2020 － 3

医学部医学科英語入試問題

下記の注意事項をよく読んで解答してください。

◎注意事項

1. 配付された問題冊子および解答用マークシートに，それぞれ受験番号(4桁)ならびに氏名を記入し，解答用マークシートの受験番号欄に自分の番号を正しくマークしてください。
2. マークには必ずHBの鉛筆を使用し，濃く正しくマークしてください。
   記入マーク例：良い例 ●
   悪い例 ⊘ ① ⊘ ⊙
3. マークを訂正する場合は，消しゴムで完全に消してください。
4. 所定の記入欄以外には何も記入しないでください。
5. 解答用マークシートを折り曲げたり，汚したりしないでください。
6. 「止め」の合図があったら，問題冊子の上に解答用マークシートを重ねて置いてください。

(受験番号のマークの仕方)

受験番号			
千	百	十	一
0	0	1	2

受験番号			
千	百	十	一
●	●	⓪	⓪
①	①	●	①
②	②	②	●
③	③	③	③
④	④	④	④
⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨

受験番号 [　　]　氏　名 [　　]

問　題

1 次の英文を読み，設問1．～15．に最も適した答えをa．～d．の中から一つ選べ。

1 You can change your biology by taking medications, or you can change the instruction manual that coded how to build your body. That manual is DNA. There are two ways to tinker with DNA: somatic gene therapy and germ-line therapy. Somatic gene therapy is tinkering with the DNA a person already has in nonreproductive cells; it affects only the current individual. Germ-line therapy is tinkering with the DNA in sperm, eggs, or embryos, so that every cell in the future adult organism has the new DNA, including the reproductive cells. That means the change is passed on to future generations.

2 Stanley Cohen of Stanford University and Herbert Boyer, then at the University of California, San Francisco, met in Hawaii. They attended a conference on bacterial plasmids in 1972. A plasmid is a DNA molecule, usually in the shape of a ring. It is separate from the chromosomal DNA but is also able to replicate. It is usually found floating around in bacterial cells. One reason it is important is that these strands of DNA can carry information that makes bacteria resistant to antibiotics. Cohen had been working on ways to isolate specific genes in plasmids and clone them individually by putting them in *Escherichia coli* bacteria and letting them replicate. Boyer had discovered an enzyme that cut DNA strands at specific DNA sequences, leaving "cohesive ends" that could stick to other pieces of DNA. Shop-talking over lunch, they wondered if Boyer's enzyme would cut Cohen's plasmid DNA into specific, rather than random, segments, then bind those segments to new plasmids.

3 They decided to collaborate, and in a matter of months succeeded in splicing a piece of foreign DNA into a plasmid. The plasmid acted as a vehicle to carry this new DNA, which then inserted new genetic information into a bacterium. When the bacterium reproduced, it copied the foreign DNA into its offspring. This created a bacterium that was a natural factory, cranking out[6] the new DNA strands. Boyer and Cohen, now considered to be the fathers of biotechnology, understood that they had invented a quick and easy way to make biological chemicals. [a] Today, people all around the world enjoy the benefits of Boyer and Cohen's "cellular factories." [b] Genetically engineered bacteria produce human growth hormone, synthetic insulin, factor VIII for hemophilia, and the clot-dissolving agent called tissue plasminogen activator. [c] This line of research suggested that perhaps custom DNA could be added to human cells. [d]

4 The goal of somatic therapy is to replace a defective gene that is causing a disease or dysfunction by the insertion of a good gene into an individual's cells. In somatic gene therapy, the recipient's genome is changed, but not in every cell in the body, and the change is not passed along to the next generation. This[8] has not been an easy assignment. Although there has been a lot of research done in this area, and a lot of money spent, the successes have been few and far between.

5 First of all, there is the problem of just exactly how one inserts genes into a cell. Researchers

finally figured out that they should use the experts in cell invasion and replication: viruses. Unlike bacteria, viruses cannot replicate on their own. In reality, a virus is merely a vehicle for DNA or RNA. It consists of DNA or RNA surrounded by a protective coat of protein: That's it. They are the quintessential houseguests from hell.

