

平成 19 年度
医学部医学科選抜入学試験問題
(英 語)

注意事項

- I. この科目は問題用紙が 14 ページ、解答用紙(マークカード)が 1 枚である。
- II. 解答用紙(マークカード)記入上の注意をよく読み、誤りのないように記入すること。
- III. 問題用紙は解答用紙(マークカード)とともに机上において退出すること。持ち帰ってはいけない。

I

次の英文を読み、下記の設問に答えなさい。

Anorexia nervosa literally means 'loss of appetite for nervous reasons'. It is characterized by weight loss. However, anorexia nervosa sufferers have not lost their appetite. They have lost weight because they are suppressing their urge to eat. Most anorexia sufferers cannot easily dismiss the feeling that they are fat or at risk of becoming fat if they fail to keep their eating in control. Such feelings are usually quite independent of their actual weight. This is referred to as having a distorted body image.

Anorexia nervosa is one of the most serious disorders afflicting children and adolescents, (12) the potential for serious impact on both physical and psychological development. Anorexia nervosa typically begins in adolescence, with onset by age 20 in over 85% of patients and rarely develops after 40 years of age. Mortality is high. Approximately 10% of chronic anorectics die from complications of malnutrition and electrolyte abnormalities, and another 5% die from suicide. This disorder is 10 times more prevalent in women than in men. There (9) is also a strong cultural component. Anorexia nervosa is more common in Western postindustrialized nations, and, in the United States, whites are more affected than African Americans or Hispanic Americans.

While the culture of thinness in which we live is certainly an influential factor in the development of anorexia nervosa, it is (13) no means the sole cause. Anorexia is a (2) response to a complex mix of cultural, social, familial, psychological and biological influences unique to each person. Some possibilities are discussed below.

One widely accepted theory is that people develop anorexia because they seek control over themselves and their lives. Food and weight can be controlled (14) other aspects of life cannot. Restricting food intake while in the presence of enticing foods evokes feelings of accomplishment.

A high percentage of people struggling with anorexia have a history of abuse, neglect, or other traumatic experiences, and develop anorexia as a coping mechanism. Losing weight provides a concrete goal that requires time, energy, planning, and effort. Therefore, anorexia nervosa becomes an effective way to cope with difficult circumstances because it serves to (3) distract the sufferer from the pain.

It has been suggested that anorexia nervosa sufferers come from families who are very (4) close emotionally, but it is difficult for them to develop a sense of their own individuality and independence.

The following two features seem to be characteristic of many sufferers. First, most have (5) low self-esteem. The second feature is that they find it difficult to deal openly with

problematic emotions. This may have something to do with their personality, for instance, they may be obsessional and perfectionist. In general, eating disorders seem to arise in the midst of the difficult business of growing up and developing as a person.

Though no candidate gene has been identified (15) the disorder, data from family and twin studies suggest heritable factors. Anorexia nervosa has a concordance rate of nearly 70% for identical twins and 20% for nonidentical twins. First-degree relatives of anorectics are more likely to be anorexic.

In order to get better from an eating disorder, the first task is for the sufferer to regain a sustainable and healthy body weight and pattern of eating. This involves the person giving up undue eating ⁽¹⁰⁾ restraint. In practice, this involves eating regular meals of sufficient size. Carbohydrates may be especially important in restoring appropriate regulation of eating.

Most people who find themselves with anorexia nervosa have very mixed feelings. On the one hand, they hate their present state; on the other, they fear changing it because change may seem to threaten instability and a loss of control. The sufferer is caught up in a vicious circle and the easiest thing to do in a vicious circle is to stay (16) it. Breaking out is always ⁽¹¹⁾ demanding. It requires courage and faith. The core treatment for anorexia nervosa should involve some kind of psychotherapy which enables the patient to feel safe enough to change.

問 1 下記の(1)～(7)の各問の答えとして最も適切なものを、それぞれA～Dの中から一つずつ選びなさい。

(1) Choose the best selection that fits in the following blank.

