英　　語

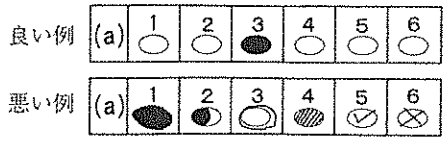
問　題

2013年度

〈H25070017〉

注　意　事　項

1. この試験では，この問題冊子のほかに，マーク解答用紙を配付します。
2. 問題冊子は，試験開始の合図があるまで開かないでください。
3. 問題は２～11ページに記載されています。試験中に問題冊子の印刷不鮮明，ページの落丁・乱丁およびマーク解答用紙の汚れに気付いた場合は，手を挙げて監督員に知らせてください。
4. マーク解答用紙については，受験番号を確認したうえ所定欄に氏名のみを記入してください。
5. 解答はすべてマーク解答用紙に，黒鉛筆（ＨＢ）またはシャープペンシル（ＨＢ）で記入し，所定欄外には何も記入しないでください。
6. マーク解答用紙に記入する際には，以下の点に注意してください。
   a）マーク欄は，はっきりとマークしてください。また，訂正する場合は，消しゴムで消し残しがないようきれいに消してください（砂消しゴムは不可）。
   b）解答は指定された解答欄にマークし，マーク解答用紙のその他の部分には何も記入しないでください。



○の中を正確にぬりつぶす

1．はみ出してぬりつぶす　4．薄い
2．ぬり残す　5．レ点（ぬりつぶしていない）
3．○ で囲む　6．×印（ぬりつぶしていない）

7. 問題冊子は持ち帰ってください。
8. **マーク解答用紙は必ず提出してください。**

I. Read Text I, Text II, and Text III, and choose the best answer from a – d for each question that follows.

Text I

[A] People with learning disabilities (LD) perform inadequately in areas of academic achievement despite apparent adequate intellectual skills and educational opportunity. Common forms of LD are in reading, writing, and mathematics, technically referred to as *dyslexia, dysgraphia*, and *dyscalculia,* respectively. However, while this brief description appears simple, adequately defining LD is far from being simple. The National Joint Committee on Learning Disabilities (NJCLD) in the US formulated a definition in 1990 which is still being used today. Reading through the definition, quoted below, provides a sense of the range of issues that need to be considered in defining this disability.

> [B] Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviours, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences (NJCLD, 1990).

[C] This definition spells out clearly that LD occurs across the life span, and it points out that behavioral problems, such as those relating to social interaction and self-regulation, are different from LD. In addition, apart from difficulties associated with acquiring skills that are commonly and explicitly taught in schools—namely reading, writing, and mathematical skills—it includes difficulties in listening, speaking, and reasoning.

[D] However, after the announcement of this definition, some educational researchers, including the late Samuel A. Kirk, who is generally considered one of the pioneers in the special education field, have expressed concern about the LD term including too many kinds of problems. They have noted that when a definition can include many things, it leads to problems in classification and specification of types. A quick search through academic databases for types of LD that have been proposed lends some support to their concern. Some researchers, for example, have suggested that problems in social skills constitute a form of LD. A Canadian psychologist, Keith Stanovich, even proposed an LD that he called *dysrationalia.* According to Stanovich, *dysrationalia* is characterized by an inability to think and behave rationally despite adequate intelligence. Understandably, some resistance has been expressed by other researchers against including problems in social skills and *dysrationalia* as forms of LD. Their proposal, however, highlights the fact that because learning is a very complex matter there are many disabilities that can be associated with it.

[E] With the existence of so many possible forms of LD, it is useful to distinguish between *academic* and *developmental* forms of LD, as Samuel A. Kirk and James J. Gallagher suggested in their highly influential book, *Educating Exceptional Children.* In effect, the categories that Kirk and Gallagher proposed distinguish between problems in skills that are taught in schools and those that are primarily a function of maturation. Academic learning disabilities—those that manifest themselves as disabilities in acquiring and using basic skills that are explicitly taught in schools (i.e., reading, writing, and mathematics)—are closely linked to an individual's reception of, and response to, instruction. In contrast, developmental learning disabilities are closely associated with an individual's natural process of development. Kirk and Gallagher included in this category disabilities that are manifested as disorders in attention and perception, memory, sensory-motor skills, thinking, and language. These skills, while they may be implicitly cultivated in schools, are not usually explicitly taught. Research into these forms of LD assumes that, other relevant factors being normal, at certain stages of development certain levels of skills acquisition could be expected, independent of instruction. For example, it could be expected that in terms of listening skills a twelve-year-old would be better than an eight-year-old, simply because the former is older and has presumably developed this skill to a more advanced level. Thus a significant negative deviation from the expected skill level could indicate a 'developmental' learning disability.

