第 1 問から第 3 問では、問題文の中の [　　] 内の数字はマークシートの問番号を示している。該当する問番号の解答記入欄に答をマークしなさい。

第 1 問　次の問 1 ～ 6 の空所 [　1　] ～ [　6　] に入れるのに最も適切なものを (1) ～ (4) から 1 つ選び、その番号をマークしなさい。

問 1.　He said he would be the [　1　] person to run away in the face of the enemy advance.

(1) hardest　(2) impossible　(3) last　(4) unbelievable

問 2.　I cannot believe that it is [　2　] to spend so much.

(1) sensible　(2) sensing　(3) sensitive　(4) sensory

問 3.　A: “I’m concerned we’ll fail the test tomorrow.”
B: “[　3　]. I need to pass it.”

(1) I’m afraid not　(2) I’m not afraid so
(3) I don’t hope so　(4) I hope not

問 4.　She persisted [　4　] her refusal to admit responsibility.

(1) for　(2) in　(3) on　(4) to

問 5.　The way [　5　] they brought up their children was amazing.

(1) how　(2) that　(3) where　(4) whether

問 6.　Those paintings are [　6　] expected to sell for between $35,000 and $45,000.

(1) each　(2) either　(3) every　(4) some

第 2 問　次の問 1 ～ 4 においては、それぞれ日本語の意味に合うように下の(1)～(7)の語句を並べかえて空所を補い、適切な文を完成させなさい。解答は [　7　] ～ [　14　] に入れるものの番号のみをマークしなさい。ただし文頭にくる文字も小文字にしてある。

問 1.　昨日のパーティで彼はそのロシア人女性に初めて会ったのだが、彼女の息子は 2 人ともその言語を話せない。

At yesterday's party, he first met that Russian woman, _____ _____ [　7　] _____ _____ [　8　] _____ language.

(1) can	(2) neither	(3) of	(4) sons
(5) speak	(6) the	(7) whose	

問 2.　彼が負けたら君に 100 ドルあげるよ。

I will _____ _____ [　9　] _____ _____ [　10　] _____.

(1) 100 dollars	(2) bet	(3) he	(4) that
(5) will	(6) win	(7) you	

問 3.　再利用できる箱はいつでも贈り物に使えるように手元に置いておくと役に立つ。

_____ [　11　] _____ _____ [　12　] _____ _____ hand for gifts anytime.

(1) are	(2) boxes	(3) great	(4) have
(5) on	(6) reusable	(7) to	

問 4.　新薬はその疾患に大きな効果があると期待されており、また深刻な副作用を引き起こすおそれもないだろう。

The new medicine is expected to be highly effective against that disease, _____ _____ [　13　] _____ _____ [　14　] _____ any serious side effects.

(1) a	(2) it	(3) nor	(4) of
(5) pose	(6) risk	(7) will	

第 3 問　次の英文を読み、後の問いに答えなさい。

Patients who have real-time video visits with their primary care providers instead of in-person exams are generally satisfied with the convenience and quality of their checkups, a new study suggests.

There's a lot about these telemedicine visits that can sound (　あ　): no need to get stuck in traffic on the way to the doctor; no long stretches in the waiting room before the exam; no missing half a day of work for an appointment that's over in the blink of an eye. But research to date hasn't offered a (　い　) picture of how the reality of virtual visits matches up with patients' expectations.

"Prior to the current study there was very little research evidence about primary-care video visits, especially when the visits are with a patient's own primary care providers (the ones they also visit in-person) as a part of their ongoing clinical care," said lead study author Dr. Mary Reed of Kaiser Permanente Northern California.

Reed and colleagues surveyed 1,274 patients at Kaiser in Northern California who had a scheduled video visit with a primary care provider in autumn 2015 to see how well the technology and the medical care worked for them.

Nearly all of the participants had some previous experience using video calling, although it might have been for personal or professional meetings and not for a medical checkup. Most of them also had undergraduate or advanced degrees and more than a third had household income of more than $100,000 a year.

Patients who had to take time off from work or other responsibilities for an in-person visit reported more often that the video visit reduced their in-person visits.

There were many reasons patients cited for having video visits: 87 percent found it more convenient; 82 percent liked that they could have the video visit with their regular primary care provider; and 70 percent were not sure they needed to go see a doctor in person.