The underlined part (1) can be best illustrated by the fact that _____.

- A genuinely obese people often feel themselves as if they are pregnant
- B most people with anorexia nervosa see their body as an object of concern and worry
- C many people with anorexia nervosa believe that eating just small amount of what they consider a “fattening” food will cause them to become obese
- D many anorexia nervosa sufferers experience themselves as being fat when, in reality, they are very thin

(2) Which of the following statements is NOT meant by the underlined part (2)?

- A What may be true of one person may not be so for another.
- B The answer to the question "Why?" is an individual one, requiring deep introspection on a personal level.
- C Dieting has become a cultural phenomenon, which imposes on young women a self image closely linked with their body image.
- D The chances of developing anorexia nervosa may be influenced by a whole range of factors having to do with the person herself, her family, her circumstances, and the society in which she lives.

(3) Which of the following is implied by the underlined part (3)?

- A Many anorectics experience a "high" when they are at a low weight.
- B Losing weight is a way to remain in a child's body without the demands of responsibility that accompany adulthood.
- C For anorexia nervosa sufferers, losing weight could be a means of protecting themselves so that they would be less vulnerable to abuse.
- D Anorexia nervosa helps the sufferers to be unaware of their feelings, forget about pain-filled experience, and survive.

(4) Which one of the following is a good example of the underlined part (4)?

- A A child who feels somehow responsible for his mother's happiness or is afraid of leaving her protection.
- B An adolescent who has experienced physical abuse in childhood.
- C A child whose father is physically or emotionally absent and experiences emptiness.
- D An adolescent who is successful in becoming an autonomous individual.

(5) Which of the following is meant by the underlined part (5)?

- A Whatever appears to be the case on the outside, the sufferers feel very sure of themselves.
- B They have real doubts about their own worth and competence.
- C Anorexia nervosa involves a complex web of ideas linking weight with self-esteem issues.
- D The problem of self-esteem is not mixed up with the issue of eating.

(6) According to the passage, which of the following statements is NOT true?

- A People with anorexia nervosa are obsessed with being thin.
- B Anorexia nervosa is less common in the developing countries than in advanced technological societies.
- C Anorexia nervosa sufferers gain a lot of weight and are terrified of losing weight.
- D Many people with anorexia nervosa believe they are fat and starve themselves.

(7) According to the passage, which of the following is NOT a valid statement about anorexia nervosa?

- A Anorexia nervosa may, in part, be biological, as the genetic evidence suggests.
- B It is difficult to define only one type of young person who is especially liable to develop anorexia nervosa.
- C Anorexia nervosa is a disorder that usually occurs in teenage girls.
- D Anorexia nervosa can be seen more among the ethnic minorities than whites in the U.S.

問 2 本文中の (8) [] ~ (11) [] 内の語に意味が最も近いものを、それぞれA~Dの中から一つずつ選びなさい。

(8) (8) [dismiss]

- A throw away
- B fall short of
- C hit on
- D stick to

(9) (9) [prevalent]

- A ingenious
- B legitimate
- C widespread
- D transparent

(10) (10) [restraint]

- A dimension
- B compliment
- C apparatus
- D constraint

(11) (11) [demanding]

- A challenging
- B prudent
- C insane
- D ambiguous

問 3 本文中の(12)～(16)の空欄に入る最も適切なものを、それぞれA～Dの中から一つずつ選びなさい。

(12) A with B in C through D of

(13) A for B by C in D upon

(14) A until B whatever C unless D when

(15) A on B like C by D for

(16) A from B within C behind D for

II

次の英文を読み、下記の設問に答えなさい。

It is said that dead men tell no tales. If that was ever true, it is certainly not so in our scientific era. Some researchers claim that the transition from a hunter-gatherer lifestyle to agriculture and then to the early stages of urbanization in ancient times has left clues in preserved skeletons that indicate that this “progress” may actually have been hazardous to health. Hunting and gathering required activity and mobility to obtain foods low in fat and high in fiber and vitamins. The isolated bands of people that lived this way had (17) contact with others before 4,000 years ago, and so the chances of contracting infectious diseases were low. Plus, the wild plants that they ate often provided phytochemicals^{*1} that treated parasitic^{*2} infections.

