

試験時間

70分

- 注意事項**
- この科目の問題用紙は15ページ、解答用紙はマークカード1枚である。
 - 解答用紙(マークカード)に、氏名・受験番号の記入および受験番号のマークを忘れないこと。
 - マークはHBの鉛筆で、はっきりとマークすること。
 - マークを消す場合、消しゴムで完全に消し、消しきずを残さないこと。
 - 解答用紙(マークカード)は折り曲げたり、メモやチェックなどで汚したりしないように注意すること。
 - 各問題の選択肢のうち質問に適した答えを1つだけ選びマークすること。1問に2つ以上解答した場合は誤りとする。
 - 問題用紙は解答用紙(マークカード)とともに机上に置いて退出すること。持ち帰ってはいけない。

I 次の英文を読み、下記の設問に答えなさい。

Northern Europe, especially the UK and Ireland should brace*¹ itself for more upland*² fires like the one on Saddleworth Moor*³, in North West England that occurred during the final week of June 2018, as the climate changes and extreme weather events become more common, scientists have warned. As the army joined firefighters to tackle the blaze*⁴ near Manchester and a second fire was reported in nearby hill country, scientists say similar events are increasingly likely in the not-too-distant future, with potentially devastating consequences⁽⁷⁾ for the environment and for human health. According to the *New Statesman*, fires like the one at Saddleworth Moor will become increasingly normal as we fight environmental collapse. Over the next 50 years, the UK and other nations are likely to experience increased wildfires, water shortages and an inability to produce enough food.

Guillermo Rein, professor of fire science at Imperial College London, said recent studies showed that "climate change is expected to increase the fire frequency and severity of wildfires in Europe." He said the effect is predicted to be "even more pronounced⁽⁸⁾ in northern Europe, including the UK and Ireland." Dr. Richard Payne of the University of York agreed, saying that "devastating events like we are seeing today at Saddleworth Moor are (1) more often in the future." He also warned that the fires would exacerbate*⁵ climate change, as the UK's peatlands*⁶ store huge amounts of carbon that is thus released. "The UK's peaty moorlands*⁷ are crucial for the carbon they lock away as peat," he said. "Since the last ice age these peatlands have helped cool our climate but fires can reverse that effect, rapidly returning carbon to the atmosphere as carbon dioxide."

The fire at Saddleworth Moor could also have more immediate health implications. Professor Susan Page of the University of Leicester said peat fires release toxic chemicals into the air as well as small particulates*⁸ that have long-term health implications — especially for children or (2) existing respiratory conditions. She added, "a further concern is the peat soils contain a pollution legacy in the form of increased levels of heavy metals, which will also be liberated*⁹ into the smoke by the fires. Saddleworth Moor had been a sponge for regional pollutants for decades and centuries, as the region was an engine of the UK's industrial revolution, whose health implications of the fire were still unknown. These moors were on the (3) end of a whole range of quite nasty industrial pollutants. So these peats are a storehouse of past pollution, which could be remobilized⁽¹⁰⁾ in the current fires with unknown consequences for human health."

Environmental campaigners have also warned about the use of UK highlands for grouse*¹⁰ shooting, a popular bird hunting sport found predominantly only in this region of the world. The environmentalists insist that the practice of grouse shooting makes fires more likely. Guy Shrubsole, an environmental activist who is writing a book on land ownership in England, said there was "a strong correlation" between the fire on Saddleworth Moor and "the tell-tale signs of intensively managed grouse moor." He said there was growing evidence that grouse shooting degrades the environment and makes both flooding and fire more likely. Pat Thompson of the Royal Society for the Protection of Birds (RSPB), which is now the largest nature conservation charity in the UK, said management of UK uplands for grouse shooting had made them more susceptible to fire over the past 150 years. He said, "over time large parts of the land have been transformed from wetlands with a high water table to a drier, heather-dominated*¹¹ environment." He said this made them more susceptible to fire and (4) to absorb water, thus contributing to increased flooding.