[F] The distinction that Kirk and Gallagher made between academic and developmental LD should not be confused with another distinction between 'developmental' and 'acquired' forms of LD. Acquired LD, in this latter context, refers to LD following brain injury in an individual who previously experienced no specific learning problems. Thus, *acquired dyslexics* were previously competent readers who now suffer problems in that ability due to brain injury. On the other hand, developmental LD in this context refers to learning disorders in individuals who have never sustained any brain damage. In essence, *developmental dyslexics* have not lost their ability to read; for some reason they never attained an adequate ability to read in the first place.

Bibliography:
Kirk, S. A., Gallagher, J. J., Coleman, M. R., & Anastaslow, N. J. (2011). *Educating exceptional children* (13th ed.). Boston: Houghton Mifflin
National Joint Committee on Learning Disabilities (NJCLD) (1990). *Definition of learning disabilities (1990)*. Retrieved from http://www.ldonline.org/pdfs/njcld/NJCLDDefinitionofLD.pdf
Stanovich, K. E. (1993). Dysrationalia: A new specific learning disability. *Journal of Learning Disabilities, 26,* 501–515.

Questions 1 – 10 refer to Text I.

1. What is the key challenge in defining LD referred to in paragraph A?
   a. People who are affected by LD perform inadequately in areas of academic achievement.
   b. The definition of LD formulated by NJCLD in 1990 is still being used today.
   c. Formulating a definition of LD requires consideration of many issues.
   d. A brief description of LD cannot be written in a simple manner.

2. Which of the following is a correct statement about '<u>Although</u>' in paragraph B?
   a. This provides a direct connection to the problems described in the preceding sentence.
   b. This indicates that examples of handicapping conditions would be provided.
   c. This shows that two conditions can occur at the same time.
   d. This is used to contrast the ideas expressed in the first and second parts of the sentence.

3. According to the NJCLD definition of LD referred to in paragraphs B and C, which of the following would most likely NOT be considered a case of LD?
   a. a university student who cannot carry out simple arithmetic computations
   b. an American exchange student in Japan who has serious problems in speaking, reading, and writing in Japanese
   c. a high school student who has been clinically diagnosed with *dysgraphia*
   d. a 45-year-old native English speaker who makes many errors in reading aloud lists of common English words

4. What is the main purpose of paragraph D?
   a. to describe the achievements of the late Samuel A. Kirk
   b. to further stress the challenges that are involved in determining what—and what is not—an LD
   c. to argue that *dysrationalia*, as proposed by Keith E. Stanovich, should be considered as one form of LD
   d. to contrast the opinions of the late Samuel A. Kirk with those of Keith E. Stanovich

5. According to paragraph E, in which of the following areas would the occurrence of problems NOT be considered a developmental form of LD?
   a. reading b. listening c. speaking d. remembering

6. According to paragraph E, why would we expect a twelve-year-old to be better than an eight-year-old in listening?
   a. because the twelve-year-old always receives more instruction in school
   b. because the eight-year-old may have an academic form of LD
   c. because the eight-year-old may have a developmental form of LD
   d. because the twelve-year-old is older and has matured more

7. Which of the following best matches the meaning of '<u>deviation</u>' in paragraph E?
   a. difference b. illness c. reaction d. problem

8. Why can we NOT consider the acquired form of LD (described in paragraph F) as satisfying the NJCLD definition of LD (given in paragraph B)?
   a. because a person with brain injury cannot be considered as having LD
   b. because the acquired form of LD does not fit in with the categories proposed by Kirk and Gallagher
   c. because the learning problems experienced by a person with LD should not be the result of outside influences
   d. because unlike developmental dyslexics, acquired dyslexics have lost their ability to read

9. Which of the following is true of the word "developmental" as it is used in the text?
   a. Its use cannot determine whether the condition it refers to resulted from injury.
   b. It is used to determine the skills that need to be taught in schools to students with LD.
   c. It can have different meanings depending on the form of LD it is referring to.
   d. It indicates that it is impossible to have both the academic and the developmental forms of LD.