6 Viruses actually sneak their way inside a host cell and then use the cell's replication apparatus to make copies of their own DNA. However, if you could make that DNA a good copy of a defective gene, and direct it to cells that have a defective copy, well then, you can see the possibilities of a virus acting as the agent[12] of somatic gene therapy: Take the virus's DNA out, add the DNA that you want, and turn it loose.

7 To begin with, research has concentrated on diseases that are caused by only a single defective gene in accessible cells, such as blood or lung cells, rather than diseases caused by a host of defects that work in concert with each other. But of course, nothing is as easy as first envisioned. The protein coats of the viruses are foreign to the body, and sometimes they have triggered host reactions that have caused rejection, a problem that recently may have been solved by researchers in Italy. Because of the problems with rejection, different DNA vehicles are being explored. Inserting strands of DNA on a chromosome is also tricky, because it matters where it is put. If spliced next to a DNA sequence that regulates the expression of the sequences next to it, it can result in unexpected consequences, such as tumors. Moreover, most genetic diseases, such as diabetes, Alzheimer's disease, heart disease, and various cancers, arise from a host of genes, not just one. Also, the effects of the therapy may not last. The cells that have been modified[15] may not be long-lived, so that the therapy has to be repeated.

1. According to paragraph 1, germ-line therapy is different from somatic gene therapy in that it
   a. affects the recipient's descendants.
   b. works on only the person receiving the therapy.
   c. is tinkering with nonproductive cells.
   d. does not handle DNA.

2. According to paragraph 2, which of the following is NOT true of a 'plasmid'?
   a. It can reproduce a copy of itself.
   b. It is not located in the chromosomal DNA.
   c. It can replicate the chromosomal DNA.
   d. It is a circular particle.

3. According to paragraph 2, what is the important feature of plasmids?
   a. They send a message to antibiotics.
   b. They are integrated into bacterial DNA.
   c. They cause resistance to antibiotics.
   d. They can cut DNA strands at specific DNA sequences.

4. According to paragraph 3, what did Boyer and Cohen achieve by their collaboration?
   a. Manufacturing new DNA at factories.
   b. Joining a piece of external DNA to a plasmid.
   c. Putting plasmids into *Escherichia coli* bacteria.
   d. Connecting Boyer's and Cohen's DNA.

5. According to paragraph 3, what was the role of the bacterium in their experiment?
   a. Reproducing its original DNA.
   b. Rejecting the foreign DNA.
   c. Producing the new DNA strands.
   d. Making Cohen and Boyer the fathers of biotechnology.

6. The expression "cranking out" in paragraph 3 is closest in meaning to
   a. breaking up
   b. extracting
   c. manufacturing
   d. repairing

7. Look at the four squares, [a], [b], [c], and [d] in paragraph 3, which indicate where the following sentence could be added to the passage. Where would the sentence best fit?
   But the problem was how to get it into the cell.

8. The word "This" in paragraph 4 refers to
   a. the next generation.
   b. the insertion.
   c. the goal.
   d. the change.

9. According to paragraph 4, the successes of somatic gene therapy have been

a. incredible.

b. unexpected.

c. quite a few.

d. scarce.

10. According to paragraph 5, while the researchers were solving the problem of how to insert genes into a cell, they realized that they should

a. rely on experts in the study of viruses.

b. figure out the way that makes viruses replicate on their own.

c. make the most of characteristics of viruses.

d. use viruses to surround the protective coat of protein.

11. According to paragraph 6, which of the following is NOT true of viruses as the agents?

a. Viruses make copies of the host's DNA.

b. Viruses use the host cell's replication mechanism.

c. Viruses sneak into a host cell.

d. Viruses deliver therapeutic DNA.

