

## 英語 [ 問題その 1 ]

解答はすべて解答用紙に記入せよ。

1 次の文 ( 1 ~ 9 ) の  1  ~  9  に入れるのに最も適当なものを、それぞれ下の①~④のうちから1つずつ選べ。

- 1 He was wearing the T-shirt inside  1  by mistake.  
 ① down                      ② in                      ③ out                      ④ up
- 2 If  2  rich, I could buy a brand-new sports car.  
 ① I were                      ② I weren't                      ③ were I                      ④ weren't I
- 3 Do you know the man  3  is standing over there?  
 ① which                      ② who                      ③ whom                      ④ whose
- 4 We shall never forget your kindness  4  we live.  
 ① as long as                      ② as soon as                      ③ even if                      ④ every time
- 5 When we entered the room, he  5  from his chair to welcome us.  
 ① rise                      ② risen                      ③ rises                      ④ rose
- 6 The little girl had no one  6  with.  
 ① play                      ② played                      ③ playing                      ④ to play
- 7 My brother chose  7  of the two apples.  
 ① big                      ② bigger                      ③ the bigger                      ④ the biggest
- 8 I have nothing in  8  to do right now.  
 ① part                      ② partly                      ③ particular                      ④ particularly
- 9 You need to have Susan  9  you out of the problem.  
 ① help                      ② helped                      ③ helping                      ④ to help

2 次の文 ( 1 ~ 9 ) の  10  ~  18  に入れるのに最も適当なものを、それぞれ下の①~⑫のうちから1つずつ選べ。

- 1  10  my surprise, his team won the game.
- 2 It is only five minutes  11  my house to the university.
- 3 Becky wrapped a beautiful scarf  12  her neck.
- 4 I'm  13  such pressure from my parents that I have to study all day.
- 5 It is  14  the rule to cross the street when the traffic light is red.
- 6 I think it is easy  15  him to pass the test.
- 7 "I like painting." "Really? Do you paint  16  oils?"
- 8 My cousin from Tokyo is now staying  17  us.
- 9 He was  18  the telephone when we went into his office.

- |           |          |      |         |         |        |
|-----------|----------|------|---------|---------|--------|
| ① against | ② around | ③ as | ④ below | ⑤ for   | ⑥ from |
| ⑦ in      | ⑧ of     | ⑨ on | ⑩ to    | ⑪ under | ⑫ with |

## 英語 [ 問題その 2 ]

解答はすべて解答用紙に記入せよ。

- 3 次の文 ( 1 ~ 6 ) において、それぞれ下の選択肢の語句を並べかえて空所を補い、日本文の意味を表す英文を完成せよ。  
解答は  ~  に入れるものの番号のみを答えよ。

1 この靴がいくらするか知っていますか。

?

- ① cost                      ② do                      ③ how                      ④ know  
⑤ much                      ⑥ shoes                      ⑦ these                      ⑧ you

2 授業に遅れてはいけません。

.

- ① be                      ② class                      ③ for                      ④ late  
⑤ must                      ⑥ not                      ⑦ the                      ⑧ you

3 世界には訪れる場所がたくさんある。

in the world.

- ① a                      ② are                      ③ lot                      ④ of  
⑤ places                      ⑥ there                      ⑦ to                      ⑧ visit

4 あなたの注文は配達手配中です。

.

- ① being                      ② delivery                      ③ for                      ④ is  
⑤ order                      ⑥ processed                      ⑦ your

5 彼女のことを気の毒に思わずにはいられなかった。

.

- ① couldn't                      ② feeling                      ③ for                      ④ help  
⑤ her                      ⑥ I                      ⑦ sorry

6 フランクが彼のチームで一番速い走者だ。

.

- ① fastest                      ② Frank                      ③ his                      ④ in  
⑤ is                      ⑥ runner                      ⑦ team                      ⑧ the

## 英語 [ 問題その 3 ]

解答はすべて解答用紙に記入せよ。

4 次の英文を読んで、下の問いに答えよ。

In English, the words “explore” and “exploit” come loaded with completely opposite connotations. But to a computer scientist, (1) these words have much more specific and neutral meanings. Simply put, exploration is *gathering* information, and exploitation is *using* the information you have to get a known good result.

