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平成 23 年度

推 薦 入 学  
学 習 能 力 適 性 検 査

英 文 問 題

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。

Modern science can explain a great deal about the world we live in. But there are also numerous facts that have not been explained by science, or at least not explained fully. The origin of life is one such example. We know that about 4 billion years ago, molecules with the ability to make copies of themselves appeared in the primeval soup, and life evolved from there. But we do not understand how these self-replicating molecules got there in the first place. Another example is the fact that autistic children tend to have very good memories. Numerous studies of autistic children have confirmed this fact, but as yet nobody has succeeded in explaining it.

Many people believe that in the end, science will be able to explain facts of this sort. This is quite a plausible view. Molecular biologists are working hard on the problem of the origin of life, and only a pessimist would say they will never solve it. Admittedly, <sup>[あ]</sup> the problem is not easy, not least because it is very hard to know what conditions on earth 4 billion years ago were like. But nonetheless, there is no reason to think that the origin of life will never be explained. Similarly for the exceptional memories of autistic children. <sup>[い]</sup> The science of memory is still in its infancy, and much remains to be discovered about the neurological basis of autism. Obviously we cannot guarantee that the explanation will eventually be found. But given the number of explanatory successes that modern science has already notched up, the smart money must be on many of today's unexplained facts eventually being explained too.

But does this mean that science can in principle explain everything? Or are there some phenomena that must forever <sup>[う]</sup> elude scientific explanation? This is not an easy question to answer. On the one hand, it seems arrogant to assert that science can explain everything. ( ア ), it seems short-sighted to assert that any particular phenomenon can never be explained scientifically. For science changes and develops very fast, and a phenomenon that looks completely inexplicable from the vantage-point of today's science may be easily explained tomorrow.

According to some philosophers, there is a purely logical reason why science ( イ ). For in order to explain something, whatever it is, we need to invoke something else. But what explains the second thing? To illustrate, recall that Newton explained a diverse range of phenomena using his law of gravity. But what explains the law of gravity itself? If someone asks why all bodies exert a gravitational force on each other, what should we tell them? Newton had no answer to this question. In Newtonian science the law of gravity was a fundamental principle: it explained other things, but could not itself be explained. The moral is generalizable. However much the science of the future can explain, the explanations it gives will have to make use of

certain fundamental laws and principles. Since nothing can explain itself, it follows that at least some of these laws and principles will themselves remain unexplained.

Whatever one makes of <sup>[ア]</sup> this argument, it is undeniably very abstract. It purports to show that some things will never be explained, but does not tell us what they are. However, some philosophers have made concrete suggestions about phenomena that they think science can never explain. An example is consciousness — the distinguishing feature of thinking, feeling creatures such as ourselves and other higher animals. Much research into the nature of consciousness has been and continues to be done, by brain scientists, psychologists, and others. But a number of recent philosophers claim that whatever this research throws up, it will never fully explain the nature of consciousness. There is something intrinsically mysterious about the phenomenon of consciousness, they maintain, that no amount of scientific investigation can eliminate.

What are the grounds for this view? The basic argument is that conscious experiences are fundamentally unlike anything else in the world, in that they have a ‘subjective aspect’.

( Samir Okasha, *Philosophy of Science — A Very Short Introduction*, 2002 )

注 primeval soup: 原始スープ	self-replicating molecule: 自己複製する分子
autistic: 自閉症 (autism) の	notch up: 得る、収める
the smart money is on ~: おそらく~になるだろう	throw up: 生み出す

問 1. 下線部 [ア] を日本語に直しなさい。

問 2. 下線部 [イ] の ‘The science of memory is still in its infancy’ が意味している内容として最も適当なものを 1 つ選び、記号で答えなさい。

- (a) 記憶の科学は将来の発展に期待がもてる
- (b) 記憶の科学は信頼できない
- (c) 記憶の科学はまだ子供を研究対象にしている段階だ
- (d) 記憶の科学はまだ動物実験の段階だ
- (e) 記憶の科学はまだ未発達だ