The evidence for this has largely come from the University of Leeds, which, in 2014-2015, published the first authoritative study on the subject of the environmental impacts of heather burning, a key topic in the grouse moor management debate. The "Effects of Moorland Burning on the Ecohydrology*¹² of River Basins" project has shown that heather burning on moorland, which is practiced predominantly to support red grouse populations for gun sports, has significant negative

impacts on peat hydrology, peat chemistry and its physical properties, river water chemistry and river ecology. Professor Joseph Holden, from the School of Geography at the University of Leeds, and a co-author of the study said, "altering the hydrology of peatlands so they become drier is known to cause significant losses of carbon from storage in the soil. This is of great concern, as peatlands are the largest natural storehouse for carbon on the land surface of the UK and play (5) in climate change. They are the 'Amazon of the UK.'"

Thomas Smith, an assistant professor in Environmental Geography at the London School of Economics, said other UK moorlands were highly susceptible with "moderate to very high fire danger ratings*¹³ across most of the UK and the Republic of Ireland." According to the RSPB's Pat Thompson, "what we need to do is get this dry hard habitat back to being a wetland environment that can (6) more effectively and across which water travels much more slowly."

To be sure, we are entering a period in which the extreme and abnormal weather and environmental conditions become increasingly commonplace, but no less catastrophic*¹⁴ for it. The likelihood of both human destruction of the natural habitats and of extreme weather events reflects deep and damaging changes in the UK's underlying natural systems, which must be preserved in order to sustain all living things.

[出典: More Saddleworth-style fires likely as climate changes, scientists warn by Matthew Taylor, The Guardian, 29 Jun 2018 (c) Guardian News & Media Ltd 2019]

[出典: Grouse moor burning causes widespread environmental changes by Joseph Holden, University of Leeds]

- 注 *¹brace 「(困難なことなどに対応する)心の準備をさせる」 *²upland 「高地」
*³moor 「(泥炭質で通例ヒースなどの低木が茂った)荒地。(特にライチョウなどの)猟場」
*⁴blaze 「火災」 *⁵exacerbate 「悪化させる」
*⁶peatland 「泥炭(の豊富な土)地」 *⁷moorland 「荒地地帯」
*⁸particulate 「微粒子」 *⁹liberate 「発散する」
*¹⁰grouse 「ライチョウ」 *¹¹heather-dominated 「ヒースにおおわれた」
*¹²ecohydrology 「生態(環境)水文学」 *¹³fire danger rating 「火災危険度数」
*¹⁴catastrophic 「壊滅的な」

問1 本文中の(1)~(6)の各空欄に入る最も適切なものを、それぞれ①~⑤の中から一つずつ選びなさい。

- (1) ① unlikely to be repeated ② expected to be ③ more severity
④ caused by ⑤ likely to happen
- (2) ① have problems ② those with ③ those
④ difficult ⑤ for whom
- (3) ① receiving ② leaving ③ destroying
④ moving ⑤ amazing
- (4) ① slowly related ② much less movable ③ less able
④ more prone ⑤ more sticky
- (5) ① a modest role ② a reckless function ③ an ambiguous part
④ a crucial role ⑤ an ardent model
- (6) ① prevent from drying ② induce heat ③ resist fire
④ recover from change ⑤ remain resistant to cold

問 2 本文中の下線部(7)~(10)の語(句)に最も意味の近いものを、それぞれ①~⑤の中から選びなさい。

(7) devastating consequences

- ① damagingly wasteful results ② extremely destructive outcomes
- ③ dangerously discredited results ④ surprisingly disputed significance
- ⑤ shockingly wasteful outcomes

(8) pronounced

- ① proudly proclaimed ② correctly sounded ③ quickly spoken
- ④ clearly indicated ⑤ proudly announced

(9) lock away

- ① find and keep ② accumulate and release
- ③ hide and change ④ remove and retire
- ⑤ trap and store

(10) remobilized

- ① returned to circulation ② recovered and moved
- ③ restored and hidden ④ moved backwards
- ⑤ made to be similar

問 3 本文中の下線部(11)の意味内容として最も適切なものを、①~⑤の中から一つ選びなさい。

(11) "the tell-tale signs of intensively managed grouse moor"

- ① the revealing notices of extremely well maintained lands that do not specifically help grouse hunters
- ② the revealing indicators of an environment that is for several bird species
- ③ the hidden signals of unexpected bird habitats that are good fits for grouse
- ④ the clear indicators of a bird habitat that has been changed to an extreme degree for a man-made practice
- ⑤ the visible signals of a bird hunting system that was previously concealed but is now readily useful for management

問 4 次の(12)と(13)の英文の問いの答えとして最も適切なものを、それぞれ①~⑤の中から一つずつ選びなさい。

(12) Which of the following statements is best supported by the information in this passage?