12. The word "agent" in paragraph 6 is closest in meaning to

a. vehicle

b. representative

c. firm

d. action

13. According to paragraph 7, what type of diseases did the researchers concentrate on first?

a. The diseases caused by multiple defective genes.

b. The diseases that have been studied.

c. The diseases caused by many faulty genes in cooperation.

d. The diseases caused by a single defective gene in cells which can be easily reached.

14. According to paragraph 7, why is inserting DNA strands on a chromosome tricky?

a. It may cause rejection.

b. It arises from a host of genes.

c. Bacterial DNA may cause tumors.

d. The site of insertion is crucial.

15. The word "modified" in paragraph 7 is closest in meaning to

a. engineered

b. invaded

c. replicated

d. explored

2 次の英文を読み，1．～10．の下線部に入る最も適した語(句)をa．～d．の中から一つ選べ。

Art and science may seem like polar _____(1). One involves the creative flow of ideas, and the other cold, hard data — or so some people believe. _____(2), the two have much in common. Both require a lot of creativity. People also use both to better understand the world around us. Now, a study finds, art also can help students remember better what they learned in science class.

Mariale Hardiman is an education specialist at Johns Hopkins University in Baltimore, Md. Back when she was a school principal, she had noticed that students who used art in the classroom were more _____(3). They might listen more intently. They might ask more questions. They might volunteer more ideas. _____(4), students seemed to remember more of what they had been taught when their lessons had involved art. But Hardiman knew the only way to test whether and how well art might really improve learning was to test it with an experiment. So she teamed up with other Johns Hopkins researchers and six local schools.

The researchers worked with teachers in 16 fifth-grade classrooms. The scientists took the traditional science lessons and created art-focused versions of them. In a traditional science classroom, for instance, students might read aloud from a book. In the art-focused class, they might now sing or rap the information instead. Another example: Traditional science classes often use charts and graphs. The art classrooms instead had students _____(5) collages and other types of art. Everyone would get the same information — just learn it in different ways.

The team then randomly assigned each of the 350 students to either a traditional science classroom or an art-focused one. Students then learned science using that approach for the entire unit — about three weeks. When they switched to a new topic, they also _____(6) to the other type of class. This way, each student had both an art-focused class and a standard one. Every unit was taught both ways, to different groups of students. This let the researchers see how students did in both types of classes.

Before and after each phase of the experiment, students took tests. They took a third one 10 weeks later. This one measured how well they still remembered what they learned two months earlier. The research team also looked at how well each student performed on the state reading test. This let them _____(7) how art and non-art classrooms affected students with different types of learning abilities.

Students who read at or above their grade level did just as well in both types of classes. Those who had lower reading scores _____(8) much more of the science if it had been taught in an art-focused class.

In some cases, Hardiman says, kids actually performed better in the third test, months later, than in those taken earlier. And classroom teachers reported "that many students continued to sing

the songs or raps that they learned after finishing the unit," Hardiman notes. "The more we hear something, the more we retain it," she says.

Students who started off in regular classes performed better after they moved into an art-focused class. But those who started in an art-focused class did well even when they switched back to a regular science class. Says Hardiman, these students appeared to use some of the art techniques after switching back to a traditional class. "Some continued to sketch or sing to help them _____(9) information," she notes. "This suggests that the arts may help students apply creative ways of learning on their own."

Her team shared its results February 7 in *Trends in Neuroscience and Education*.

The study takes art as a method of science learning very seriously, says Jaime Martinez. He's a science, technology, engineering, arts and math (STEAM) specialist at the New York Institute of Technology in New York City. He was not involved with the study. It's understandable that the authors might interpret their new results as a useful approach for helping struggling readers, he says. But he also thinks there's a broader _____(10) to using arts in the classroom. Researchers and teachers find that students in art-focused classes develop more creativity and learn to collaborate better skills, he notes.

Everyone benefits from the arts, Hardiman agrees. "All educators should learn how to use the arts as an instructional tool to promote learning."