After the video exams, 93 percent of patients felt the checkup met their needs; 92 percent felt the provider was familiar with their medical history; and 90 percent were confident in the quality of their care.

In addition, 84 percent of patients who had video visits thought the experience improved their relationship with their provider.

(　う　), 41 percent of participants said they preferred an in-person visit, 24 percent expressed concern about making their home or video visit space presentable for the checkup, and 21 percent of patients worried they might not get adequate treatment.

Overall, nine in ten patients said they would consider a video visit in the future, even if they didn't go to their scheduled visit during the study.

One drawback of the study is that it's old — the video visits happened several years ago and technology used in 2015 may look a lot different than what's possible today. Patients in the study were also fairly affluent and educated, and it's possible results would look different for people with lower income and education levels.

There's also a limit to what types of medical conditions may be suitable for telemedicine checkups,

said Dr. Jay Portnoy, medical director of telemedicine at Children's Mercy Hospital in Kansas City, Missouri.

"The most common issues dealt with include colds, rashes, behavior issues and common issues that are embarrassing such as hair loss, erectile dysfunction, birth control and so on," Portnoy, who wasn't involved in the study, said by email.

Video visits still might one day replace many in-person checkups, said Dr. Michael Barnett of the Harvard T. H. Chan School of Public Health in Boston.

"We are a long way from that because many people prefer in-person care and technology is still a barrier for many of the sickest patients who don't use the internet or smart phones," Barnett, who wasn't involved in the study, said by email. "Video visits might help health spending by avoiding unnecessary office visits, but even if they don't the convenience and time saved from them is very valuable."

https://www.reuters.com/article/us-health-telemedicine/patients-value-convenience-of-telemedicine-idUSKCN1S525T

注 checkup: 診察　telemedicine: 遠隔医療　blink: またたき
ongoing: 継続中の　household: 世帯

問 1. 空所 (　あ　) に入れるのに最も適切なものを (1) ～ (4) から 1 つ選び、その番号を [　15　] にマークしなさい。

(1) appealing　(2) entertaining　(3) inconvenient　(4) uncertain

問 2. 空所 (　い　) に入れるのに最も適切なものを (1) ～ (4) から 1 つ選び、その番号を [　16　] にマークしなさい。

(1) clear　(2) nostalgic　(3) satisfied　(4) vague

問 3. 空所 (　う　) に入れるのに最も適切なものを (1) ～ (4) から 1 つ選び、その番号を [　17　] にマークしなさい。

(1) Eventually　(2) However　(3) Similarly　(4) Therefore

問 4. この研究で調査された人たちに関して、本文の記述と合致するものを(1)～(4)から 1 つ選び、その番号を [　18　] にマークしなさい。

(1) Approximately 90% of the participants who did not go on their scheduled video visit stated that they would schedule a video visit in the future.
(2) Most of the participants were university graduates and had a household income of over $100,000 per year.
(3) Regarding the video exams, over 90% of the participants were confident in the quality of the care they received and felt familiar with their medical history.
(4) Some participants noted being uncertain about the necessity of an in-person visit as a reason why they chose to have a video visit.

問 5. この研究の問題点として本文で言及されているものを(1)～(4)から 1 つ選び、その番号を [　19　] にマークしなさい。

(1) Nearly all participants experienced video calling for the first time during this study.
(2) Participants had low educational levels.
(3) Participants were quite wealthy.
(4) The video visit technology used was already out of date at the time of the study.

問 6. Barnett についての本文の記述と合致するものを(1)～(4)から 1 つ選び、その番号を [　20　] にマークしなさい。

(1) Barnett claimed that video visits are a convenient option for the sickest patients because they frequently use the internet and smartphones.
(2) Barnett remarked that video visits will not soon replace many in-person checkups due to technological barriers for some people and people’s preference for in-person care.
(3) Barnett stated that video visits are valuable because they allow people to avoid unnecessary office visits to reduce health spending.
(4) Barnett was one of the researchers leading this study, and his research shows that video visits might help health spending by avoiding unnecessary office visits.