10. Which is the best way to divide the text into four parts according to how the content is organized?
    a. ABC-D-E-F b. AB-C-D-EF c. A-BC-DE-F d. AB-C-D-EF

Text II

The British actress, Keira Knightley, is perhaps best known for her role as Elizabeth Swann in the first three "Pirates of the Caribbean" movies. She has also received nominations for—and won—numerous acting awards. Not as well-known, however, is the fact that she is dyslexic, having been first diagnosed with the disability when she was six. Compared to other children, she had to work much harder in order to learn to read and write, but she did manage and left school with excellent grades in her exams. Keira reports that as a child she found it difficult to read her lines during auditions, but that her desire to be an actress became her driving force to work much harder in overcoming her problems.

Bibliography:
Career Paths for Dyslexia (n.d.). Quotes. Retrieved from http://www.careerpathsfordyslexia.com/Html/quotes.html
Das, L. (2003). Dyslexia had not stopped me. The Daily Mail. Retrieved from http://www.dailymail.co.uk/health/article-188728/Dyslexia-stopped-me.html

Questions 11 – 12 refer to Text I and Text II.

11. Which of the following aspects of the LD is not evident from the description given of Keira Knightley's dyslexic condition?
    a. LD appears as significant difficulties in a number of abilities, including reading and writing.
    b. LD occurs across the life span.
    c. LD can show up as problems in skills that are formally taught in school.
    d. LD can occur in the acquired form.

12. What important point about LD does Text II add to the information provided in Text I?
    a. Compared to other children, a dyslexic child would find it more difficult to learn to read.
    b. LD can be diagnosed in children.
    c. It is possible to overcome the problems presented by LD.
    d. A desire to be an actress can become a driving force for working harder.

Text III

Can a child who is gifted, one who is exceptionally talented, also have LD? According to the research literature, the answer is a definite "yes." Linda Brody and Carol Mills, both of the Center for Talented Youth at Johns Hopkins University, describe gifted students with LD as those who "possess an outstanding gift or talent and are capable of higher performance, but who also have a learning disability that makes some aspect of academic achievement difficult." The most serious concern about these students is that their teachers often do not find out that they have LD. As a consequence, these students' educational needs are not addressed and they fail to achieve their full potential.

Brody and Mills note that gifted students with LD have both a blessing and a burden. On the one hand, they can often use their exceptional skills and talents to compensate for the performance problems caused by their LD. On the other hand, however, compensating for those areas of weakness also effectively hides the problems from teachers—and sometimes even their parents—and so they do not receive the attention, instruction, and support that they need.

Bibliography:
Brody, L. E., & Mills, C. J. (1997). Gifted children with learning disabilities: A review of the issues. *Journal of Learning Disabilities*, 30, 282–296
Johns Hopkins Center for Talented Youth (2012). All about CTY. Retrieved from http://cty.jhu.edu/welcome/index.html

Questions 13 – 15 refer to Text I, Text II, and Text III.

13. Who among the following could be considered a gifted student with LD?
    a. a student who is exceptionally good in mathematics but seriously struggles in reading
    b. a student who is exceptionally good in writing but freezes when required to make a speech
    c. a student who is not good in school at all but aspires to becoming a famous actor
    d. a student who is not good in school at all and has been diagnosed with dyslexia

14. Apart from hard work, which of the following is the most likely alternative explanation for how Keira Knightley (in Text II) achieved excellent grades in her school exams?
    a. She succeeded in hiding her LD from her parents and teachers.
    b. She used her talents to compensate for the difficulties caused by her LD.
    c. She completely overcame her LD as a consequence of medical treatment.
    d. She learned about the content of her exams during her acting auditions.