出典：Alison Pearce Stevens, Science News for Students, April 15, 2019. Used with permission

1. a. opposites　b. objectives
　c. similarities　d. ideas

2. a. Moreover　b. Accordingly
　c. Therefore　d. In fact

3. a. equipped　b. gifted
　c. engaged　d. invited

4. a. Conversely　b. What's more
　c. However　d. What's worse

5. a. create　b. teach
　c. understand　d. attend

6. a. led　b. changed
　c. listened　d. spoke

7. a. supply　b. bring
　c. compare　d. fill

8. a. gained　b. finished
　c. lost　d. stood

9. a. regain　b. retain
　c. report　d. reveal

10. a. debate　b. harm
　c. benefit　d. mess

3 次の英文を読み，設問1．～15．に最も適した答えをa．～d．の中から一つ選べ。

1　I have included in this book all that I have learned about emotion during the past forty years that I believe can be helpful in improving one's own emotional life. Most of what I have written is supported by my own scientific experiments or the research of other emotion scientists, but not everything. My own research specialty was to develop expertise in reading and measuring facial expressions of emotions. So equipped, I have been able to see — on the faces of strangers, friends, and family members — subtleties that nearly everyone else misses, and by that means I have learned a great deal more than I have yet had the time to prove through experiments. When what I write is based just on my observations, I note that by phrases such as "I have observed," "I believe," "it seems to me. . . ." And when I write based on scientific experiments I cite in endnotes the specific research supporting what I say.

2　Much of what I have written in this book was influenced by my cross-cultural studies of facial expression. The evidence changed forever my view of psychology in general and of emotion in particular. Those findings, in places as varied as Papua New Guinea, the United States, Japan, Brazil, Argentina, and Indonesia, led me to develop my ideas about the nature of emotion.

3　At the start of my research in the late 1950s, I wasn't even interested in facial expression. It was the movements of the hands that drew my interest. My method of classifying hand movements distinguished neurotic from psychotically depressed patients, and indicated how much the patients improved from treatment. In the early 1960s there wasn't even a tool for directly and precisely measuring the complex, often rapidly changing facial movements shown by the depressed patients. I had no idea where to begin, and so I didn't[6]. Twenty-five years later, after I had developed a tool for measuring facial movement, I returned to those patient films and unearthed important findings.

4　I don't think I would have shifted my research focus to facial expression and emotion in 1965 if it hadn't been for two strokes of luck. [a] Through serendipity the Advanced Research Projects Agency (ARPA) of the Department of Defense gave me a grant to do cross-cultural studies of nonverbal behavior. [b] But because of a scandal, a major ARPA project was canceled and the money budgeted for it had to be spent during that fiscal year on overseas research, and on something noncontroversial. [c] By accident I happened to walk into the office of the man who had to spend the funds. [d] He was married to a woman from Thailand and was impressed by differences in their nonverbal communication. He wanted me to find out what was universal and what was culturally variable. I was reluctant at first, but I couldn't walk away from[9] the challenge.

5　I began the project believing that expression and gesture were socially learned and culturally variable, and so did the initial group of people I asked for advice — Margaret Mead, Gregory Bateson, Edward Hall, Ray Birdwhistell, and Charles Osgood. I recalled that Charles Darwin had made the

opposite claim, but I was so convinced that he was wrong that I didn't bother to read his book.

6 The second stroke of luck was meeting Silvan Tomkins. He had just written two books about emotion in which he claimed that facial expressions were innate[11] and universal to our species, but he had no evidence to back up his claims. I don't think I would ever have read his books or met him if we hadn't both submitted articles on nonverbal behavior to the same journal at the same time — Silvan's a study of the face, mine a study of body movement.

