I. 次の文章に関して、空欄補充問題と読解問題の二つがあります。まず、[1]から[20]の空所を埋めるのに、文脈的に最も適切な語を1から3の中から選び、その番号を解答欄（1）から（20）にマークしなさい。次に、内容に関する[21]から[30]の設問には、1から4の選択肢が付されています。そのうち、文章の内容からみて最も適切なものを選び、その番号を解答欄（21）から（30）にマークしなさい。

1 Three men serving time in Israeli prisons recently appeared before a Jewish Israeli parole* judge. The three prisoners had completed at least two-thirds of their sentences, but the parole board granted freedom to only one of them. Guess which one:

Case 1 (heard at 8:50 a.m.): An Arab Israeli serving a 30-month sentence for fraud.
Case 2 (heard at 3:10 p.m.): A Jewish Israeli serving a 16-month sentence for assault.
Case 3 (heard at 4:25 p.m.): An Arab Israeli serving a 30-month sentence for fraud.

2 There was a pattern to the judge's decisions, but it wasn't related to the men's [1](1. educational 2. ethnic 3. employment) backgrounds, crimes or sentences. It was all about timing, as researchers discovered by analyzing more than 1,100 parole decisions. Judges approved parole in about a third of the cases, but the probability of being paroled fluctuated [2](1. minimally 2. wildly 3. randomly) throughout the day. Prisoners who appeared early in the morning received parole about 70 percent of the time, while those who appeared late in the day were paroled less than 10 percent of the time. As a result, it was only the man at 8:50 a.m. who was set free that day, even though the man at 4:25 p.m. had committed the same crime with the same sentence.

3 There was nothing malicious or even unusual about the judges' behavior, however. Their erratic judgment was actually due to the occupational [3](1. hazard 2. privilege 3. duty) of decision fatigue. No matter how rational you try to be, you can't make decision after decision without paying a biological price. It's different from ordinary physical fatigue—you're not consciously aware of being tired—but you're low on mental energy. The more choices you make throughout the day, the harder each one becomes for your brain, and eventually it looks for shortcuts, resulting in poor or irrational decisions—or simply the decision to do nothing at all, as in the case of the parole judges.

4 Decision fatigue is the newest discovery [4](1. challenging 2. involving 3. intensifying) a phenomenon called ego depletion, a term coined in honor of Sigmund Freud's idea that the ego depended on the transfer of energy. This idea was generally ignored until the end of the century, when an American researcher named Roy Baumeister began studying mental discipline with his graduate students.

5 At first they weren't concerned with routine decision-making, but then a postdoctoral fellow, Jean Twenge, started working at Baumeister's laboratory right after planning her wedding. As Twenge studied the results of the lab's ego-depletion experiments, she remembered how [5](1. exhausted 2. invigorated 3. selfish) she felt the evening she and her fiancé registered for wedding gifts. Did they want plain white plates or something with a pattern? Which brand of knives? How many towels? What kind of sheets? How many threads per square inch?

6 "By the end, you could have [6](1. changed 2. talked 3. invited) me into anything," Twenge told her new colleagues. The symptoms sounded familiar to them too, and gave them an idea. They purchased a range of simple products and presented them to their experimental subjects. The subjects were told that, in return for doing the experiment, they would [7](1. have 2. expect 3. get) to keep one item at the end of the experiment, but first they had to make a series of choices. Would they prefer a pen or a candle? A vanilla-scented candle or an almond-scented one? A candle or a T-shirt? A black T-shirt or a red T-shirt? [8](1. Meanwhile 2. Furthermore 3. All the same), a control group of "nondeciders" spent an equally long period contemplating all these same products without having to make any choices. Afterward, all the participants were given a common test of self-control: holding your hand in ice water for as long as you can. The impulse is to pull your hand out, so self-discipline is needed to keep the hand underwater. The deciders gave up much faster; they lasted 28 seconds, less than half the 67-second average of the nondeciders. Making all those choices had apparently [9](1. bolstered 2. restored 3. sapped) their willpower. They had decision fatigue.