15. Based on the definitions and descriptions of LD provided in Text I, Text II, and Text III, which of the following is a common feature of the disability?
    a. The abilities affected are specific; not all ability areas are negatively affected.
    b. The cause of the disability is unknown, but presumed to be due to central nervous system dysfunction.
    c. Taking an interest in something is a good way to overcome the difficulties that are presented.
    d. It will coincide with the possession of an outstanding gift or talent.

II. Read the passage and rearrange the seven words in 1 – 5 in the correct order. Then choose from a – d the answer that contains the third and fifth words.

Maxwell's own account of his equations is not very tidy. You will not find in his writings the clean, elegant structure that students learn as "Maxwell's equations." Instead you discover a flood of symbols, words, and equations. Maxwell, a deeply humble man, $_1$(consider / did / he / not / producing / that / was) poetry for the ages that would be suitable for permanent record. Rather he simply $_2$(everything / known / out / set / summarize / then / to) about electricity and magnetism in mathematical form. In his presentation, fundamental equations mix with chance observations.

Lorentz's achievement was to simplify the message of Maxwell's equations, to separate the signal from the noise. The signal: four equations that $_3$(and / electrical / fields / govern / how / magnetic / respond) to electric charge and its motion, plus one equation $_4$(fields / force / have / specifies / that / the / those) on charge. The noise: everything else!

Now one had definite equations for the behavior of very small bodies with specified mass and charge. Could $_5$(equations / one / rebuild / the / those / to / use) description of matter on a new foundation, starting from idealized "atoms" of charge? This was the purpose of Lorentz's electron theory. Starting with his 1892 paper, Lorentz and his followers used the electron theory to explain one property of matter after another.

Adapted from:
Wilczek, Frank (2012). Happy Birthday, Electron. *Scientific American*, 21 May, 2012. www.scientificamerican.com/article.cfm?id=happy-birthday-electron

1.	a. *3rd*: that *5th*: was	b. *3rd*: he *5th*: not	c. *3rd*: not *5th*: that	d. *3rd*: consider *5th*: he
2.	a. *3rd*: summarize *5th*: everything	b. *3rd*: summarize *5th*: to	c. *3rd*: to *5th*: about	d. *3rd*: to *5th*: everything
3.	a. *3rd*: electrical *5th*: magnetic	b. *3rd*: respond *5th*: and	c. *3rd*: fields *5th*: and	d. *3rd*: and *5th*: respond
4.	a. *3rd*: force *5th*: those	b. *3rd*: the *5th*: those	c. *3rd*: fields *5th*: the	d. *3rd*: those *5th*: the
5.	a. *3rd*: those *5th*: to	b. *3rd*: to *5th*: those	c. *3rd*: use *5th*: rebuild	d. *3rd*: equations *5th*: use

III. Answer the questions in Sections A and B.

Section A: Read the text and choose the best option from a – d for questions 1 – 6.

I would start by presenting the panel with a problem: (I) young man, brought up in a religious family, studies a science, and as (II) result he comes to doubt—and perhaps later to disbelieve in—his father's God. (A), this is not (i) isolated example; it happens time and time again. Although I have no statistics on this, I believe that many scientists—(B), I actually believe that more than half of (ii) scientists—really disbelieve in their father's God; that is, they don't believe in God in a conventional sense.

(A), since a belief in God is a central feature of religion, this problem that I have selected points up most strongly the problem of (iii) relation of science and religion. Why does this young man come to disbelieve?

(III) first answer we might hear is very simple: You see, he is taught by scientists, (C), as I have just pointed out, they are all atheists at heart, so (IV) evil is spread from one to another. (D) if you can entertain this view, I think you know less of science than I know of religion.

(iv) answer may be that (V) little knowledge is dangerous; this young man has learned (v) little bit and thinks he knows it all, (D) soon he will grow out of this sophomoric sophistication and come to realize that (vi) world is more complicated, (C) he will begin again to understand that there must be God.

I don't think it is necessary that he come out of it. There are many scientists—(VI) men who hope to call themselves mature—who still don't believe in God. (B), as I would like to explain later, the answer is not that the young man thinks he knows it all—it is the exact opposite.