In (18), urbanization led to inactivity and dietary changes. The (19) malnutrition and spread of infectious diseases are seen in the preserved bones of children. When a child starves or suffers from severe infection, the ends of the long bones stop growing. When health returns, growth resumes, but leaves behind telltale areas of dense bone.

Several types of studies vividly point out the health differences between then and now. Tooth decay, for example, is an excellent (20) of health. Among teeth from hunting gatherers, 3% show decay, whereas among farming people, the percentage jumps to 8.7, and among city dwellers it is 17. Before agriculture, life (21) was about 25 years; after, it fell to 19 years. Preserved excrement^{*3} from native peoples who lived in Arizona 9,000 years ago did not contain parasites, but (22) the people began to farm, their excrement contained pinworms, tapeworms, and hookworms. The people (23) these infections by living too

near their excrement, using it to (24) crops, storing grain, and no longer eating plants that contained antiparasitic chemicals.

Paleopathologists, who study the diseases of ancient people, have discovered some fascinating glimpses of the past. For instance, we have learned what humans were like 5,300 years ago from an “Iceman” mummy whose remains hikers discovered in northern Italy in 1991. People nicknamed him Ötzi because he was found in Ötztaler Alps. Ötzi was apparently shepherding his sheep high on a mountaintop. He was dressed for the harsh weather, and berries found with him place the season as late summer or early fall.

Researchers found that Ötzi was ill, yet [] ! An autopsy*⁴ revealed a whipworm in his large intestine, which causes anemia and cramps. About his waist, [] . Each sac contained the birch*⁵ fungus*⁶ which produces an oil that kills whipworms and also causes diarrhea that can flush the parasites out of the body. In addition, DNA from a sample of lung tissue held a surprise—it came from another fungus! This suggests that [] , while working hard in a low-oxygen environment.

A CT scan survey in 2001 detected a wound in Ötzi's shoulder and researchers discovered a stone arrowhead embedded there. Now scientists can tell a story of the Iceman's death. Ötzi was attacked and managed to flee. As he ran, [] . He pulled out the arrow shaft but the head remained stuck in his shoulder. He reached the top of the mountains but now [] . He could go no further, lay down and died.

Limited DNA analysis of Ötzi's tissues indicates that he belonged to the gene pool of people living in the area today. Ötzi's genetic similarity (25) modern humans isn't surprising, considering that the history of life on Earth began more than 3 billion years ago. The 5,300 years (26) Ötzi's existence from ours is but a flicker of evolutionary time.

[註] *¹ phytochemical 「植物化学物質」 *² parasitic 「寄生虫の」

*³ excretion 「排泄物」 *⁴ autopsy 「檢死解剖」 *⁵ birch 「樺」 *⁶ fungus 「菌」

問 1 本文中の(17)～(26)の空欄に入る最も適切なものを、それぞれA～Eの中から一つずつ選びなさい。

(17) A much B little C plentiful
D excessive E incredible

問 2 下記の(27)～(31)の各問の答えとして最も適切なものを、それぞれA～Eの中から一つずつ選びなさい。

(27) Choose the answer that can NOT fit in the following blank.

This passage has something to do with

- A archaeology
- B history
- C astronomy
- D anthropology
- E paleopathology

(28) Each of the following fits into one of the five boxes in the passage above. Choose the suitable one for (28).

- A he carried a remedy with him
- B he was exhausted and weakened from bleeding
- C he was apparently in a weakened condition from a lung infection
- D he was shot in the back with an arrow
- E he wore two small sacs that hung from a leather thong

(29) Which of the following statements is NOT inferred by the underlined part of the first paragraph?