- ① Peatlands are the largest natural storehouse for carbon on the land surface of the UK, earning them the term 'Amazon of the UK', because they contain the greatest levels of biodiversity in the region.
- ② The largest nature conservation charity in the UK, the Royal Society for the Protection of Birds, has produced the most important studies on the environmental impacts of heather burning, which is central to the debate on grouse moor management and grouse shooting.
- ③ The fire at Saddleworth Moor has multiple negative consequences, including unleashing carbon, releasing dangerously toxic chemicals and particulate matter, and exposing the public to past pollution in the form of industrial chemicals and heavy metals.
- ④ The environmental activist Guy Shrubsole, an expert on land ownership in England, has linked the fire on Saddleworth Moor and intensively managed grouse moor, and he believes that what is needed is to increase more wetland environments that can be more fire-resistant.
- ⑤ The fact that the army in Northern Europe has been called in to assist firefighters to tackle the Saddleworth Moor fire near Manchester is unrelated to climate changes and extreme weather events that have become more common.

(13) Why should the UK brace itself for more upland fires like the one on Saddleworth Moor?

- ① Because of the strong correlation between fires and intensive management of grouse moor for grouse shooting, there is continued degradation of the environment, which will make such fires less likely.
- ② Devastating fire events such as that at Saddleworth Moor would worsen climate change because of the huge amounts of carbon stored in UK peatlands, which are then absorbed in fires.
- ③ These types of peatlands have helped to cool our climate since the last ice age but these types of fires can magnify that effect, rapidly absorbing carbon from the atmosphere.
- ④ Scientists have warned that climate change is very likely to increase both the frequency and the severity of extreme weather events, such that wildfires will become more common in northern Europe.
- ⑤ UK moorlands have been converted from drylands that once served as sponges for the industrial legacy of the region to wetter types of environments that can quickly release toxic chemicals as such regions become more susceptible to fire.

II 次の(14)~(25)の各英文の空欄に入る最も適切なものを、それぞれ①~⑤の中から一つずつ選びなさい。

(14) This accident resulted from () proper care was not exercised.

- ① why ② which ③ the fact that
- ④ the fact which ⑤ because of

(15) (), scientists have greatly increased the yield of crops such as corn, rice, and wheat.

- ① As using the laws of genetics ② The laws of genetics
- ③ Using the laws of genetics ④ The laws of genetics are to be used
- ⑤ From the laws of genetics

(16) Someone making a decision that is () with the most commonly followed trend is more of a follower and less of a leader.

- ① vulnerable ② compatible ③ hospitable
- ④ indispensable ⑤ available

(17) Although it is hard for the average person to get close to isolated regions of the Southern Hemisphere where most wild penguins live, it is nevertheless quite easy to observe captive penguins in zoos () those in Miami and Moscow.

- ① disparate widely ② to disparate widely ③ to be widely disparate
- ④ disparate widely in ⑤ as widely disparate as

(18) This particular information technology system works by first making precise measurements and then () into a long series of zeros and ones.

- ① convert the measurements ② the measurements convert
- ③ to convert the measurements ④ converting the measurements
- ⑤ the measurements converting

(19) Scientists know that the jelly-like material in cells () proteins and other substances.

- ① actually is a complex mixture of
- ② it is actually a complex mixture
- ③ that actually are a complex mixture of
- ④ actually are a complex mixture
- ⑤ are actually complex mixtures

(20) () affect a person's body has long been known by doctors.