Adapted from:

Feynman, R. (1956). *The Relation of Science and Religion.* Transcript of a talk given at the Caltech YMCA Lunch Forum on May 2, 1956. http://calteches.library.caltech.edu/49/2/Religion.htm

1. In which blanks from I – VI is the word '*a/an*' most likely used?
   a. I, II, IV b. I, II, V c. II, IV, V d. I, III, VI

2. In which blanks from i – vi is the word '*the*' most likely used?
   a. i, ii, iv b. ii, iii, vi c. ii, iv, v d. iii, iv, v

3. Which of the following best fits in the two blanks labeled A?
   a. Now b. Even so c. To clarify d. Thus

4. Which of the following best fits in the two blanks labeled B?
   a. as a result/As a result b. in fact/In fact c. because/Because d. yet/Yet

5. Which of the following best fits in the two blanks labeled C?
   a. so b. and c. while d. if

6. Which of the following best fits in the two blanks labeled D?
   a. Even so/even so b. So/so c. But/but d. Nevertheless/nevertheless

Section B: Choose the best answer from a – d for questions 7 and 8.

7. Paragraph [A] below consists of five sentences (1) – (5), which are not in the correct order. Rearrange the sentences to make the paragraph more coherent and choose the answer which shows the best sentence order from a – d below.

[A] (1) Furthermore, the heavy rainfall that accompanies them can completely flood a small town in a couple of hours.
(2) These violent storms are often a hundred miles in diameter.
(3) Typhoons are tropical storms that exert tremendous power.
(4) Their winds can reach velocities of seventy-five miles per hour or more.
(5) The energy that is released by a typhoon in one day can exceed the total energy consumed by humankind throughout the world in one year.

a. 4-3-2-1-5 b. 5-3-2-4-1 c. 3-2-4-1-5 d. 3-4-1-5-2

8. Paragraph A above and the four paragraphs B – E below make up a five-paragraph passage but are not arranged in the best order. Rearrange the five paragraphs and choose the answer which shows the best paragraph order from a – d below.

[B] The dynamics for the creation of a different kind of tornado were in place on Sunday, May 6. A tornado—with no association with a typhoon—was able to form in the Kanto region. This storm was created by an area of low pressure to the northwest of Japan which provided enough spin in the atmosphere to form a few strong storms across the region.

[C] These massive storms begin as thunderstorms that form over areas of the ocean where the water temperature exceeds 81 degrees Fahrenheit. The warmth and moisture in these regions provide the storm with its tremendous power, which explains why these storms quickly weaken when they pass over cool water and dissipate soon after they hit land.

[D] The tornado picked up vehicles and tossed them like toys. Hundreds of houses suffered broken windows, and many properties had entire roofs blown away. At least 30 people were injured and a 14-year-old boy died. Tragedies such as these are expected to become less common, however, as new weather technology makes it easier to predict the formation of tornadoes and provide early warning to the areas that may be affected.

[E] Although typhoons themselves are only a real concern to coastal areas, they often give birth to tornadoes. Tornadoes in Japan are rare, but not unheard of. The most common time of the year for Japan to experience tornadoes is during the summer and fall months, in the midst of typhoon season. The funnel clouds in them turn inland, leaving swaths of destruction in their wakes. Tornadoes destroy power lines, damage homes and other property, and are responsible for dozens of deaths every year.

Adapted from:
Daniel, M. (2012). Rare tornado strikes near Tokyo, Japan on May 6. http://earthsky.org/earth/rare-tornado-strikes-near-tokyo-japan-on-may-6; Oshima, A. and Hogue, A. (1999). Writing Academic English. Longman, White Plains, New York.

a. E-D-A-C-B b. D-B-A-C-E c. A-E-C-D-B d. A-C-E-B-D

IV. Read the texts in Sections A and B and answer the questions.

Section A: Choose the best answer from a – d for questions 1 – 5.

A claim, or a belief, is more convincing when it is accompanied by relevant evidence—facts supporting the truth value of the claim. Evidence thus plays an important role in evaluating arguments. The following passage presents two positions on how the human brain is organized and functions.