この後の第 4 問と第 5 問は記述用解答用紙に解答しなさい。

第 4 問　次の英文を読み、後の問いに答えなさい。

The human body is often visualized as a symmetrical form: Picture the geometric precision of Leonardo da Vinci's iconic drawing of a man's proportions encased by a circle and square. In reality, we are actually quite lopsided. Most people have a dominant ear; the same is true for eyes, feet, and hands. Handedness is perhaps the most obvious of these asymmetries.

From the time most children first start picking up and using objects, they tend to favor one hand over the other. And in a majority of humans, the right side is dominant: about 85 percent of the modern human population on Earth is right-handed.

【　あ　】

Is this a trait that our hominin ancestors also possessed? How long has right-handedness outweighed left-handedness?

Evolutionary anthropologist Natalie Uomini was unaware that she would be tackling these questions when she began her academic career studying the origins of language. Her interest was in the so-called technological hypothesis, which suggests that the origin of hominin language lies in the teaching of stone toolmaking. Uomini started to investigate such tools to see what she might glean about the details of how exactly they were made.

【　い　】

Uomini focused on a collection of Acheulean tools—a technological toolkit that lasted for nearly 1.5 million years and was the primary tool type made by early Neanderthals and their predecessor *Homo heidelbergensis*. Many of these tools are characterized as hand axes: multiuse, teardrop-shaped tools crafted from a core of flint, chert, or other similar stone.

【　う　】

Uomini tasked expert flint knappers with making replicas of Acheulean tools and Oldowan "choppers," an even earlier form of stone tool. She found that both right- and left-handed knappers could make a tool for either a right- or left-handed user—so a stone tool could not reveal the handedness of its maker. But, she discovered, it could reveal something about its intended user.

Uomini's work showed that the way in which a knapper struck the tool with a hammerstone to remove flakes was a good indicator of whether the tool was meant to be used by a right- or left-hander: The toolmaker removed flakes in either a clockwise or counterclockwise direction, depending on the handedness of the person for whom the tool was intended. The tools were also blunted on one side to make them more comfortable to hold by either a right or left hand—much as right- and left-handed scissors

have different handle shapes.

【　え　】

This trend is borne out by another line of evidence: skeletal asymmetry. As you (or anyone—even a Neanderthal) use muscles in your body, and as those muscles grow stronger, the parts of the skeleton to which those muscles attach also grow in order to provide more robust anchor points for the increased muscle mass. After death, the skeleton can reveal which parts of the body were stronger, and thus used more intensively, than others.

《A》Neanderthals seem to have had unusually strong right arms based on studies of a number of upper arm bones (humeri) from Neanderthal specimens. We humans typically have a 4 to 13 percent difference in muscle development between our right and left arms. Neanderthals, on the other hand (pun intended), had up to 50 percent or more muscular asymmetry.

【　お　】

Biological anthropologists have suggested for decades that this development in Neanderthal right-arm muscles was a result of the right-handed use of spears to hunt large game animals. The strength needed for the thrusting or throwing motion capable of killing a bison, horse, or reindeer would certainly be immense.

Another hypothesis, though, suggests that the muscular asymmetry is the result of a much less dangerous task: the arduous scraping of the animal skins that Neanderthals used to keep warm during harsh European winters. Research done in the 1960s found that Neanderthal stone tools were mostly used by right-handed individuals.

【　か　】

Whatever the reason, the Neanderthal skeletal record shows that a stark majority (76 percent of 69 Neanderthals studied) were dominant in their right hands. That's very close to the modern human figure of 85 percent.

How might a prevailing trend of right-handedness have affected Neanderthal day-to-day life? Handedness probably had much the same impacts for them as it has for us today. Instead of right- and left-handed pairs of scissors, Neanderthals had right- and left-handed stone tools. Perhaps Neanderthals also ate with a preferred hand or made gestures with their dominant arm. There are only a few known examples of Neanderthal art, but compellingly, one handprint does exist, on the wall of Maltravieso Cave in Spain. The print was made by dabbing paint onto the wall around what is demonstrably a left hand. 《B》The artist, whoever he or she was, painted right-handed.

https://www.sapiens.org/column/field-trips/handedness-neanderthals/ (改変あり)

The Neanderthal Arm- Hints About Handedness by Anna Goldfied, 11 JULY 2019, Sapience.org.