It's fairly intuitive that never exploring is no way to live. But it's also worth mentioning that never exploiting can be every bit as bad. In the computer science definition, exploitation actually comes to characterize many of what we consider to be life's best moments. A family gathering together on the holidays is exploitation. So is a bookworm settling into a reading chair with a hot cup of coffee and a beloved favorite, or a band playing (2) their greatest hits to a crowd of adoring fans, or a couple that has stood the test of time dancing to “ (3) their song.”

What's more, exploration can be a curse.

A Part of what's nice about music, for instance, is that there are constantly new things to listen to. Or, if you're a music journalist, part of what's terrible about music is that there are *constantly* new things to listen to. Being a music journalist means turning the exploration dial all the way to 11, where it's nothing but new things all the time. Music lovers might imagine working in music journalism to be paradise, but when you constantly have to explore the new you can never enjoy the fruits of your connoisseurship — a particular kind of hell. Few people know this experience as deeply as Scott Plagenhoef, the former editor in chief of *Pitchfork*. “You try to find spaces when you're working to listen to something that you just want to listen to,” he says of a critic's life. His desperate urges to stop wading through unheard tunes of dubious quality and just listen to what he loved were so strong that Plagenhoef would put only new music on his iPod, to make himself physically incapable of abandoning his duties in those moments when he just really, really, really wanted to listen to the Smiths. Journalists are martyrs, exploring so that others may exploit.

In computer science, the tension between exploration and exploitation takes its most concrete form in a scenario called the “multi-armed bandit problem.” The odd name comes from the colloquial term for a casino slot machine, the “one-armed bandit.” Imagine walking into a casino full of different slot machines, each one with its own odds of a payoff. The rub, of course, is that you aren't told those odds in advance: until you start playing, you won't have any idea which machines are the most lucrative (“loose,” as slot-machine aficionados call it) and which ones are just money sinks.

B Naturally, you're interested in maximizing your total winnings. And it's clear that this is going to involve some combination of pulling the arms on different machines to test (4) them out (exploring), and favoring the most promising machines you've found (exploiting).

To get a sense for the problem's subtleties, imagine being faced with only two machines. One you've played a total of 15 times; 9 times it paid out, and 6 times it didn't. The other you've played only twice, and it once paid out and once did not. Which is more promising?

Simply dividing the wins by the total number of pulls will give you an estimate of the machine's “expected value,” and by this method the first machine clearly comes out ahead. Its 9–6 record makes for an expected value of 60%, whereas the second machine's 1–1 record yields an expected value of only 50%. But there's more to it than that. After all, just two pulls aren't really very many. So, there's a sense in which we just don't yet *know* how good the second machine might actually be.

[Algorithms to Live By: The Computer Science of Human by Brian Christian and Tom Griffiths. Reprinted by permission of HarperCollins Publishers Ltd. (c) Brian Christian, Tom Griffiths 2017]

注 connotation : 言外の(暗示的)意味

adore : love and respect deeply

editor in chief : 編集長

iPod : 携帯型デジタル音楽プレイヤー

matyr : victim, sacrifice

rub : 障害, 困難

characterize : describe, portray

to 11 : to the maximum

wade through ~ : deal with something that is boring and takes a lot of time

the Smiths : ザ・スミス (1982–1987; イギリスのロックバンド)

colloquial : used in ordinary or familiar conversation

lucrative : producing a large amount of money

bookworm : a person who likes reading

connoisseurship : 音楽ジャーナリスト業

aficionado : 熱烈な愛好家, マニア

## 英 語 [ 問題その 4 ]

解答はすべて解答用紙に記入せよ。

1 下線部 (1) ~ (4) の表現が指すものを、それぞれ①~⑩のうちから1つずつ選べ。

(1):  (2):  (3):  (4): 