During his observation of split-brain patients who had had their left and right brain separated by an operation, Professor Sperry noticed that the processing of information was different depending on which side of the brain it entered. Following this result, the notion that each of the two hemispheres of the brain has specialized functions established itself firmly in popular culture. According to this view, the left hemisphere controls language, logic, and mathematics, while the right is more creative and intuitive. Because of the supposed independent functions of the two hemispheres, and because of their difference in specializations, an activity might engage one part of the brain while the other part is not used at all. Those who support this right-brain/left-brain theory try to classify a person as "right-brained" or "left-brained."

Opponents of the right-brain/left-brain theory point out that this idea is simplistic at best. They suggest that the difference between the two hemispheres is in their "style of working." The left brain focuses on the detail, whereas the right brain focuses on the broad, background picture. They point to the fact that when people look at the details of an image, the left-side of the brain is more activated, and when looking at the entire image, the right-side of the brain is more activated.

Bibliography:

Cherry, K. (2012). Left brain vs. right brain, retrieved from http://psychology.about.com/od/cognitivepsychology/a/left-brain-right-brain.htm

McCrone, John. (1999). Right Brain or Left Brain – Myth or Reality. The New Scientist.

1. What is the point of disagreement between the proponents and opponents of the right-brain/left-brain theory?
   a. what functions are shared by the left and right sides of the brain
   b. what should be used to classify people as "left-brained" or "right-brained"
   c. what the functions of the left and right sides of the brain are
   d. what the meanings of right-brain and left-brain are

2. Which of the following from the passage is presented as evidence, as opposed to a simple claim?
   a. People can be classified into "right-brained" and "left-brained" individuals.
   b. The left-side of the brain controls both language and logic.
   c. When individuals focus on detail, the left-side of their brain is activated.
   d. The right-side of the brain focuses on the broad, background picture.

3. Which of the following would be evidence that can be used to defend the right-brain/left-brain theory?
   a. Splitting the brain reduced instances of loss of consciousness and inability to control muscle movement in patients with epilepsy.
   b. Many split-brain patients found themselves unable to name objects that were processed by the right-side of the brain, but were able to name objects that were processed by the left-side of the brain.
   c. Even after the split brain surgery, the patients were able to function normally, as each side of the brain was able to carry out its individual function efficiently and successfully.
   d. all of the above

4. Which of the following is valid evidence to support the position of the opponents of the right-brain/left-brain theory?
   a. There is a time limit during which babies must be exposed to language if they are to acquire language normally.
   b. Damage to different parts of the brain causes different types of physical and cognitive problems.
   c. Studies show that abilities in mathematics are strongest when both halves of the brain work together.
   d. People with a genetic disorder exhibit dissociations between abilities in music and disabilities in number tasks.

5. Which of the following best indicates the author's position toward the right-brain/left-brain theory?
   a. supportive because the author presents the proponent's position of the theory first
   b. unsupportive because the author writes that the theory is simplistic at best
   c. not interested because the author does not express his/her definite position about the theory
   d. neutral because the author presents both proponent's and opponent's positions of the theory

Section B: Choose the best answer from a – d for questions 6 – 10.

The following are instructions for drawing a figure having vertices labeled A – E.

I. Draw a line from a starting point A to a second point B.
II. From B, draw another line that makes an angle of 72° with segment AB, and stop at point C, which lies above the center of segment AB.
III. Draw a line that connects point C to point A.
IV. From point A, draw a line that is the same length as segment BC, so that the angle BAC is divided into two equal angles. The end of this segment will be point D.
V. From point D, draw a line that is parallel to segment AB, crosses segments AC and BC, and stops at point E, so that the resulting length of segment CE is equal to that of segment CD.
VI. Draw lines to connect the following points: E to B, B to D, D to C, C to E, and E to A.

Questions 6 – 10 refer to Figures 1 – 4 below.

