

for emotional intelligence will be of equal important.
c d

問 12 He has drawn the world's attention to the danger of global warming
a
with his documentary on climate change entitled *An Inconvenient Truth*,
b c
which won the Oscar for the best documentary films of 2006.
d

問 13 No matter what abundant natural resources may seem, they are limited
a b
and bound to be exhausted, so why don't we utilize them sensibly?
c d

問 14 I have two infants to look after. I change their diapers and wipe off
a
spilled food all day long, day after day. It's so tired that you need
b c
infinite patience.
d

問 15 "It was thoughtful of you to send me the money, You saved my life.
a b
I'm much obliged." "Don't mention it. It was the least I could do."
c d

III 問 16～問 23 について、次の英文の空所(16)～(17)に入れるべき最も適切なものを a～d の中から1つずつ選びなさい。

An ancient Chinese legend says that there was once village famous for the longevity, which went something like this: if you want to live a long life, drink broth made from ginger after getting up in the morning, and drink the broth of a Japanese radish before going to sleep at night. Practice moderation in eating meat and fish, eat a lot of vegetables, keep early hours, and go out for a good long walk and get plenty of exercise every day.

The villagers put the ideas of the song into practice. Why did they recommend a Japanese radish at night and ginger in the morning? After going to bed, there is no need to keep the stomach in action; the easily (16) Japanese radish lightens the burden on the stomach. In the morning, one needs enough energy to start the day; ginger moderately warms and stimulates the stomach, increasing the appetite and promoting good digestion and absorption of nutrients. Ancient Chinese people instinctually knew the (17) of these two vegetables --- without the benefit of scientific evidence.

In traditional Chinese medicine, ginger is considered the best home remedy for colds. We Japanese also have a long-established custom of drinking hot ginger juice when we have a cold. In fact, we make (18) of many vegetables and plants as folk remedies for improving our health. But because such usage is based (19) tradition, the safety and effectiveness of these natural remedies have not always been proven. However, in recent years, interest in the effectiveness of natural foods and herbal medicines has (20), leading to greater scientific attention to the (21) use of plants. Studies from around the world now show that plants are useful for treating disease and improving health, often without any significant side effects.

These days, media attention to particular foods or food groups has led to the belief that eating them can prevent or cure specific diseases or conditions.

Because their advantages are often exaggerated, some see them as health "miracles." But if these "fad" diets are nutritionally unbalanced and unconfirmed by scientific studies, they may have the opposite of the (22) effects.

Longevity, health, happiness. A nutrient-rich diet can help us (23) these benefits, giving us increased energy and stronger bodies and immune systems. Why not take the ancient Chinese song as inspiration and try a healthful diet, relaxation, and exercise ?

問 16 a. digestible b. available c. cooperative d. coordinative

問 17 a. benefit b. demerit c. harm d. charity

問 18 a. a mess b. a choice c. fun d. use

問 19 a. for b. on c. to d. with

- 問 20 a. increased b. decreased c. changed d. inspired
 問 21 a. medicinal b. commercial c. physical d. mental
 問 22 a. disregarded b. intended c. fallen d. changed
 問 23 a. cast b. wrap c. attain d. lose

IV 問 16～20 について、それぞれ下の①～⑤の語句をならべかえて空所を補い、文を完成しなさい。ただし解答は 16～20 に入るものの記号のみを答えなさい。

We all need to feel useful to others. It's an indispensable nourishment for the soul. When this need isn't satisfied it leads to pain ⁽²⁴⁾ that is all the more *1 searing if death is near. A large part of what is called the fear of death comes from a fear that our life hasn't had any meaning, that we have lived (25), that our existence hasn't made any difference to anyone or anything.