問 3. 下線部 [ウ] の ‘elude’ に置き換えてもほぼ同じ意味になるものを 1 つ選び、記号で答えなさい。

- (a) accept      (b) escape      (c) find      (d) need      (e) offer

問 4. 空所 ( ア ) に入れるのに最もふさわしいものを 1 つ選び、記号で答えなさい。

- (a) At the same time
- (b) In addition to that
- (c) In a similar manner
- (d) In consequence
- (e) On the other hand

問 5. 空所 ( イ ) に入れるのに最もふさわしいものを1つ選び、記号で答えなさい。

- (a) will be able to explain everything
- (b) will be able to explain something
- (c) will never be able to explain anything
- (d) will never be able to explain everything

問 6. 下線部 [え] の 'this argument' が指しているのは、( ) ということを主張する議論である。この ( ) に入る 20 字以内の日本語を答えなさい。

問 7. この文章には、今日の科学では説明しきれていない具体的な問題が 4 つ挙げられている。それらを日本語で書きなさい。

問 8. 前問の 4 つのうち、科学では永遠に説明できないであろうとされているものはどれか。すべて書きなさい。1 つもなければ「なし」と書きなさい。

問 9. 本文に波線を付した次の 8 つの動詞のうち、名詞形にしたときに第 1 アクセントのある位置が移動するものをすべて選び、その記号を答えなさい。1 つもなければ「なし」と書きなさい。

- |             |             |             |              |
|-------------|-------------|-------------|--------------|
| (a) explain | (b) appear  | (c) confirm | (d) discover |
| (e) assert  | (f) develop | (g) exert   | (h) maintain |

## 第2問 次の英文を読んで設問に答えなさい。

Within the economics departments at certain universities, there is a famous but probably apocryphal story about two world-class economists who run into each other at the voting booth.

“What are you doing here?” one asks.

“My wife made me come,” the other says.

The first economist gives a confirming nod. “The same.”

After a mutually sheepish moment, one of them hatches a plan: “If you ( ア ) here, I’ll never tell anyone I saw you.” They shake hands, finish their polling business and scurry off.

<sup>[あ]</sup> Why would an economist be embarrassed to be seen at the voting booth? Because voting exacts a cost — in time, effort, lost productivity — with no discernible payoff except perhaps some vague sense of having done your “civic duty.” As the economist Patricia Funk wrote in a recent paper, “A rational individual should abstain from voting.”

The odds that your vote will actually affect the outcome of a given election are very, very, very slim. This was documented by the economists Casey Mulligan and Charles Hunter, who analyzed more than 56,000 Congressional and state-legislative elections since 1898. <sup>[い]</sup> For all the attention paid in the media to close elections, it turns out that they are exceedingly rare. The median margin of victory in the Congressional elections was 22 percent; in the state-legislature elections, it was 25 percent. Even in the closest elections, it is almost never the case that a single vote is pivotal. Of the more than 40,000 elections for state legislator that Mulligan and Hunter analyzed, comprising nearly one billion votes, only seven elections were decided by a single vote, with two others tied. Of the more than 16,000 Congressional elections, in which many more people vote, only one election in the past one hundred years — a 1910 race in Buffalo — was decided by a single vote.

Still, people do continue to vote, in the millions. Why? Here are three possibilities:

1. Perhaps we are just not very bright and therefore wrongly believe that our votes will affect the outcome.
2. Perhaps we vote in the same spirit in which we buy lottery tickets. After all, your chances of winning a lottery — and of affecting an election are pretty similar. From a financial perspective, playing the lottery is a bad investment. But it’s fun and relatively cheap: for the price of a ticket, you buy the right to fantasize how you’d spend the winnings — much as you get to fantasize that your vote will have some impact on policy.
3. Perhaps we have been socialized into the voting-as-civic-duty idea, believing that it’s a good thing for society if people vote, even if it’s not particularly good for the individual. And thus we feel guilty for not voting.