7 It turns out that once you're mentally depleted, you become reluctant to make trade-offs. If you're shopping, you're liable to look at only one dimension, like price: "just give me the cheapest." Or you indulge yourself by looking at quality: "I want the very best." Decision fatigue leaves you [10](1. indifferent 2. vulnerable 3. resistant) to marketers who know how to time their sales.

8 Shopping can be especially tiring for the poor, who have to struggle continually with trade-offs. Most of us in developed countries won't spend a lot of time agonizing over whether we can afford to buy soap, but it can be a depleting choice in rural India. An economist offered people in 20 villages in northwestern India the chance to buy a couple of bars of brand-name soap for the equivalent of less than 20 US cents. It was a [11](1. scant 2. shallow 3. steep) discount off the regular price, yet even that sum was a strain for the people in the 10 poorest villages. Whether or not they bought the soap, the act of making the decision left them with less

willpower, as measured afterward in a test of how long they could squeeze a hand grip. In the slightly more [12](1. sanitary 2. affluent 3. determined) villages, people's willpower wasn't affected significantly. Because they had more money, they didn't have to spend as much effort weighing the merits of the soap versus, say, food or medicine.

9 Researchers argue that this sort of decision fatigue is a major factor trapping people in poverty. [13](1. Although 2. Until 3. Because) their financial situation forces them to make so many trade-offs, they have less willpower to devote to school, work and other activities that might get them into the middle class. Study after study has shown that low self-control correlates with low income as well as with a host of other problems. Lapses in self-control have led to the notion of the "undeserving poor"—epitomized by the image of the welfare mom using food stamps to buy junk food—but researchers urge sympathy for someone who makes decisions all day on a [14](1. tight 2. narrow 3. tense) budget. In one study, it was found that when the poor and the rich go shopping, the poor are much more likely to eat during the shopping trip. This might seem like confirmation of their weak character, but if a trip to the supermarket induces more decision fatigue in the poor than in the rich—because each purchase requires more mental trade-offs—by the time they reach the cash register, they'll have less willpower left to resist the chocolate bars and candies displayed there. Not for [15](1. anything 2. something 3. nothing) are these items called "impulse purchases."

10 This isn't the only reason that sweet snacks are featured prominently at the cash register. With their willpower reduced, people are especially vulnerable to anything offering a quick hit of sugar. While supermarkets figured this out a long time ago, only recently did researchers discover [16](1. how 2. why 3. when).

11 The brain, like the rest of the body, derives energy from glucose, the simple sugar manufactured from all kinds of foods. To establish whether this could cause an improvement in self-control, researchers at Baumeister's lab tried refueling the brain in a series of experiments involving lemonade mixed either with sugar or with a diet sweetener. The sugary lemonade provided a burst of glucose; the sugarless variety tasted quite similar without providing the same burst of glucose. Again and again, the sugar restored willpower, but the artificial sweetener had no effect. The glucose would at least [17](1. mitigate 2. instigate 3. eradicate) the decision fatigue and sometimes completely reverse it. The restored willpower improved people's self-control as well as the quality of their decisions; they resisted irrational bias when making choices, and when asked to make financial decisions, they were more likely to choose the better long-term strategy instead of going for a quick payoff.

12 The benefits of glucose were [18](1. unmistakable 2. inconsequential 3. unobservable) in the study of the Israeli parole board mentioned at the beginning of this article. In midmorning, the parole board would take a break, and the judges would be served a sandwich and a piece of fruit. The prisoners who appeared just before the break had only about a 20 percent chance of getting parole, but the ones appearing right after had around a 65 percent chance. The odds dropped again as the morning wore on, and prisoners really didn't want to appear just before lunch: the chance of getting parole at that time was only 10 percent. After lunch it soared up to 60 percent, but only [19](1. somewhat 2. briefly 3. nominally). Remember that Jewish Israeli prisoner who appeared at 3:10 p.m. and was denied parole from his sentence for assault? He had the misfortune of being the sixth case heard after lunch. But another Jewish Israeli prisoner serving the same sentence for the same crime was lucky enough to appear at 1:27 p.m., the first case after lunch, and he was rewarded with parole. It must have seemed to him like a fine example of the justice system at work, but [20](1. in addition 2. in actuality 3. in sum), it probably had more to do with the judge's glucose levels than the details of his case.