- A When researchers examined skeletons of ancient people, they thought changes from hunter-gatherer lifestyle to agriculture and urbanization caused health problems in some respects.
- B Although it was regarded as a progress in one respect, transition of lifestyles from hunter-gatherer to agriculture increased health risks.
- C Lifestyles and eating habits were crucial factors of health status in ancient times.
- D Researchers who study human bones of ancient eras have difficulty finding signs that show the health condition of people in primitive societies.
- E Skeletons of ancient people offered some evidence of better health status of hunter-gatherers compared with people engaged in agriculture or who lived in urban areas.

(30) According to the passage, which of the following statements is true as an explanation for the health status of hunter-gatherer communities?

- A People in hunter-gatherer groups were more susceptible to infectious diseases than agriculturalists because each group lived in an isolated manner.
- B Hunter-gatherers had higher incidence of tooth problems than people who engaged in farming.
- C Meals that hunter-gatherers ate seem to have been unhealthy with respect to vitamins, fiber, and fat.
- D The mobility of agriculturalists tended to be lower than that of hunter-gatherer communities.
- E Hunter-gatherers had a higher incidence of parasitic infections than farmers.

(31) Which of the following statements is NOT true concerning Ötzi?

- A The birch fungus that Ötzi carried with him shows that hunter-gatherers ate plants of an antiparasitic nature.
- B The Iceman's possessions have given scientists a better look at what life was around the 4th millennium BC.
- C Analysis of the mummy's digestive tract shows that the Iceman suffered from parasitic infections.
- D The means for Ötzi to support himself seem to involve the searching for edible plants.
- E The material in Ötzi's sacs was actually a medicinal fungus effective in treating lung cancer.

III 次の(32)～(36)の各組のA～Eの単語の中で、最も強いアクセントのある音節の位置が他と異なるものを一つずつ選びなさい。

(35) A con-*ti-nu-i-ty* B *ar-is-toc-ra-cy* C *hy-po-thes-i-cal*
D *en-thu-si-as-tic* E *cu-ri-os-i-ty*

IV

次の(37)～(41)の各英文のA～Eの下線部の中で誤っているものを、それぞれ一つずつ選びなさい。

(37) Illegal immigration exists whenever the economic incentives are strong enough,
A regardless of authorities' attempts to eliminate them.
C D E

(38) The whole members of the Girl Scouts went in the direction of a river, and most of
A B them started to jump into the river upon getting to it.
C D E

(39) The cerebellum is the part of the vertebrate brain responsible for controlling
A B C muscular movements, balance, and to coordination.
D E

(40) Plants absorb water and nutrients and anchoring themselves in the soil with their
A B C D E roots.

(41) The tourist industry, even as much as the computer industry, is the main source of
A B C revenue for New York's economy.
D E

V

次の(42)～(46)の各英文の空欄に入る最も適切な語(句)を、それぞれA～Eの中から一つずつ選びなさい。

(42) The process of osmosis _____ through a membrane in order to equalize the conditions on both sides of the membrane.

A involves fluid to pass	B which involves passing fluid
C involving fluid passing	D involves the passing of a fluid
E that involves fluid passing	

(43) People give little thought to the gravity that glues them to the earth which _____ send them spinning off into space.

A might however	B would otherwise
C could nevertheless	D must therefore
E should thus	

(44) It would be better if the project were completed before we _____ for the holidays.

A break	B will break	C had broken
D have been broken	E were breaking	

VI 次の会話が成立するように、空欄に入る最も適切なものを、それぞれA～Eの中から一つずつ選びなさい。

Mike: Hello, Professor Gable. This is Mike Ford. I'm in your senior seminar this semester.

Prof. Gable: Oh, yes, Mike. How are you?

Mike: Just fine, thanks. I'm calling because I'm applying for graduate school, and I need three letters of recommendation. (47) ?

Prof. Gable: Why yes, Mike. (48). I think you are an excellent candidate for graduate school. Are you applying here or to another university?