- ① Since emotional disturbances
- ② Emotional disturbances
- ③ An emotional disturbance
- ④ If emotional disturbances
- ⑤ That emotional disturbances

(21) This electric car () as a special back-up battery for electricity grids that have been specifically designed to incorporate renewable energy.

- ① can also function ② can been also ③ may use
- ④ can form ⑤ may also functioning

- (22) If there are mosquitoes in your home, there is almost certainly () water nearby.
 ① stagnant ② magnificent ③ dynamic
 ④ scanty ⑤ inevitable
- (23) () stimulants can also cause increases in breathing rate and in heartbeat, the use of such drugs must be carefully controlled and monitored.
 ① Because certain drugs that are used as
 ② Although certain drugs are used to change the variety of
 ③ Because many drugs create many side-effects as
 ④ Things that hinder the brain's ability to function are
 ⑤ Although drugs that are given to patients from
- (24) Richard has had a bad time lately. First, he was fired by his boss, then his wife left him, and yesterday he had an accident. To describe his luck, we can use the following proverb that says, ().
 ① "He who shoots often, hits at last"
 ② "Don't count your chickens before they're hatched"
 ③ "Time and tide wait for no man"
 ④ "He who runs after two hares will catch neither"
 ⑤ "When it rains, it pours"
- (25) Regarded as one of the greatest physicists, ().
 ① the relationship between force and motion was first expressed by Isaac Newton
 ② the first to express the relationship between force and motion was by Isaac Newton
 ③ Isaac Newton was the first to express the relationship between force and motion
 ④ it was Isaac Newton who was the first to express the relation between force and motion
 ⑤ Isaac Newton's expression of the relationship between force and motion was the first

III 次の二つの英文(広告文と Email)を読み、(26)~(28)の英文の書き出しに続くものや英文の問いの答えとして最も適切なものを、それぞれ①~⑤の中から一つずつ選びなさい。

Walls For You, Inc.
<p>Walls For You, Inc. is your one-stop shopping center for all your wallpapering needs. For 55 years now, we have been helping customers with customized wallpaper <u>that turns dull, boring houses into wonderfully warm homes</u>. You can come to our store, located in the Greenville Shopping Mall in the Lower Mainland or you can visit us online at www.walls4you.com. We have an extensive range of every color, pattern and texture imaginable for every type of design. Our website makes it very easy to browse through all the latest types of wallpaper styles, many of which have changed drastically in just the last few years, in design and in patterns and textures. In fact, we feel absolutely confident that we have every type of wallpaper you can hope for, or possibly even imagine!</p> <p>Our online ordering system is very easy to navigate. Simply click on the wallpaper styles you like and indicate how much you need, and your selections will automatically be sent into your shopping cart. Once you've completed shopping, proceed to the checkout and there you will find payment options involving credit cards, PayPal, and if you are already registered for our special online credit system, simply log in and follow the instructions. If you live in the Greater Norwalk area, your order will take 3-5 business days to arrive but, for a small additional fee, you can reduce this to 2 business days with our special Expedited Shipping Option. If you live outside this area, your order will take longer to arrive, depending on the distance from our store.</p>

From: Steve Manly < manly.man@eweb.com >
To: Customer Support < support@walls4you.com >
Date: 12 March 2018
Subject: Order #4416
<p>I ordered 4 different wallpaper types using your online system. I had previously registered with your special online credit system, but this was the first time I'd actually used it. I had a lot of trouble logging in but eventually it worked. But then, I actually had to log off and try again because the system seemed to hang or to freeze. Unfortunately, this seems to have created some confusion in my order because it seems that your system charged me for the same order twice! Hence, what should have been \$235.57 became \$471.14. I noticed the problem right away but I could not reach anyone through your online help section. Instead, I was given this e-mail address. So please look at this and get it sorted out ASAP.</p> <p>Thank you, Steve Manly</p>

