

(ページ数)

令和 3 年度

20ページ

試験問題(択一式) —

英語	… 1～6ページ
数学	… 7～13ページ
国語	… 15～20ページ

受 験 地	受 験 番 号

受 験 心 得

1. この試験問題は、指示があるまで開かないこと。
2. 試験問題および解答用紙には、受験地、受験番号を忘れずに記入すること。
3. 問題数は、英語、数学それぞれ15題、国語は10題である。
4. 試験時間は、英語、数学、国語の3科目を合わせて、10時から11時30分までの90分間である。
5. 携帯電話等は、電源を切り、使用できない状態にすること。

6. 解答方法は次のとおりである。

各問題にはいくつかの答が示してある。そのうち、問題の解答として正しいと思うものを一つ選び、次の例にならって記入すること。

- ① (3)が正しい答と思うとき、解答用紙のその番号のところ、下のようにはっきりと×印を記入すること。

(1) (2) (3) (4) (5)
○ ○ ⊗ ○ ○

- ② (3)に×印をつけたあと、答を(5)に修正する場合には、下のように(3)をぬりつぶし、(5)にはっきりと×印をつけ直すこと。

(1) (2) (3) (4) (5)
○ ○ ● ○ ⊗

- ③ ぬりつぶした訂正箇所(3)が正しい答と思い直したときは、(5)をぬりつぶし、正しいと思う番号(3)の●の上にはっきりと大きな×印をつけ直すこと。

(1) (2) (3) (4) (5)
○ ○ ⊗ ○ ●

7. 解答に×印をつけないものや、二つ以上つけたものは、誤りと同じに取り扱う。
8. 試験時間中は、すべて試験係官の指示に従うこと。用便その他やむを得ない事情があるときは、黙って手をあげて試験係官に用件を話すこと。

試験問題(択一式) — 英 語

1 ~ 15

次の文を読んで問に答えよ。

In the middle of a humid night in November 1997, two scientists and I donned waders and walked into the water of a half-acre test pond about 20 miles west of West Palm Beach, Fla. The researchers were there to set up egret decoys before the real birds flew over at dawn. I'd been warned about the snakes we might encounter while I was reporting on their research for this magazine. Our flashlights illuminated the eyes of not too distant alligators. But despite the potential for venomous and/or crushing reptile bites, the most (1) safety concern explained my long sleeves and head netting—preventing the pinprick puncture of encephalitis-carrying mosquitoes.

I was reminded of my 4 A.M. tromp upon the arrival of the new book *The Mosquito: A Human History of Our Deadliest Predator*. Most people are probably more frightened of sharks than they are of mosquitoes—it's tough to get too worked up over something you can swat. But as author Timothy Winegard points out, sharks kill fewer than 10 people annually, whereas the average yearly mosquito-related death toll over the past two decades is about two million. Mosquitoes *are* the deadliest predator of people on the planet.

The (2) killer of human beings is—you guessed it—human beings. In that same stretch, we've offed about 475,000 of our fellows on average annually, Winegard reports. Granted, it would be tough for 7.7 billion humans to outkill the 110 *trillion* mosquitoes that are alive at any time. That's more than 14,000 of them for every person. In the Arctic during the summer, they can completely cover something (or someone) edible in a flash. "Ravenous mosquito

swarms,” Winegard writes, “literally bleed young caribou to death at a bite rate of 9,000 per minute, or by way of comparison, they can (3) half the blood from an adult human in just two hours.”

Of the more than 15 diseases mosquitoes transmit, the deadliest—malaria—has been sickening animals for an exceedingly long time. “Amber-encased mosquito specimens contain the blood of dinosaurs infected with various mosquito-borne diseases, including malaria,” Winegard writes. He notes that the 1993 movie *Jurassic Park* gets it wrong because the mosquito depicted as having supplied the dinosaur blood, and thus its DNA, is one of the few species for which blood meals are not required for (4). Indeed, that egregious error is what blew the movie’s verisimilitude for me.

The book claims that mosquito diseases played a critical role in the American colonists’ (a) underdog win in 1783 against the British in the Revolutionary War. George Washington, himself a malaria (5), “had the (A) of commanding acclimated, malaria-seasoned colonial troops.” Meanwhile many British troops had never been exposed and were mowed down by the kill-buzz.

Washington was first in war, first in peace and the first of eight presidents to be afflicted with malaria, according to Winegard. The others were Lincoln, Monroe, Jackson, Grant, Garfield, Teddy Roosevelt and John F. Kennedy. Roosevelt caught his in the Amazon, and Kennedy got it in the South Pacific, but the first six all got the disease in the U.S. when malaria and yellow fever were still common here.

In 2018 Climate Central reported that higher temperatures could mean more “disease danger days,” in the temperature range that disease-carrying

mosquitoes prefer. But take heart: "Climate change may also actually make some locations too hot for mosquito survival and disease transmission," Climate Central acknowledged. (B), some good news.

1 ~ 5 (1) ~ (5) に(1)~(5)より選んで入れよ。

- (1) reproduction (2) drain (3) sufferer
(4) pressing (5) runner-up

6 次の文を挿入すると、本文のどの段落の後に入るか。

Of course, human expiration via exsanguination by mosquito is exceedingly rare. "It is the toxic and highly evolved diseases she transmits that cause an endless barrage of desolation and death," Winegard writes. He uses "she" because only females bite, attracted to us mostly by the carbon dioxide exhalations that they can detect up to 200 feet away. They also like really smelly feet. So if you think you can hide in plain sight by holding your breath, be sure to also wash between your toes before you pass out.

- (1) 第一段落 (2) 第二段落 (3) 第三段落 (4) 第四段落 (5) 第五段落

7 下記は全文のタイトルである。(1) ~ (5) に(1)~(5)より選んで入れると (1) に入るものはどれか。

The (1) (2) (3) (4) (5) in Human History

- (1) Role (2) Mosquitoes (3) Tiny
(4) Outsize (5) of

8 下記は全文のサブタイトルである。(1) ~ (5) に(1)~(5)より選んで入れると (3) に入るものはどれか。

A new book tells the (1) (2) (3) (4) (5) of human beings in history

- (1) the (2) predator (3) of (4) greatest (5) tale

9 下線(a) underdog と意味の違うものはどれか。

- (1) loser (2) second-best (3) favorite
(4) little guy (5) small fry

10 (A) に入る単語を選べ。

- (1) plight (2) advantage (3) disadvantage
(4) shortcomings (5) faults

11 (B) に入る単語を選べ。

- (1) Also (2) Dreadfully (3) Finally
(4) Awfully (5) Initially

12 According to the text, mosquitoes are attracted most by

- (1) carbon monoxide. (2) fetid feet.
(3) dead animals. (4) big toes.
(5) amber.

13 According to the text, the deadliest killer of the human beings is

- (1) human beings. (2) malaria. (3) sharks.
(4) yellow fever. (5) mosquitoes.

14 George Washington was the president who

- (1) commanded malaria-seasoned colonial troops.
(2) won the Revolutionary War in 1776.
(3) was immune to malaria.
(4) had been to Amazon.
(5) fought in the South Pacific.

15 Choose the wrong statement.

- (1) Several historical American presidents suffered from malaria because it was not scarce in the North America then.
- (2) The depiction of the dinosaur blood supplied by mosquitoes in *Jurassic Park* is misleading because those are ones which do not need blood for propagation.
- (3) To annihilate mosquitoes, every human being has to kill more than 14,000 of them.
- (4) In the Arctic, swarming mosquitoes sometimes bleed animals to death.
- (5) Mosquitoes can detect the carbon dioxide exhalation up to 200 meters away.