Note:

* parole: the release of a prisoner before the completion of a sentence, on the promise of good behavior

—Based on John Tierney (2011, August 17). "Do You Suffer From Decision Fatigue?" *The New York Times.*

[21] Why does the 1st paragraph make note of whether the men were Jewish Israeli or Arab Israeli?

1. To add human interest to the article.
2. It might adversely affect the judge's ruling.
3. To show that some of the men were foreigners.
4. Jewish and Arab cultures think about time differently.

[22] What reason does the article suggest for the man from Case 2 being denied parole?

1. He had not completed enough of his sentence.
2. He was the victim of ethnic discrimination.
3. He had his hearing at the wrong time.
4. He was a dangerous violent offender.

[23] According to the article, who coined the term "decision fatigue?"

1. It is not stated.
2. Sigmund Freud
3. Roy Baumeister
4. Jean Twenge

[24] Why did the "nondeciders" discussed in the 6th paragraph find it easier to keep their hands in the ice water?

1. They were naturally more strong-willed.
2. They had not made any decisions.
3. They were reluctant to make any trade-offs.
4. They were not trying to keep any products.

[25] Using the phenomenon described in the article, how could marketers take advantage of customers?

1. By announcing a surprise early-morning sale.
2. By emphasizing the trade-offs between price and quality.
3. By beginning an unannounced sale late in the day.
4. By offering expensive products at low prices.

[26] Which of the following is the best summary of the problem addressed in the 8th and 9th paragraphs?

1. Rich people often look down on poor people for their poor hygiene without appreciating the cost of toiletries.
2. Rich people often look down on poor people, thinking that they simply lack willpower, without understanding their difficult lives.
3. Poor people are poor because they have weak characters, which causes many problems in their personal and financial lives.
4. Poor people have less willpower due to the strain of living in poverty, which makes it difficult to succeed.

[27] Which of the following is ***NOT*** a reason that supermarkets place chocolate and candy near the cash register, according to the article?

1. People with decision fatigue will be enticed into buying them.
2. Decisive people will be enticed into buying them.
3. People often crave sugar when they are mentally depleted.
4. Supermarkets have many years of experience recommending this.

[28] What was the purpose of the experiment described in the 11th paragraph?

1. To determine if artificial sweeteners produce glucose.
2. To determine if lemonade helps people think.
3. To determine if sweet drinks make it hard to think.
4. To determine if glucose helps tired people think.

[29] What did the author mean in the 12th paragraph when he suggested that "prisoners really didn't want to appear just before lunch"?

1. The judge was getting hungry and likely looking forward to his midmorning snack.
2. The judge's glucose levels were low and he was less likely to make good decisions.
3. The probability of being found guilty at that time was very high.
4. The probability of being denied parole at that time was very low.

[30] Which of the following is the best summary of the research presented in the article?

1. Ego depletion is an important new field of research, with applications to marketing, poverty relief, and criminal justice.
2. Ego depletion is a serious problem that allows companies to take advantage of shoppers, causes the poor to make bad choices, and undermines court rulings.
3. Every time we make a decision, we lose willpower, hurting our ability to avoid trade-offs; this can, however, be helped by periodically eating when making decisions.
4. The more decisions we make, the more mental energy we lose, hurting our ability to make good decisions; this can, however, be helped by consuming sugar when making decisions.

II. 次の文章に関して、空所補充問題と読解問題の二つがあります。まず、[31]から[50]の空欄を埋めるのに、文脈的に最も適切な語を1から3の中から選び、その番号を解答欄(31) から (50)にマークしなさい。次に、内容に関する[51]から[60]の設問には、1から4の選択肢が付されています。そのうち、文章の内容からみて最も適切なものを選び、その番号を解答欄(51)から(60)にマークしなさい。

1 The environment is arguably an invention of our imagination. What we know from experience of much of the world, moreover, is related to us through stories, conventions, and ideas that we learn from other people. Processes and transitions are captured in conceptual terms that are fundamentally symbolic and abstract. This is as true for modern urban residents as it is for forest-dwelling agriculturists, perhaps more so. Ideas about nature inevitably reflect our social world. This is the basic claim of constructivism.