[A]

One day I was called in to see Joe, a young man covered with tattoos who had a long history of alcoholism, drugs and violence. He'd become *2 unhinged when he was told that he had brain cancer and had started to break everything in his room. The terrified nurses wouldn't go near him. He seemed like ⁽²⁶⁾ a caged lion when I introduced myself to him as a psychiatrist. But he agreed to talk to me. I sat down next to him and said, "I've heard ⁽²⁷⁾ the news that you've just been given. I know you are very upset. I imagined that it can be quite frightening." He launched into a long *3 diatribe, but after twenty minutes he started to cry. His father was an alcoholic, his mother withdrawn and emotionally absent. He had no friends and his fellow *4 barflies were surely going to ⁽²⁸⁾ turn their back on him. He was lost. I said, "I don't know what I'm going to be able to do for you. But I can promise to see you every week as long as ⁽²⁹⁾ that helps." [B]

During those meetings I didn't have much to say, but I listened. He had worked a bit as an electrician. For years he hadn't held down a job and had lived on welfare. He wasn't speaking to his parents. He spent his days watching TV. He was terribly alone. It soon became clear ⁽³⁰⁾ (was / what / intolerable / death / made / his) the fact that he hadn't done anything with his life. I asked if, in the time remaining to him, he could do something that would be useful to someone. He had never thought about it. He considered it for a while. Then he answered, "There's a church in my neighborhood. I think I could do something for them. They need an air-conditioning system I know how to do that." I encouraged him to go and see the minister, who was delighted with the offer.

Joe got up every morning to go to his rooftop job installing air conditioning for the church. His work moved slowly. Because of his large brain tumor he had trouble concentrating. But there weren't any hurry. The *5 parishioner got used to seeing him up there on the roof. They spoke to him, brought him a sandwich and coffee at lunchtime. He was tearful when he talked about it. For the first time in his life he was doing something that really (31) others. He turned into a different person and never again exploded in anger. In reality, underneath his rough appearance he had a big heart. [C]

One day, Joe couldn't go to work. His *6 oncologist doctor called me to say that he was in the hospital, the end was near and he was going into hospice care. I went to his room in the hospital and found it flooded with sunshine. He lay there very calmly, almost asleep. They had removed all his *7 intravenous drips. I sat down on his bed to say goodbye and he opened his eyes. He tried to speak to me but he didn't have the strength. Lifting a weak hand, he signed for me to come closer. I brought my ear right next to his lips and heard him murmur, ⁽³²⁾ “God bless you for saving my life.”

I still carry with me the lesson he taught me: on the threshold of death, one can still save one's life. That gave me enough confidence to take on the task I had to carry out for myself, to be ready when the time came. In a certain way, Joe too saved my life. [D]

- Notes: *1 searing 耐えがたい *2 unhinged 錯乱した
 *3 diatribe 痛烈な非難 *4 barfly 飲み仲間
 *5 parishioner 小教区民 *6 oncologist 腫瘍学者
 *7 intravenous 静脈注射の

問 24 下線部 (24) と文法的に同じ使い方を含む (a)～(d) の中から 1 つ 選 び な さ い。

- a. That the earth is round is true.
 b. I have the idea that he is still living somewhere.
 c. The man that came in your absence yesterday is now at the door.
 d. The dog that you keep often barks at strangers.

問 25 空所 (25) に入れるのに最も適切なものを (a)～(d) の中から 選 び な さ い。

- a. happily b. successfully c. without cause d. in vain

問26 下線部(26)の意味として最も適切なものを(a)～(d)の中から1つ選びなさい。

- a. a person who cannot do anything
b. a person whose face is quite similar to that of a lion
c. a person who can eat anything quickly
d. a person who is arrogant and short-tempered

問27 下線部(27)とほぼ意味としてあらかず英文を(a)～(d)の中から1つ選びなさい。

- a. the news that his life hasn't had any meaning
b. the news that his existence hasn't made any difference to anyone
c. the news that he has a long history of drugs
d. the news that he has brain cancer

問28 下線部(28)とほぼ同じ意味をあらわす語を(a)～(d)の中から1つ選びなさい。

- a. desert b. respect c. strike d. burn

問29 下線部(29)の意味として最も適切なものを a～d の中から1つ選びなさい。

- a. the writer's advice b. the writer's visit
c. the writer's talk d. the writer's prayer

問30 下線部(30)の語を並べかえて意味の通る文にする場合に5番目に来る語を a～d の中から1つ選びなさい。

- a. what b. was c. intolerable d. death

問31 空所(31)に入れるのに最も適切なものを a～d の中から1つ選びなさい。

- a. disappointed b. gave away
c. experienced d. mattered to

問32 下線部(32)とほぼ同じ意味をあらわす英文を a～d の中から1つ選びなさい。

- a. I am sorry to leave you without saying goodbye.
b. I am happy to meet you in my room.
c. I regret never doing anything useful in society.
d. I really appreciate your helping me.