注　iconic: 象徴的な
hominin: ヒト族 (の)
Acheulean: アシュール文化 (の)
chopper: 礫 (れき) 器
robust: 強固な
scrape: ～をなめす
encase: ～を囲う
outweigh: ～に勝る
knapper: 石工
flake: 剥片
specimen: 標本
stark: はっきりした
lopsided: 非対称的な
glean: 少しずつ収集する
Oldowan: オルドワイ文化 (の)
blunt: ～を鈍くする
arduous: 努力を要する
dab: ～を軽くぺたぺたと塗る

問 1．Uomini が石器の調査を始めたきっかけは何か、本文の内容に即して日本語で述べなさい。

問 2.　石器には右利き用と左利き用があるが、その違いを本文の内容に即して 2 つ日本語で述べなさい。

問 3.　下線部《A》は、何のためにどんな道具を右腕で使用した結果と考えられるか、本文に即して 2 つの可能性を日本語で述べなさい。

問 4.　残されている手形が左手のものであることから下線部《B》のように推測できるのは何故か、本文の内容に即して日本語で根拠を述べなさい。

問 5.　次の段落は本文のどの位置に置くのが最も適切か、【あ】～【か】の記号で答えなさい。

Archaeologist Olaf Jöris, a colleague of Uomini's, applied this research to an assemblage of Neanderthal stone tools from Germany and found that at least 85 percent of those tools were made for right-handers, while some appear to have been modified specifically for left-handers.

注　assemblage: 一群

第 5 問　次の英文を読み、下線部 (1) ～ (3) の日本語の内容を英語にしなさい。

An increasing number of offices are adding greenery to their environments, finding it a good way to reduce stress among employees and enhance their corporate image to make them more attractive to potential recruits.

(1)オフィスの緑化とは、室内への植物の持ち込みにとどまらず、従業員の心身の健康を増進する独創的で創造性に富んださまざまな設計の導入でもある。

Nextbeat Co., an information technology startup founded in 2013, has a vine tree covering a 2.5-meter-diameter ring hanging from the ceiling of the entrance at its head office in Tokyo.

“You can see greenery everywhere,” said a woman visiting the office, referring to the green spaces on each floor. The sun appears to shine brighter due to the presence of plants.

In the lounge where employees relax, a tree dubbed “everfresh,” which survived a typhoon in a forest in Okinawa in the southernmost prefecture of Japan, stands as a symbol of company vitality.

“Greenery helps employees feel refreshed and improves concentration,” Akane Hosokawa, a 34-year-old public relations official for the company, said. “(2)お客様が会社にいらしたとき、社内にある緑がまず話題になることが多いです,” she added.

Among the 60 new workers who joined Nextbeat in April, some attributed their choice to the green office environment. Companies are paying greater attention to working environments as they have been legally required to screen for stress-related illnesses since December 2015. They are finding that the promotion of employees' health by adding plants to the workplace reduces stress and increases their productivity.

Following the global financial crisis caused by the bankruptcy of U.S. financial services company Lehman Brothers Holdings Inc. in 2008, many companies removed indoor plants from their offices to cut costs, according to Daiichi Engei Co., which creates green environments in offices and commercial facilities.

Recently, however, the introduction of greenery is increasing as part of work-system reforms.

A demonstration experiment led by Kahori Genjo, an associate professor at the Graduate School of Engineering of Nagasaki University, found that the indoor presence of greenery relaxes people and eases their drowsiness or discomfort because it stimulates the parasympathetic nervous system — sometimes called the rest and digest system — in the autonomic nervous system.

Prime Assistance Inc., a Tokyo-based provider of roadside assistance services, maintains a green reception area and customer call center and farms out the management of plants to experts who water and trim them or replace them twice a month.

“(3)そのサービスには月に約 20 万円かかりますが、緑に囲まれた社内環境は従業員の間の議論を活発にし、業務を行う上で役立ちます,” a company official said.

https://english.kyodonews.net/news/2019/06/e31337c21651-feature-offices-adding-greenery-as-part-of-work-style-reform.html (改変あり)

"Offices adding greenery as part of work-style reform" 2019年6月3日「KYODO NEWS」 共同通信配信

注　parasympathetic nervous system: 副交感神経系　　autonomic nervous system: 自律神経系