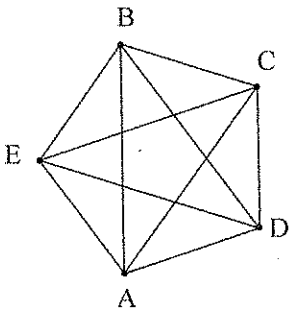


Figure 1

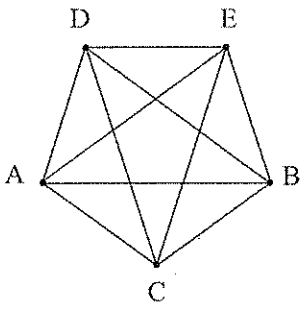


Figure 2

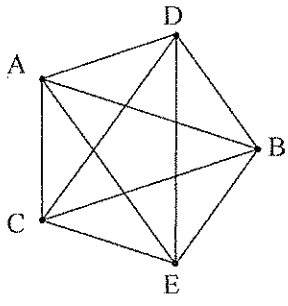


Figure 3

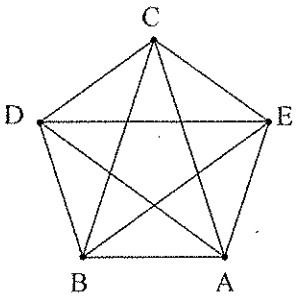


Figure 4

6. Which of the following is the figure that was drawn according to the instructions above?
   a. Figure 1 b. Figure 2 c. Figure 3 d. Figure 4

7. Let S be the area of the figure drawn from the instructions above. The figure consists of three triangles, having the areas s_1, s_2, and s_3, and $S = s_1 + s_2 + s_3$. Which of the following is a possible relationship between the values of s_1, s_2, and s_3?
   a. $s_1 = s_2 < s_3$ b. $s_1 = s_2 = s_3$ c. $s_1 < s_2 = s_3$ d. $s_1 < s_2 < s_3$

8. C_n is an axis of symmetry, which is an imaginary line around which a planar figure can be rotated through $360°/n$, reproducing the original figure. In Figure 1, the imaginary line that passes through point D and the center of the segment BE is a C_2 axis of symmetry because Figure 1 is reproduced by rotating it $360°/2 = 180°$. Figure 1 has other C_2 axes of symmetry. Which of the following is another C_2 axis of symmetry of Figure 1?
   a. the axis passing through points B and C
   b. the axis passing through points A and B
   c. the axis passing through point B and the center of segment CE
   d. the axis passing through point A and the center of segment BD

9. Which of the following statements about the number of C_2 axes of symmetry in the Figures 1 – 4 above is true?
   a. Figure 1 and Figure 2 have more C_2 axes of symmetry than the other two.
   b. Figure 1 has more C_2 axes of symmetry than Figure 3 does.
   c. Figure 2 and Figure 4 have fewer C_2 axes of symmetry than the other two.
   d. Figures 1 – 4 all have the same number of C_2 axes of symmetry.

10. Another type of axis of symmetry of Figure 1 makes an angle of 90° with the plane of the figure passing through its center. Rotating the figure by 72° around the axis reproduces its original shape. According to the definition provided in Question 8, what would be the label for this axis of symmetry?
    a. C_2 b. s_n c. C_5 d. segment BC

V. Answer the questions in Section A, Section B, and Section C.

Section A: For 1 – 5, three definitions are given with one sample sentence each. Think of a word that matches all definitions and also fits the blanks in all the sentences. Convert each letter of the word into a number 1 to 4 according to the table below: number 1 represents letters a – g, 2 represents h – m, 3 represents n – s, and 4 represents t – z. Then choose the matching series of numbers from a – d. For example, if the word you think of is *wise*, for which the first letter *w* is given, the remaining letters would be changed into 2 for *i*, 3 for *s*, and 1 for *e*. Hence, the correct answer would be *w*231.

Numbers	Letters
1	a, b, c, d, e, f, g
2	h, i, j, k, l, m
3	n, o, p, q, r, s
4	t, u, v, w, x, y, z

1. (i) A chemical which is given to people in order to treat or prevent an illness or disease: The d____ will be useful to the hundreds of thousands of people who have this disease.
   (ii) Substances that some people take because of their pleasant effects: Some people with depression take d____s to feel better.
   (iii) Give someone or something a chemical substance in order to make them sleepy or unconscious: Some doctors prefer to d____ their patients so they experience little pain and discomfort during surgery.
   a. d121 b. d234 c. d341 d. d423