7 I was very impressed with the depth and breadth of Silvan's thinking, but I thought he was probably wrong in his belief, like Darwin's, that expressions were innate and therefore universal. I was delighted that there were two sides to the argument, that it wasn't just Darwin, who had written a hundred years earlier, who opposed Mead, Bateson, Birdwhistell, Hall and Osgood. It wasn't a dead issue. There was a real argument between famous scientists, elder statesmen; and I, at the age of thirty, had the chance, and the funding, to try to settle it once and for all: Are expressions universal, or are they, like language, specific to each culture? Irresistible[13]! I really didn't care who proved to be correct, although I didn't think it would be Silvan.

出典 : Excerpt from the book EMOTIONS REVEALED: Recognizing Faces and Feelings to Improve Communication and Emotional Life,Revised Edition by Paul Ekman. Copyright (c) 2003 by Paul Ekman. Reprinted by permission of Henry Holt and Company. All rights reserved.

1. According to paragraph 1, what is the author's intention of writing this book?
   a. To cover everything that he is sure enriches our emotional lives.
   b. To write about what the author has experienced in his whole life.
   c. To support the research of other emotion scientists.
   d. To prove all the author's idea by his scientific experiments.

2. According to paragraph 1, the author is able to
   a. read much literature on facial expression of emotions.
   b. convey subtleties of emotion through facial expression.
   c. detect slight difference in facial expressions.
   d. develop the instrument of reading and measuring emotions.

3. According to paragraph 1, the author states that his way of writing varies depending on whether what he says is
   a. backed up by experiments or just his own monitoring.
   b. proved by his own observations or other researchers'.
   c. demonstrated by the author or someone else.
   d. observed frequently or rarely.

4. According to paragraph 2, the author's studies in various cultures
   a. changed general psychology into specific psychology.
   b. widened his view of nature.
   c. gave him a new outlook on both psychology and emotion.
   d. built up his thought about particular emotion.

5. According to paragraph 3, what did his way of categorizing hand movements result in?
   a. It improved the treatment for psychotically depressed patients.
   b. It showed how much the patients got well.
   c. It became a tool to measure facial expression.
   d. It led to the treatment of neurotic patients.

6. The expression "so I didn't" in paragraph 3 is closest in meaning to
   a. "I didn't develop a tool measuring how rapidly patients move."
   b. "I didn't begin research of hand movement."
   c. "I didn't change my way of investigation into facial expression."
   d. "I didn't work on the study of facial expression."

7. Look at the four squares, [a], [b], [c], and [d] in paragraph 4, which indicate where the following sentence could be added to the passage. Where would the sentence best fit?

   I had not sought the grant.

8. According to paragraph 4, what was one of the reasons the author changed the subject of investigation from hand movements to facial movements?
   a. He happened to receive a grant for nonverbal communication studies.
   b. The Department of Defense needed the tool he developed.
   c. His research on hand movements was canceled due to a scandal.
   d. The man who needed to spend the fund was impressed with his research.

9. The expression "walk away from" in paragraph 4 is closest in meaning to
   a. suffer from
   b. take on
   c. give up
   d. work on

10. According to paragraph 5, what was Charles Darwin's claim?

a. Expression was socially acquired but gesture was by nature.

b. Expression and gesture were socially learned.

c. Expression was acquired along the course of evolution.

d. Expression and gesture were inborn.

11. The word "innate" in paragraph 6 is closest in meaning to

a. inherent

b. particular

c. common

d. coherent

12. According to paragraph 7, the author was ready to

a. put an end to the argument gradually.

b. defeat his opponents badly.

c. end the controversy finally.

d. solve the dispute for everyone.

13. It can be inferred from paragraph 7 that the author says "Irresistible!" because the issue was

a. irrational.

b. irrelevant.

c. impossible.

d. tempting.

14. According to the passage, which of the following advocate had the same perspective of the author's?

a. Charles Osgood

b. Silvan Tomkins

c. Charles Darwin

d. The man who gave him the grant

15. Which of the following is the best title of this passage?

a. Measuring Facial Expressions

b. Differences in the Nonverbal Communication

c. Facial Expression Across Cultures

d. Beyond the Darwinian Thoughts

4 次の 1．～10. は Empathy and Ethics と題する一つづきの文章の冒頭である。1．～10. の各英文それぞれについて，下線部分に誤りを含んでいるものを記号 a．～ d．の中から一つ選べ。

1. The role playing (a) by empathy in our moral judgments (b) can be summarized (c) in the well-known Native American proverb 'Never judge a man until (d) you've walked two moons in his moccasins'.