- ① a band                      ② a couple                      ③ a family                      ④ adoring fans  
 ⑤ completely opposite connotations                      ⑥ different machines                      ⑦ “explore” and “exploit”  
 ⑧ greatest hits                      ⑨ life’s best moments                      ⑩ new things                      ⑪ the arms

2 次のア~ケの記述について、本文の内容と合致するものに①を、合致しないものに②をマークせよ。

- ア  Scott Plagenhoef had to sacrifice himself to abandon his journalist duties.  
 イ  Never exploring is not good any more than never exploiting.  
 ウ  Casinos have more lucrative slot machines than ones that are money sinks.  
 エ  In computer science, you must get a known good result by exploitation.  
 オ  Just two trials are not very many, yet they are enough to draw a conclusion.  
 カ  Gathering information can be a cause of harm if it is not under your control.  
 キ  A bookworm reading a beloved favorite is exploitation rather than exploration.  
 ク  A music journalist listening to nothing but new things is not exploration.  
 ケ  Finding out which slot machine pays out the most in a casino is exploiting.

以下の問いの解答はすべて [ 解答用紙 ( 記述 ) ] に記入せよ。

3 下線部 A を和訳せよ。

4 下線部 B を和訳せよ。

5 次の各組の二文がほぼ同じ意味を表すように、( ) 内に適当な語を入れよ。

1 John is older than I am.

John is ( ) to ( ).

2 While having dinner, we used to talk about our day.

While ( ) ( ) having dinner, we used to talk about our day.

3 There’s a possibility that he will win the lottery.

There’s a possibility ( ) him ( ) the lottery.

英語 [解答用紙 (記述)]

'21  
I B

受 験 番 号	
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4 第2問までの解答はすべて [解答用紙 (マーク)] に記入せよ。

4

3	
---	--

4	
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5

1		2		3	

# 解答例

## 英語[解答用紙(マーク)]

21-I-B

受験番号	0 1 2 3 4 5 6 7 8 9	受験番号	注意 1. HB または B の鉛筆で濃くマークすること。 2. 消すときは消しゴムで完全に消すこと。 3. 所定欄以外に記入しないこと。 4. 用紙を汚したり、折り曲げたりしないこと。
	0 1 2 3 4 5 6 7 8 9		
	0 1 2 3 4 5 6 7 8 9		
	0 1 2 3 4 5 6 7 8 9		
	0 1 2 3 4 5 6 7 8 9		
	0 1 2 3 4 5 6 7 8 9		

解答番号	解答欄	解答番号	解答欄
1	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	23	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
2	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	24	① ② ③ ● ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
3	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	25	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
4	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	26	① ② ③ ④ ⑤ ● ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
5	① ② ③ ● ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	27	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
6	① ② ③ ● ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	28	① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩ ⑪ ⑫
7	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	29	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
8	① ② ● ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	30	① ② ③ ④ ⑤ ● ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
9	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	31	① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩ ⑪ ⑫
10	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ● ⑪ ⑫	32	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
11	① ② ③ ④ ⑤ ● ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	33	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
12	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	34	① ② ③ ④ ⑤ ● ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
13	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ● ⑫	35	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
14	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	36	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
15	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	37	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
16	① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩ ⑪ ⑫	38	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
17	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ●	39	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
18	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ● ⑩ ⑪ ⑫	40	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
19	① ② ③ ④ ⑤ ⑥ ⑦ ● ⑨ ⑩ ⑪ ⑫	41	● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
20	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	42	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
21	① ② ③ ④ ● ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	43	① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
22	① ② ③ ● ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫		

4 第3問以降の解答は [解答用紙(記述)] に記入せよ。

解答例

4 第2問までの解答はすべて [解答用紙 (マーク)] に記入せよ。

4	3	音楽の良いところは、たとえば、いつも新しく聴くものがあることだ。
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4	当然のこととして、(普通の人ならば誰でも) 賞金総額を最大化したいと思う。
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5	1	2	3			
	senior	me	we	were	of	winning