Mike: Here. (49) Everyone on the selection committee knows and respects you.

Prof. Gable: Let's see, Dr. Brown is the chair of the committee, isn't he?

Mike: Yes. So if you would just write the letter to him, that would be great.

Prof. Gable: All right. I'll send it directly to his office.

Mike: Thank you. (50)

Prof. Gable: You're welcome. I'm

- B Would you be willing to write me one
- C Could you spare me a minute, please
- D Would you blame me for that
- E Would you do me a favor in return

(48) A I'm really overwhelmed
B It could happen to anyone
C It's too early to give up
D It's all in your mind
E I'd be happy to

(49) A That's why you deserve the credit, not me
B That's what I call bad timing
C That's why I think otherwise
D That's to your credit
E That's why I think your letter matters

(50) A I really appreciate it
B Life would mean nothing without you
C You're really out of it
D It was a lucky hit
E This is very embarrassing

VII 次の(ア)～(エ)の各会話に関する問の答えとして、最も適切なものを、それぞれA～Eの中から一つずつ選びなさい。

(ア) Mother: Are you still studying? It's three o'clock in the morning.

John: I know. I just can't seem to get caught up.

Q: What does John mean?

(51) A He should go to bed.
B He did not know the time.
C He has been trying to bring his assignments up to date.
D He is not sleepy yet.
E He is doing well in his class.

(1) Patty: Did you make your flight okay?

Barry: Just barely. The train was late.

Q: What does Barry mean?

(52) A The plane did not take off on time.

B He almost missed his flight.

C The flight was cancelled.

D The train never arrived.

E The plane made a successful landing.

(2) Jack: Do you want to see if I can get tickets to the football game next week?

Patty: I don't think we stand a chance, but try anyway.

Q: What does Patty mean?

(53) A She's trying to fool him.

B She doesn't want to get tickets because they might have to get up early.

C She thinks it's going to be hard to get tickets.

D She already has tickets for both of them.

E She doesn't want to go to the football stadium.

(3) Susie: This was supposed to be a quiet, relaxing weekend.

Alex: But it didn't quite turn out that way, did it?

Q: What does Alex imply about the weekend?

(54) A The weather wasn't good.

B It was perfectly planned.

C It was quite relaxing.

D It was unexpectedly busy.

E It was extraordinarily comfortable.

VIII

次の(ア)～(オ)の日本語の文の意味を表すように、空欄にそれぞれA～Jの語(句)を入れて英文を完成させ、(55)～(64)に入るものを選びなさい。但し、文頭にくる語(句)も小文字の書き出しになっている。

(ア) 高血圧で心臓に異常な負担をかけると、心肥大をきたすことがあります。

The _____ (55) _____ the heart (56) _____ the heart
_____.

A become	B on	C cause	D high blood pressure
E enlarged	F to	G strain	H can
I from	J abnormal		

(イ) 政府立法は工場や乗り物の公害規制にいたり、生活の質の向上に役立ってきた。

Government legislation _____ (57) factories
and vehicles, (58) _____ life.

A controls	B the quality of	C has	D in	E which
F on	G has helped	H pollution	I improve	J resulted

(ウ) 私が今まで述べてきたことが、この計画に私が反対する理由です。

I _____ (59) so _____ (60) _____
_____.

A the plan	B I	C the reasons	D with	E stated
F far	G are	H what	I disagree	J have

(エ) お分かりのように、人々は、そのつもりがなくても、自然のバランスを崩すことがあり得るのです。

you _____, (61) _____ the balance of
nature (62) _____.

A for people	B meaning	C see	D to disturb	E to
F it is	G can	H without	I as	J possible

(オ) 喫煙と飲酒の両方をする人々は、そうでない人々の最高15倍口腔ガンにかかりやすい。

People who _____ smoke and drink are _____ to oral cancer (63)
_____ (64) _____ don't.

A who	B to	C both	D 15	E those
F than	G times	H up	I vulnerable	J more