2. In other words, (a) before judgment (b) someone we should first try to imagine (c) the situation from their (d) point of view.

3. However, slow judgment (a) does not mean (b) no judgment, and this is (c) not always true that 'to know all (d) is to forgive all'.

4. Empathy can help us not only (a) to make more humane judgments (b) about other people, (c) but also regulating our own behavior. (d)

5. According to the (a) famous golden rule — variations of which (b) can be found in most culture (c) — you should seek to (d) 'do as you would be done by'.

6. The idea behind this rule (a) is that if we imagine ourselves (b) in the place of the people affected by (c) our behavior, we will tend to have (d) less bad and more good.

7. As the above suggests, it is widely believed (a) that empathy — imagining yourself in someone (b) else's situation — lead naturally (c) to sympathy — showing concern for them. (d)

8. However, it is (a) important to be aware (b) that this is a hypothesis than (c) a self-evident fact. (d)

9. After all, you might be able (a) to image (b) what someone is feeling (c) without caring about (d) it.

10. Even if your distress (a) by another person's suffering, (b) your concern (c) may be self-directed. (d)

出典：Theory of Knowledge for the IB Diploma by Richard van de Lagemaat (c)2015 Cambridge University Press. Reproduced with permission of the Licensor through PLSclear.

5 次の英文を読み，設問1．～15．に最も適した答えをa．～d．の中から一つ選べ。

1 Among the factors that most undermine human relationships is "lying," and particularly as it involves betrayal. [a] We have all been taught that since early childhood. Most of us have also been told we will be punished if we are caught in a lie. [b] They often exaggerate what happens to them or hide the facts to make them look better in the eyes of their parents. [c] They may make up stories — some fanciful, others with a semblance of what would seem to be a reasonable pattern of facts. [d] Or, they may twist the truth to their advantage, or just plain deny their involvement in some disallowed activity.

2 What is fascinating about children lying is that they don't need to be taught how to do it, nor do they need to be encouraged by others. Lying seems to come about naturally, as if something innate in a child enables him or her to deny what is even obvious or construct complicated stories to avoid an unpleasant or punishing reaction from parents, teachers, or friends.

3 To a large extent lying is both self-protecting and exciting. It is similar to the thrill we experience from getting a bargain at a sale. Similarly, lying offers the excitement of manipulating[4] a situation to our benefit and getting away with it. For the most part, young children lie about actions — something they have or have not done. They are not sophisticated enough to lie about how they feel until they get older — at least nine or ten years of age. Many experts in child development, as far back as Piaget, believe that children need to achieve a certain level of intellectual development and insight to lie. Piaget thought that children don't begin to deceive others intentionally until around seven years of age.

4 The reasons children lie have always been thought to center on self-protection. A child may be afraid that he or she will be punished for disobeying a parent or authority figure. In some cases, children will overreact by expecting a stronger parental response than their behavior would warrant. A second reason children lie is that they imitate others who lie. Children learn to lie by observing their parents, other adults, or their schoolmates deal with the uncomfortable dilemma of whether or not to admit that they have done something wrong. The child quickly picks up that lying offers an opportunity to get away with forbidden actions or infractions[8] of a moral code. In this sense, they recognize that lying can be an effective "punishment-avoidant" technique.

5 For some, lying may become a habit, in which case the child may lie compulsively, even without a real reason to lie. Compulsive lying[9] is not the usual lying behavior of most children; it is often associated with more serious behavioral problems, such as cheating on tests, violence, truancy, and impulsivity.