2 In its most radical form, "hard" constructivism [31](1. takes 2. puts 3. gets) this symbolic and ideational character of environmental knowledge extremely seriously. It insists that it is social context alone that conditions and determines our concepts for understanding the world, and [32](1. here 2. so 3. there) creates the world, at least effectively, in the process. This position suggests that things are true because they are held to be true by the socially powerful and influential, because they are true on television, and because they are true in our minds. As philosopher of science Steve Woolgar insists, "nature and reality are the by-product rather than the pre-determinants of scientific activity." Environmental conflicts are, therefore, struggles [33] (1. over 2. without 3. around) ideas about nature, in which one group prevails, not because they hold a better or more accurate account of a process—soil erosion, global warming, ozone depletion— but because they access and mobilize social power to create consensus on the truth.

3 For most political ecologists, this approach is somewhat too sharp a double-edged sword. While it [34](1. defies 2. undergoes 3. allows) a critical examination of how politically empowered environmental science has influenced and created the environments of the world around us, which is an important political ecological project, this approach does not allow us to make [35](1. adaptations 2. contributions 3. references) to non-human actors and processes (like soil, trees, and climate) in explaining outcomes. This makes hard constructivism unattractive to many researchers. While producing a valuable open space for accepting and appreciating alternative constructions of the environment held by other social communities, like forest dwellers, nomadic herders, and religious philosophers, this approach makes the symbolic systems of humans [36](1. sovereign 2. go 3. carry) over all other reality, apparently disabling empirical investigation in traditional environmental science.

4 As a result, most political ecologists tacitly cling to a "softer" form of constructivism, which holds that our concepts of reality are real and have force in the world, but that they reflect incomplete, incorrect, biased, and false understandings of an empirical reality. In other words, the objective world is real and independent of our [37](1. sophistication 2. categorization 3. cohabitation), but filtered through subjective conceptual systems and scientific methods that are socially conditioned. [38](1. Within 2. Without 3. By) this approach to constructivism, there are differing emphases, which center attention either on people's misunderstanding of objective facts or on the social biases that enter into scientific exploration.

5 In the first case, false and socially biased categories of the world, like "race," are important to understand and explore even while their reality—consistent, racially-differentiated genetic differences—does not objectively exist. Since people hold them [39](1. importantly 2. experimentally 3. experientially), these concepts or social constructions make a difference in the world, often with harmful effects, and therefore need to be understood. This "social object" approach to nature is attractive for political ecologists, who are able to assume that ecological science can reveal real environmental trends, like soil erosion, while social investigation can show how ignorant people can create false pictures of the world through power-laden social processes. This approach is satisfactory for most researchers since they consider themselves scientists. They can insist that their way of seeing the problem, using the tools of science, helps to unmask biased and incorrect views of nature.

6 The confidence that such an approach places in scientific practice, however, is highly problematic. As radical constructivists persuasively point out, and as [40](1. revealing it 2. is revealed 3. having revealed it) in histories of science, the very categories of scientific investigation are the same order of "social object" as the false commonsensical notions of the lay population.

7 The history of ecology is revealing in this respect. The dominant theories of the operation of natural systems have consistently reflected the prevailing social languages and assumptions of their times. [41](1. Underachieving 2. Culminating 3. Emerging) during the high industrial age, the science of ecology came to depend heavily on metaphors and concepts from mechanical engineering, with orderly, cyclical processes structured around balance and symmetry. It also [42](1. laid 2. drew 3. carried) heavily, and somewhat contradictorily, upon philosophical Romanticism and the obsession with holism and interdependence, as is found in Romantic writers like Henry David Thoreau. These metaphors, on which science depends, became unsatisfactory in recent years, either because they reflected reality poorly, or didn't fit changing

social and cultural codes and now are in a state of [43](1. satisfaction 2. agreement 3. upheaval).

