I

以下の英文を読み、設問に答えよ。なお、答は解答冊子における対応した解答欄に 記載すること。

Alzheimer's disease (AD) is one of several causes of dementia*1, a brain problem that makes it difficult for you to complete daily tasks without help. For many people, AD starts with changes in memory, but some people with AD also have changes in language, mood or thinking skills.

(あ)

The cause of AD is unknown. Scientists know that in AD there is a large build-up *2) of proteins called *amyloid* and *tau* within brain cells. These proteins occur normally, but (1) 我々はなぜそれらが大量に溜まる(build up)のかを、まだ理解していない。 (2)病気の進行は症状(symptom)なしに何年も続き得る, but as more and more proteins form in brain cells, the cells lose their ability to function and eventually die. (3) This causes the affected parts of the brain to shrink.

(//)

Most people with AD start having symptoms after age 65, although some people have shown signs as early as age 40.

(う)

For many people, the first sign of AD is a change in memory, but others may have changes in language, mood, or thinking skills. For example, some people with AD may have trouble remembering to pay the bills or organizing tasks at work. Others may have more trouble with planning, difficulty in talking or getting lost in familiar environments. AD can also affect a person's mood, and people with AD may become depressed, anxious, paranoid*3) or irritable*4. The early symptomatic stage of AD is called mild cognitive*5) impairment. People with AD gradually need more help from others to complete their daily tasks. They may need help paying their bills, shopping, taking their medications or remembering

appointments. Late in the disease, people may need help with bathing and dressing. AD is a disease that changes with time. A person with AD can live many years with the disease. (4) これは人によって異なるけれども、AD に罹患した人は8年から20年もしくはそれ以上、生きるであろうことを研究は示唆している。

(え)

Though there is no cure for AD yet, there are medications that help manage the symptoms. There are two general types of medications used to treat AD, the cholinesterase inhibitors*6 and one NMDA receptor antagonist*7. These medications can help improve cognition, but they do not reverse or slow down the disease process in the brain. Often times, people with AD can have mood changes, such as depression or irritability. (5) これらはうつや不安症に使われるような薬によってなんとかすることができる。

(お)

In addition to medications, there are various ways to help a person with AD. Research has shown that physical exercise helps to enhance brain health and improves mood and general fitness. A balanced diet, enough sleep, and limited alcohol intake are other important ways to promote good brain health. Other illnesses that affect the brain, such as diabetes*8, high blood pressure and high cholesterol, should also be treated if present.

(出典: Weil Institute for Neurosciences, Memory and Aging Center: https://memory.ucsf.edu/dementia/alzheimer-disease. 一部改変している。)

*1)	dementia	認知症	*2)	build-up	溜まったもの
*3)	paranoid	過剰にうたぐり 深い	*4)	irritable	短気な irritability は名 詞
*5)	cognitive	認識の cognition は名詞	*6)	cholinesterase inhibitor	コリンステラー ゼ阻害剤という 薬剤
*7)	NMDA receptor antagonist	NMDA 受容体拮 抗薬という薬剤	*8)	diabetes	糖尿病

問1 (あ)から(お)には各段落に対するタイトルが入る。以下の選択肢から選べ。なお、各選択肢の使用は1回のみとする。

選択肢

- 1: Are There Medicines to Treat AD?
- 2: What Other Things Help?
- 3: What Happens in AD?
- 4: What Causes AD?
- 5: How is Age Related to AD?

問2

下線部(1)を英訳せよ。

問3

下線部(2)を英訳せよ。

問4

下線部(3)は何を指すのか、20字以内の日本語で答えよ。

問5

下線部(4)を英訳せよ。なお、冒頭の部分はすでに示してある。

問6

下線部(5)に関して、下の語群中 $1\sim8$ の語句を適切な順に並べ替えて英訳し、その順序を数字で解答欄の()に記入せよ。なお、選択肢の使用は 1 回のみとし、最初の語はすでに示してある。

1: managed 2: depression 3: can 4: be

5: or anxiety 6: used for 7: by 8: medications like the ones