6 Psychologists and behaviorists believe — Ana Freud was probably the first to propose this — that children learn to lie because they fear being punished when they are disobedient. However, this

may not be the whole story. Some studies have shown that the instinct to tell a falsehood, even in a three-year-old child, seems unrelated to whether the child thought he or she would be punished. It may be associated with simply not wanting to be caught, even if the only outcome is that the child feels embarrassed.

7 Children are not alone in this penchant for lying. Recent research on lying has shown rather staggering findings about the incidence and prevalence of deception. Almost everyone at one time or another has told a lie. Furthermore up to 60 or more percent of people lie regularly. The average number of lies told by an individual has been estimated to be as high as twenty-five during the course of a day. Adults are believed to lie to avoid trouble from others, to present themselves in the best light, or to prevent others from experiencing discomfort.

8 A long line of studies have shown that males lie nearly two to three times more often than females and that their primary objective in lying is to promote themselves. Men, these studies have said, lie not only in their workplace to achieve advantage by distorting their accomplishments, but also in the social world of dating and networking.

9 Women, on the other hand, lie primarily for self-protection. They may lie about a variety of things, such as how they spent their day, or how they feel about their partners. But this finding of a difference between men and women might well be obsolete. By virtue of women becoming more involved in public affairs and corporate ambitions, one has to assume that their interests in lying are tending more in the direction of self-promotion, just like men.

10 Most people are not aware of how often they conceal the truth; one doesn't become aware of twisting the truth unless something major depends on the response. For example, most of us tell "white lies" — minor deceptions with little chance of harm to others — all the time, and feel no compunction[15] in doing so. Some studies have shown that people "shade" the truth in their favor one to six times per hour during interactions with others.

出典：Hardwired Behavior What Neuroscience Reveals about Morality by Laurence R. Tancredi (c)2005 Cambridge University Press.Reproduced with permission of the Licensor through PLSclear.

1. Look at the four squares, [a], [b], [c], and [d] in paragraph 1, which indicate where the following sentence could be added to the passage. Where would the sentence best fit?

Yet children lie frequently.

2. According to paragraph 2, the author mentions that

a．children are unable to lie because they are afraid of punishment.

b．children lie only when they are afraid of punishing reaction from others.

c．children's lying comes about as a natural result.

d．something children are born with seems to allow them to lie.

3. According to paragraph 2, which of the following is NOT true of children's lying?

a. Refusing to admit plain facts.

b. Making up stories.

c. Encouraging themselves to lie.

d. Preventing negative reactions.

4. The word "manipulating" in paragraph 3 is closest in meaning to

a. facing

b. exchanging

c. fitting

d. controlling

5. According to paragraph 3, what do children of nine or ten begin to lie about?

a. About something concrete.

b. About what they think.

c. About something analytical.

d. About what they hide.

6. According to paragraph 3, children over seven years of age start to

a. achieve a certain level of development.

b. betray others deliberately.

c. attain their purpose.

d. avoid punishment.

7. According to paragraph 4, by watching others lying, children learn that

a. denial of wrong doing is immoral.

b. lying ends in moral dilemma.

c. they can't avoid penalty if they lie.

d. lying makes it possible to do something bad without punishment.

8. The word "infractions" in paragraph 4 is closest in meaning to

a. violations

b. establishment

c. acceptance

d. shortcomings

9. According to paragraph 5, what is "compulsive lying"?

a. To lie convincingly.

b. To lie innocently.

c. To lie successfully.

d. To lie obsessively.

10. According to paragraph 6, Ana Freud

a. has shown children have an instinct to tell a lie.

b. associated children's lying with the fear of punishment.

c. has found the fear of punishment has nothing to do with children's lying.

d. told the whole story of how children become a liar.

11. According to paragraph 7, which of the following is NOT true of adults' lies?

a. Showing themselves more impressive.

b. Keeping other people from feeling unpleasant.

c. Tiding over difficulties.

d. Avoiding troubles from others.