2. (i) Someone that likes a famous person or a sports team very much and is interested in them: As a boy, he was a great f____ of the Giants baseball team.
   (ii) A flat object that you hold in your hand and wave in order to move the air and make yourself cooler: A lot of people carry folding f____s during summer to keep cool.
   (iii) To stir some kind of activity: High winds can f____ forest wildfires, causing them to spread to residential areas.
   a. f13 b. f22 c. f34 d. f41

3. (i) A room where a painter, photographer or designer works: She was in her s____ again, painting on a large canvas.
   (ii) Film-making or recording companies: She sent letters to several major s____s to see if she could get auditions to appear in a major motion picture.
   (iii) A small apartment with one room for living and sleeping in, a kitchen and a bathroom: As I will be living there by myself, I want to rent a s____ apartment in New York City.
   a. s12314 b. s24432 c. s31232 d. s44123

4. (i) A custom or belief that has existed for a long time: Mary has carried on the family t____ of serving in the military.
   (ii) An artistic method or style established by an artist: Van Gogh started out in the t____ of Dutch painting.
   (iii) The handing down of information or beliefs by word of mouth: Only a few fishermen are left to hand down tribal t____s of thousands of years.
   a. t13241232 b. t21231421 c. t31124233 d. t43421233

5. (i) The type and range of food that you regularly eat: He has a healthy d____ rich in fruit and vegetables.
   (ii) A requirement by a doctor for their patient to eat a special type or range of foods in order to improve their health: After his heart-attack, the doctor put him on a low-fat, low carbohydrate d____.
   (iii) To eat special kinds of food or less food than usual in order to lose weight: I've been on a d____ since giving birth to my second child.
   a. d123 b. d214 c. d311 d. d424

Section B: For 6 – 10, choose the sentence from a – d where the underlined word(s) is LEAST likely to appear together with the *bold* word.

6. a. Teams belong to an age ***group*** defined by the birth date of the oldest player on the team.
   b. Please email us to receive our free booklet on how to set up a new ***group***.
   c. A person's blood ***group*** is determined by the blood ***group*** of his/her parents.
   d. The set of participants forms one joined ***group***.

7. a. James Coleman was so engrossed in his tweeting that he didn't notice a low hanging ***branch*** on his route.
   b. Sharon Coleman has been promoted to ***branch*** manager at the area estate agency.
   c. Simply enter your postcode or location to find your local bank ***branches*** and their full contact details.
   d. The simplest means for a foreign company to establish a base for business operations in Japan is to begin a ***branch*** office.

8. a. The aircraft made an overnight ***stop*** at the airport due to the problem.
   b. Driver Runs ***Stop*** Sign; Causes Crash.
   c. I fell asleep on the train and missed my ***stop***.
   d. Do not stand up or leave your seat until the aircraft has finished to a ***stop***.

9. a. The underlying ***cause*** of high blood pressure cannot be determined.
   b. The key principle of establishing ***cause*** and effect is proving that the effects seen in the experiment happened after the cause.
   c. Working for charity is considered by many people as a high ***cause***.
   d. Employers typically cannot terminate your contract without good ***cause***.

10. a. Select a comfortable ***chair*** with arm rests as well as adequate back support.
    b. Pull up a ***chair***, it's time to talk.
    c. Mr Watanabe was selected as the acting ***chair*** for the new venture.
    d. He looked after the ***Chair*** of Japanese Literature at Cambridge University for thirty years.

Section C: For 11 – 15, choose the answer from a – d that best fits in the blank.

11. The committee aimed to _____ the impact of the Charter on communication policy and practice in Africa.
    a. involve b. create c. assess d. signify

12. Once again if these changes continue to develop in the UK, the classification and definition of what _____ a rural area will have to be radically altered.
    a. constitutes b. advocates c. estimates d. requires

13. Eggs and other cholesterol-rich foods, eaten in normal amounts, do not materially _____ the amount of cholesterol in the blood.
    a. distribute b. evaluate c. affect d. obtain

14. Almost 90% of Indonesia's population are Muslims. Thus, Indonesians are _____ of the Islamic faith.
    a. chronologically b. incessantly c. necessarily d. predominantly

15. The price of oil is difficult to predict as it _____ according to various factors including the currently unstable political situation in the Middle East.
    a. disintegrates b. elevates c. fluctuates d. generates

[End of Exam]