't know, Mom. You'd think it was stupid."

"Of course I wouldn't! You can tell me. Honey, no one cares for you as much as I do. I'm only interested in your welfare. What's making you so unhappy?"

"Oh, I don't know."

"Come on, honey. What is it?"

"Well, to tell you the truth, I just don't like school anymore."

"What?" you respond incredulously. "What do you mean you don't like school? And after all the sacrifices we've made for your education! Education is the foundation of your future. If you'd apply yourself like your older sister does, you'd do better and then you'd like school. Time and time again, we've told you to settle down. You've got the ability, but you just don't apply yourself. Try harder. Get a positive attitude about it."

(注 incredulously : 疑うように)

(Stephen R. Covey, *The 7 Habits of Highly Effective People*)

英語 解答用紙

第1問

問1		問2	イ:	ウ:	エ:
問3	オ:	カ:	キ:	問4	ク ケ コ サ
問5		問6		問7	

第2問

問1	ア:	イ:	ウ:	エ:	オ:
問2	A:			B:	
	C:			D:	
問3					
問4	a:				
	b:				
	c:				
問5					

第3問

問1		問2					
問3							
問4		問5	ア:	イ:	ウ:	問6	