12. According to paragraph 8, the main reason males lie is

a. to promote a better relationship.

b. to protect themselves.

c. to avoid attacks.

d. to advance themselves.

13. According to paragraph 9, the author assumes that these days

a. women have a tendency to tell lies for their self-protection.

b. women might tell lies for the same reason as men.

c. women don't have desire to achieve success in corporations.

d. women are good at self-promotion.

14. According to paragraph 10, most people

a. are not aware of being lied by others.

b. detect a lie in others often in everyday lives.

c. think they can conceal lies if they respond properly.

d. are unconscious of how frequently they lie.

15. According to paragraph 10, why do people "feel no compunction" in telling "white lies"?

a. They don't know how good their lies are.

b. Their lies sometimes help others.

c. Their lies do not hurt others.

d. They don't care how bad they hurt others.

6 次の日本文の下線部1.～5.を英訳した場合，それぞれ最も適切な英文をa.～d.より一つ選べ。

社会における科学者の責務とは何でしょうか。科学者には，その英知をもって新たに発見をしたり，社会が抱えるさまざまな課題を解決してほしいという社会からの期待があります。[1]こうした期待に応えることが一つの責務といえるでしょう。また，その過程において公的な研究資金を使用するケースも多いだけに，[2]そうしたものに込められた社会からの期待についても自覚しておかなくてはなりません。さらに，自分が携わる研究の意義と役割を一般に公開し，かつ積極的に分かりやすく説明すると共に，その研究が人間，社会，環境に及ぼしうる影響や起しうる変化を，中立性・客観性をもって公表し，社会と建設的な対話を行っていくことが求められています。

[3]科学はさまざまな形で社会に貢献しています。この中で科学者は，自分が生み出す専門知識や技術の質を担保する責任を持ち，さらに自分の専門知識，技術，経験を活かして，人類の健康と福祉，社会の安全と安寧，そして地球環境の持続性に貢献する責任を持っています。このため科学者は，常に正直かつ，誠実に判断，そして行動し，自分の専門知識・能力・技芸の維持向上に努め，科学研究によって生み出される知の正確さや正当性を科学的に示す最善の努力を払うことが求められます。[4]また，科学技術と社会・自然環境との関係を広い視野から理解し，適切に行動することが求められているのです。さらに，科学者の意図に反して研究成果が悪用されるという可能性も，深刻な問題として登場しています。[5]科学者はこのような研究の両義性についても認識しておく必要があります。

出典：「科学の健全な発展のために　－誠実な科学者の心得－」「日本学術振興会「科学の健全な発展のために」編集委員会」

出典：For the Sound Development of Science -The Attitude of a Conscientious Scientist-

1. a. It is one of scientists' responsibilities to meet such expectations.
   b. It is one of scientists' duties that they answer to such expectations.
   c. Realizing such expectations is one of scientists' duties.
   d. One of scientists' responsibilities is to attribute such expectations to themselves.

2. a. they must be aware of society's expectations reflected in such funding.
   b. they should be conscious of social expectations from such things.
   c. they have to understand social anticipation filled by such a process.
   d. they ought to know the hopes in society embedded in such responsibility.

3. a. Science contributes to society in many different ways.
   b. Science plays a role in society in many kinds of forms.
   c. It is science that really serves society in various forms.
   d. What science offers to society is done in many ways.

4. a. In addition, they are to understand the relationships between science/technology and the social/natural environment from various standpoints and to do in what they think proper.
   b. It is also essential for them to perceive the relation between science/technology and the social/natural environment with wide outlook and act in a proper way.
   c. They are expected to know the science/technology relationships and the social/natural environment by a wide viewpoint and do as they are expected.
   d. It is also necessary for them to understand the relationship between science/technology and the social/natural environment from wide perspective and to behave in an appropriate way.

5. a. Scientists have to be aware of these double meanings in research.
   b. Scientists should master this ambiguity in research.
   c. Every scientist ought to remember this twofold significance in research.
   d. Each scientist must bear in mind this double-edged sword in research.