8 This should be in no way surprising, ecologist Daniel Botkin insists: Previous views of nature, either as an organic [44](1. food 2. element 3. whole) or as a divinely ordered house, clearly reflected the social languages available to those who sought to explain nature's order. So too, the history of primatology,* studied in careful detail by Donna Haraway, shows similar socially-bounded evolution; the changing topics of explorations and experiments on chimpanzees and gorillas (maternal instinct, aggression, competition) reflect the social concerns of their historical moment. It reads more like a history of contemporary American culture than orderly evolution of animal ethology.** Our scientific ideas of nature inevitably reflect the social conditions and dominant metaphors in which they were formed. This is not necessarily bad. With changing metaphors come emerging ways of thinking about and [45](1. reproducing 2. reinventing 3. reaching) the world. Science is not free of "social objects."

9 An alternative soft constructivist approach, "social institutional constructivism," allows that such biases are a structural part of scientific practice, but that they nevertheless do not solely determine the conditions of the objective material world. [46](1. Rather 2. Moreover 3. Hence), these conceptual biases in science help to explain why science sometimes gets facts wrong. For social institutional constructivists, wrong ideas about nature are a product of the inevitable "socialness" of scientific communities. Over time, however, and through progressive experimentation and refutation, the "social" ideas are purged from our understanding of nature, moving towards a true understanding of the objects of the natural world. This is especially true, a social institutional constructivist might argue, as contemporary ecology and life sciences become more and more reflexive about the metaphors that [47](1. understand 2. underpin 3. underestimate) their analysis of objective systems.

10 As an approach to political ecology, this is perhaps the most common and attractive compromise. Knowledges are all different, most researchers maintain, and different experiences, like those of biologists, herders, historians, farmers, and foresters, [48](1. counter-intuitively 2. are unlikely to 3. do indeed) produce extremely different categorical structures for interpreting the objective realities of the natural world. Even so, these knowledges can be examined by incorporating local ways of knowing into a flexible but rigorous scientific framework, which will distill myths from realities and produce better, more emancipatory knowledge. [49](1. Acknowledging 2. Refuting 3. Reinforcing) the socially situated character of science, the method can still be used to test contested claims.

11 This approach is a pragmatic compromise but is troubling for many observers of science and politics. From a philosophical and historical point of view, it is somewhat unconvincing and asymmetrical; social institutional constructivism insists that only falsehoods, those situations where scientific facts are wrong, can be explained socially, whereas facts and true understandings of nature have no social component.

12 For some political ecologists who are most definitely interested in how environmental concepts become powerful and true, this might be quite unsatisfactory. Such an approach only functions to explain things that we believe to be "wrong," including the dominant account of nature, and only if we are [50](1. already 2. still 3. far from) confident that whatever the claims are, they are wrong, and scientifically untrue. Generally this means that the claims of others ("enemies" like state oil conservationists, World Bank officers, or seed company representatives) can be disposed of as "constructions," while the claims of other parties ("allies" like local herders or fishermen) are held up as environmental "knowledge." Where even those allies' knowledges fail the practical tests of science—whatever that is taken to mean—they too become constructions.

Note:

* primatology – the scientific study of primates such as gorillas and chimpanzees

** ethology – the branch of zoology that studies the behavior of animals in their natural habitat

–Based on Paul Robbins (2012). *Political Ecology* (2nd Ed.). Wiley-Blackwell, pp. 127-134.

[51] Which of the following best represents the author's position about the constructivist approach or constructivism in political ecology?

1. Whatever type of constructivism is used, studying the construction of nature is difficult and presents complex methodological problems.
2. The constructivist approach is more viable than orthodox scientific approaches to account for ecological problems.
3. The scientific approach should be improved to minimize the impact of the constructivist approach in the field.
4. A clear line needs to be drawn between the constructivist approach and the scientific investigation, because there is no compromise.

[52] What does Steve Woolgar mean by "nature and reality are the by-product rather than the pre-determinants of scientific activity" in the 2nd paragraph?

1. Science deals with nature independently, but reality is not the same as nature.
2. Nature and reality are the objective targets of scientific investigation.
3. Neither nature nor reality exists as an objective entity.
4. Scientific studies distinguish what is real from what is merely conceptual.