But wait a minute, you say. If everyone thought about voting the way economists do, we might have no elections at all. No voter goes to the polls actually believing that her single vote will affect the outcome, does she? And isn't it cruel to even suggest that her vote is not worth casting?

This is indeed a slippery slope — the seemingly meaningless behavior of an individual, which, in aggregate, becomes quite meaningful. Here's a similar example in reverse. Imagine that you and your eight-year-old daughter are taking a walk through a botanical garden when she suddenly pulls a bright blossom off a tree.

- ( イ )
- ( ウ )
- ( エ )
- ( オ )

In the old days, there were <sup>[う]</sup> more pragmatic incentives to vote. Political parties regularly paid voters \$5 or \$10 to cast the proper ballot; sometimes payment came in the form of a keg of whiskey, a barrel of flour or, in the case of an 1890 New Hampshire Congressional race, a live pig.

( Steven D. Levitt and Stephen J. Dubner, *Freakonomics*, 2006 )

注 apocryphal: 嘘の sheepish: 恥ずかしそうな hatch: たくらむ scurry off: あわてて走り去る  
discernible payoff: 明確な利益 abstain from voting: 棄権する odds: 可能性  
state-legislative election: 州議会選挙 median margin: 平均差 pivotal: 勝敗を決する  
winnings: 勝利金 in aggregate: 全体として ballot: 投票、投票用紙 keg: 小さい樽

問 1. 空所 ( ア ) には次の 10 語のうち 8 語がある順序で入る。2 番目、5 番目、8 番目に入る語の記号を答えなさい。

- (a) anyone      (b) I      (c) me      (d) never      (e) promise
- (f) saw      (g) someone      (h) tell      (i) to      (j) you

問 2. 下線部 [あ] の問い 'Why would an economist be embarrassed to be seen at the voting booth?' に対して本文ではどのように答えているか。その内容を 30 字から 40 字の日本語で書きなさい。

問 3. 下線部 [い] の 'For all the attention' を別の表現に置き換えるとすれば次のうちどれが最も適当か。1 つ選び、記号で答えなさい

- (a) Because of the attention
- (b) By means of the attention
- (c) For the sake of the attention
- (d) In spite of the attention
- (e) In the case of the attention

問 4. Mulligan と Hunter による調査について、次の A~E の各欄に入る数値を答えなさい。

	連邦議会選挙	州議会選挙
調査数	A	B
1 票差	C	D
同 票		E

問 5. 1 票のもつ意味は軽いのに人々は今も投票を行い、選挙は成立している。その理由として挙げられているものを次の (a)~(j) から 3 つ選び、記号で答えなさい。

- (a) 1 票の意味が軽いというのは誤解で、本当は重要であることを理解しているから。
- (b) 自分の 1 票にも重要な意味があると勘違いしているから。
- (c) 善良な市民であるというふりをするために。
- (d) 投票行為というわずかな「投資」で夢を買えるから。
- (e) 投票に対して金銭的な報酬が得られるばあいもあるから。
- (f) 投票は市民が歴史的に獲得した権利であり、それを無駄にしたくないから。
- (g) 投票は社会の一員としての市民の義務だと思うから。
- (h) 投票を促すキャンペーンに影響されているから。
- (i) マスコミの選挙報道の騒ぎをゲーム感覚で楽しむため。
- (j) 立候補者からの投票してくれという圧力があるから。

問 6. 空所 ( イ ) ~ ( オ ) には、それぞれ次のいずれかが入る。各空所に最もふさわしいものを選び、記号で答えなさい。

- (a) "Yeah, but everybody isn't picking them," she says with a look. "Only me."
- (b) "You shouldn't do that," you find yourself saying.
- (c) "Well," you reason, "because if everyone picked one, there wouldn't be any flowers left at all."
- (d) "Why not?" she asks.

問 7. 下線部 [う] の 'more pragmatic incentives to vote' が指している具体的な内容を、15 字以内の日本語で答えなさい。