問33 本文中の[A]～[D]のいずれかに、英文 He calmed down and came to see me every week for six months until he died.を入れるのに最も適切なものを a～d の中から1つ選びなさい。

- a. [A] b. [B] c. [C] d. [D]

問34～問37 について、本文の内容に一致する最も適切なものを a～d の中から1つずつ選びなさい。

問34 How did Joe receive his reality just after he knew his physical condition?

- a. He ignored it.
b. He regretted it.
c. He was overwhelmed by it.
d. He was ready for it.

問35 What was his previous life?

- a. He had lived happily with his parents.
b. He had led a lonesome life.
c. He had earned his living by himself.
d. He had got into a good company.

問36 What was the second to the last line, 'when the time came', mean?

- a. the writer's death
b. Joe's death
c. a man's death
d. none of the above

問37 Why did the writer think, 'Joe too saved my life' in the last line?

- a. Because he thought that Joe died without pain.
b. Because he felt that he was given consolation from Joe's words.
c. Because he could believe that Joe prayed for him.
d. Because he could come to know the meaning of his career.

2012 年度 川崎医科大学 [数学] 解答速報

1 (ベクトル)

(1) $q_1 = -1, q_2 = 1, q_3 = 0, r_1 = -1, r_2 = 0, r_3 = 1$ (アイウエオカ)

$$\frac{1}{t} = \frac{1}{3l} + \frac{1}{3m} + \frac{1}{3n} \quad (\text{キクケ})$$

(2) (i) $|\vec{a}| = 1, |\vec{b}| = 1, |\vec{c}| = 1, \vec{a} \cdot \vec{b} = \frac{1}{2}, \vec{b} \cdot \vec{c} = 0, \vec{c} \cdot \vec{a} = \frac{1}{2}$ (コサシスセソ)

(ii) $|\vec{OT}| = \frac{1}{9}\sqrt{5}, |\vec{TA}| = \frac{5}{9}\sqrt{2}, |\vec{TB}| = \frac{1}{9}\sqrt{59}, \vec{TA} \cdot \vec{TB} = \frac{14}{81}$ (タチツテトハヒフヘ)

三角形 TAB の面積 $\frac{1}{18}\sqrt{34}$ (ホマミム)

2 (確率)

(1) $r_3 = 2, l_3 = 3, L_3 = 3\sqrt{5}$ (アイウエ) $\frac{9}{16}$ (オカキ) $\frac{7}{16}$ (クケコ)

(2) $r_4 = 3, l_4 = 2\sqrt{2}, L_4 = 4\sqrt{5}$ (サシスセ)
 $\frac{27}{128}$ (ソタチツテ) $\frac{41}{128}$ (トナニヌネ)

(3) $n = 45$ (ノハ)

(4) $n = 141$ (ヒフヘ)

3

(1) $\alpha_1 = 1, \alpha_2 = \frac{1}{2} - \frac{1}{2}\log 2, \alpha_3 = \frac{1}{3} - \frac{1}{2}\log 3$ (アイウエオ)

(2) $l_1^2 = 2, l_2^2 = \frac{3}{4}, l_3^2 = \frac{4}{9}$ (カキクケコ)

(3) $\lim_{n \rightarrow \infty} f_n(0) = 0, \lim_{n \rightarrow \infty} l_n = 0$ (サシ)

(4) $n = 3$ (ス), $n = 10$ (セソ)

(5) $\beta = \frac{3}{2}, \lim_{n \rightarrow \infty} n^\beta S_n = 1$ (タチツ)

《講評》

大問3問の出題で、いくつかの分野にまたがった出題であった。イライラさせられる問題設定も例年通り。3は最初に題意がつかめたかどうかで大きく差がつく。図を描いて情報をきちんと処理できれば解答できる。3の後半は時間が足らなかつただろう。合格ラインは65%。