[53] With reference to the 2nd and the 3rd paragraphs, the author uses the term "politically empowered environmental science" to mean that

1. politicians support environmental science in order to give power to it.
2. environmental science is not immune to power structure.
3. politics makes environmental science more powerful.
4. environmental science is politically influential.

[54] Which of the following does ***NOT*** fit the author's description of "hard constructivism"?

1. There should be alternative views and constructions of the world if people have different perspectives.
2. The truth about the world is not given, but rather something that is produced by the people who are socially powerful and influential.
3. Our conception of world is symbolically constructed in a social context, but it is objective, scientific facts that determine the validity of such constructions.
4. Mass media contributes to social constructions of the world and consensus-making on the "truth."

[55] Which of the following best summarizes the 5th paragraph?

1. Political ecologists have to be careful about false understandings of our reality brought by the "social object" approach. Otherwise, their scientific study can be misled.
2. The "social object" approach shows that people can have an erroneous conception of the world. It is the tools of science that give us true understandings of the world.
3. The "social object" approach is effective in dealing with social concepts such as "race," but it does not hold in the area of political ecology.
4. Political ecologists are aware that ecological science must be at the heart of their research, but people's false understandings of the world make their scientific research difficult to carry out.

[56] In the 7th paragraph, the author refers to "metaphors" to illustrate that

1. theoretical creativity and originality come from interesting metaphors as revealed by careful studies of metaphors in science.
2. theories based on metaphors do not have solid empirical ground and should not be accepted unconditionally.
3. if the prevailing metaphor changes, then the scientific community must fight against it.
4. the history of ecology has been influenced by the dominant metaphors of the times.

[57] The history of primatology is mentioned in the 8th paragraph in order to illustrate that

1. the scientific study of gorillas and chimpanzees has followed a socially conditioned path similar to the case of political ecology.
2. the topics of exploration in primatology have been discussed within the framework of cultural studies.
3. primatology and political ecology have used semantically similar metaphors when framing theories in their respective fields.
4. primatology has given political ecologists insightful ideas when they develop their thinking about the world.

[58] The phrase "the inevitable 'socialness' of scientific communities" in the 9th paragraph means that when they develop their theories, scientists

1. can escape from the reality of being members of a social community.
2. must become aware of the social power over their communities.
3. must emphasize the roles of a society in which they live.
4. cannot be free from the influence of social construction.

[59] Which of the following is stated in the 9th and 10th paragraphs as a claim of "social institutional constructivism"?

1. People categorize the world according to their own interests, and scientific knowledge is one type of categorization.
2. Science and social constructivism are essentially different practices, and do not permit a compromise between the two.
3. Life science and contemporary ecology are the areas of investigation which are socially institutionalized.
4. Due to its conceptual biases, social institutional constructivism cannot attain a true understanding of nature.

[60] The main idea of the 12th paragraph is that the constructivist approach

1. lacks a set of solid criteria to differentiate scientific facts from social constructions, and hence can be used arbitrarily.
2. highlights the social aspect of knowledge more strongly than the scientific aspect of knowledge, and thus produce social biases.
3. operates in such a way as to rationalize the claims of those who do not maintain the dominant account of nature, and thus encourages a power struggle.
4. has an important function of telling what is wrong from what is right in a variety of claims about ecological concerns, thus functioning as Occam's razor.

2013(平成25)年度　総合政策学部　問題訂正

教科・科目	誤	→	正	
英語	p.6　I [23] 2. Sigmund Freud 3. Roy Baumeister 4. Jean Twenge	→	p.6　I [23] 2. Sigmund Freud. 3. Roy Baumeister. 4. Jean Twenge.	ピリオドをつける
	p.12　II [54] 3. Our conception of world is …	→	p.12　II [54] 3. Our conception of the world is …	
数学 および 英語	p.7　I [23] 2. Sigmund Freud 3. Roy Baumeister 4. Jean Twenge	→	p.7　I [23] 2. Sigmund Freud. 3. Roy Baumeister. 4. Jean Twenge.	ピリオドをつける