

第 1 問から第 4 問では、問題文の中の [] 内の数字はマークシートの間番号を示している。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 1～8 の空所 [1]～[8]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. Ann found out then that her daughter [1] with her dogs for the last two hours.

- (1) had been playing (2) had played
(3) has been playing (4) has played

問 2. Bill argued with his girlfriend that they should move in together, but I think she will [2] not to.

- (1) avoid (2) decide (3) enjoy (4) stop

問 3. His mother welcomed him [3] her arms wide open and tears in her eyes.

- (1) after (2) of (3) to (4) with

問 4. I won't ever forget that a surgeon [4] he was familiar saved my father's life.

- (1) on which (2) on whom (3) with which (4) with whom

問 5. Isn't it inappropriate for high school students to take [5] in such a late-night event?

- (1) apart (2) aside (3) part (4) place

問 6. She smiled, finally [6] in turning on her new electronic device.

- (1) succeed (2) succeeded (3) succeeding (4) success

問 7. Their juvenile actions rendered the older folks [7] than excited.

- (1) calm (2) calmer (3) more calm (4) much calm

問 8. What would you [8] to studying together for tomorrow's test?

- (1) say (2) speak (3) state (4) talk

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、最も適切な文を完成させなさい。解答は[9]～[16]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. アジア諸国は温室効果ガス削減の合意に向けて一歩近づいている。

Asian countries are _____ [9] _____ _____ [10] _____ greenhouse gasses.

- (1) an agreement (2) closer (3) coming to (4) cutting
(5) on (6) one step (7) to

問2. 多くの部員が新しいことに挑戦するこの部活は、前途有望と評される。

_____ [11] _____ _____ _____ [12] new challenges is deemed promising.

- (1) many (2) members (3) of (4) on
(5) take (6) this club (7) whose

問3. その計画は上手くいかなかったとだけ言っておこう。

_____ [13] _____ _____ _____ [14] _____.

- (1) failed (2) it (3) say (4) suffice
(5) that (6) the plan (7) to

問4. 理不尽な要求には決して屈するべきではない。

At _____ _____ [15] _____ _____ [16] _____ unreasonable demands.

- (1) give (2) in (3) no (4) should
(5) time (6) to (7) you

第3問 Read the article and answer the questions that follow.

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注	archaeologist: 考古学者	intriguing: 好奇心をそそる	artifact: 人工物
	excavate: ~を発掘する	unearth: ~を掘り出す	porous: 多孔性の
	submerge: ~を沈める	sodium phosphate: リン酸ナトリウム	buffer solution: 緩衝液
	proof of concept: 概念実証	contaminate: ~を汚染する	

問 1. Choose the meaning of the underlined word “non-invasive” that best fits the context within the article. Write the number of your answer in [17].

- (1) causing no damage
- (2) involving no physical contact
- (3) not harming living beings
- (4) not requiring surgical cutting

問 2. According to the article, what is one potential application of the newly developed DNA extraction technique? Write the number of your answer in [18].

- (1) to analyze dietary habits of Stone Age populations through fragment analysis
- (2) to determine whether ancient tools were buried by Homo sapiens or Neanderthals
- (3) to improve the accuracy of radiocarbon dating of archaeological artifacts
- (4) to investigate sex-based divisions of labor in prehistoric societies

問 3. Which of the following statements about the newly developed DNA extraction technique is TRUE according to the article? Write the number of your answer in [19].

- (1) It can be successfully applied to both bone artifacts and stone tools.
- (2) It involves taking small samples of the artifact's surface to retrieve DNA.
- (3) It requires freshly excavated and uncontaminated artifacts to work effectively.
- (4) It successfully extracted ancient DNA from bone tools excavated in the 1970s to 1990s.

第4問 Read the article and answer the questions that follow.

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注	microbiome: 微生物叢	metabolite: 代謝物	inflammatory: 炎症性の
	antibiotic: 抗生剤 (の)	susceptible: かかりやすい	pathogen: 病原体
	mimic: ～をまねる	resilient: しなやかで強い	commensal: 共生の
	monopolize: ～を独占する	robust: 力強い	immunosuppressant: 免疫抑制の
	bolster: ～を支える、強化する		

問 1. Based on the context of the article, which phrase best fits (あ)? Write the number of your answer in [20].

- (1) power up (2) look after (3) take over (4) wipe out

問 2. Which statement is closest in meaning to what is mentioned in this article? Write the number of your answer in [21].

- (1) A diet rich in plant-based foods helps renew a diversified gut microbiome after antibiotics.
(2) Antibiotics do not affect the gut microbiome when taken with a Mediterranean diet.
(3) Mediterranean diet-based food intake should be decreased when antibiotic use is called for.
(4) Plant-based diets slow down the recovery of the gut microbiome after antibiotic use.

問 3. According to the article, what is necessary for the gut microbiome to fully recover after damage?
Write the number of your answer in [22].

- (1) a correct sequence of occurrences helping the recovery of healthy gut microbes
- (2) completely removing all gut bacteria before starting antibiotics to prevent infections
- (3) eating a diet rich in processed foods to encourage quick return of gut bacteria
- (4) unplanned bacterial regrowth occurring regardless of nutrient supply or timing

この後の第5問と第6問は記述用解答用紙に解答しなさい。

第5問 次の英文を読み、後の問いに答えなさい。

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注 sperm whales: マッコウクジラ
wire: ～を配線する
avian: 鳥類の
zebra finch: キンカチョウ

noggin: 頭
stick around: 残っている
suborder: 亜目
gauge: ～を測定する

hefty: 重い
songbird: 鳴鳥
speciation: 種分化

- 問1. 鳴鳥に関する Jarvis たちの研究結果は、これまで立証の試みがなされていなかったどのような説を検証するに至ったのか、本文の内容に即して日本語で答えなさい。
- 問2. 下線部«A»は、Jarvis たちが行った実験における音声学習を行う鳥のどのような具体的な行動によって証拠づけられたのか、本文の内容に即して 50 字～60 字の日本語で答えなさい。
- 問3. (i) Jarvis たちがまだ明らかにしていないことは何か、本文の内容に即して 60 字～70 字の日本語で答えなさい。
- (ii) それを明らかにするために今後どのようなことをする必要があるのか、本文の内容に即して日本語で答えなさい。
- 問4. 次の段落は本文のどの位置に置くのが最も適切か、【あ】～【え】の記号で答えなさい。

This doesn't mean that the two bird species who were not vocal learners were stupid. Instead, it shows they did not evolve this one particular form of intelligence. "We have to be careful and very specific when we talk about intelligence because it really depends on which traits we are talking about," he explains.

第6問 次の英文を読み、下線部(1)～(3)の内容を英語にしてください。

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注 deforestation: 森林伐採
stipulate: ～を規定する

replenish: ～を補充する

oil palm: アブラヤシ