- (26) The customer is writing to the wallpaper company to _____.
 ① request a refund for the \$235.57 he'd been charged and that the wallpapers he'd ordered be sent as soon as possible
 ② recommend changes in their special online credit system so that the problems he'd encountered would not be repeated
 ③ require a doubling of his order from \$235.57 to \$471.14 so that he can get his wallpaper order delivered on time
 ④ request a correction of the mistake made in his order and to cancel the order altogether
 ⑤ insist that they fix the mistake made in overcharging him and ensure that the order is completed correctly
- (27) Which of the following is NOT true?
 ① Walls For You, Inc. has both an online store and also a real "brick" store at the Greenville Shopping Mall within the Greater Norwalk area.
 ② Walls For You, Inc. allows payments to be made online using credit cards, PayPal, as well as a special online credit system for which shoppers must first register.
 ③ Unless shoppers pay extra for a special Expedited Shipping Option, all orders will take 3-5 business days to arrive.
 ④ Since Walls For You, Inc. first began business 55 years ago, wallpaper styles have changed drastically in design and in patterns and textures.
 ⑤ It is quite likely that Steve Manly was charged \$471.14 instead of \$235.57 because he first had to log off from the company's special online credit system, and then he had to try again.
- (28) Which of the following best represents the meaning of the phrase "that turns dull, boring houses into wonderfully warm homes"?
 ① The service that Walls For You, Inc. provides is the necessary heat and energy that makes homes and houses warm and wonderful.
 ② Walls For You, Inc. is trying to market itself as an expert in making typical, ordinary living spaces into more exciting and comfortable versions.
 ③ Walls For You, Inc. is able to very precisely help their customers to imagine any type of wallpaper style and to create customized wallpaper for homes.
 ④ Walls For You, Inc. can transform houses into homes because the company has a special qualification that it has every type of wallpaper customers can hope for, or possibly even imagine.
 ⑤ Only houses that have wallpaper selected from this company's extensive range of colors, patterns, and textures for every type of design style, can be considered homes.

IV 次の英文が論理的に意味の通る内容として完成するように、(29)~(33)の各空欄に入る最も適切なものを、①~⑦の中から一つずつ選びなさい。選択肢は一度しか使えません。また、すべての選択肢が入るわけではありません。

- A good story often contains a conflict within the narrative. (29). When we read a story interesting enough that we allow it to pull us into whatever drama is unfolding in the plot, we may then want to know how the struggle will eventually be settled. (30). The conflict in a story can be set at external or internal levels. (31). For example, we can imagine a story about a farmer trying to save a crop from destructive weather conditions. (32). On the other hand, an internal conflict could be along the lines of a struggle that takes place within a person's mind. (33).
- ① In this case, the story develops a new, smaller conflict, and shows the goal of a new character
 ② A conflict can be defined as a struggle between two opposing forces
 ③ An external conflict is a struggle against an outside force, such as Nature or another person
 ④ Therefore, the main problem is resolved and the story tells what happens to everyone else
 ⑤ And, if the conflict element is sufficiently compelling, we may very well decide to complete even long stories so as to witness the final outcome and resolution
 ⑥ Hence, a person trying to decide between attending a party or staying with a sick friend would be representative of such a type of inner conflict
 ⑦ In this case, the story involves a conflict occurring at an external level between a person and the forces of Nature

V 次の(A)と(B)の会話文を読んで、各設問の答えとして最も適切なものを、それぞれ①～⑤の中から一つずつ選びなさい。

(A) Here is a conversation between a female manager, Kate, and a man on the production line, Mark.
 Kate: I'm calling to tell you that I have concerns about the Navi49 prototype. Those faulty parts that were flagged can become a real problem. Have you found a solution yet?
 Mark: Well, we only detected the trouble yesterday, so we're still trying to correct the problem.
 Kate: OK, that's fair enough. Better to get it right than to rush this. Let me know when you've fixed it, but don't start production until I get our Quality Control people to give it a thorough check.
 Mark: OK, understood.

- (34) Which of the following is the best interpretation of this dialogue?
- ① The man and the woman are arguing about the different ways the product can be fixed before production can progress.
 - ② Problems with a production line have been detected and have been thoroughly corrected before production on the prototypes continues.
 - ③ The woman is upset with the man on the production line because problems with a product were not corrected in time for production to continue.
 - ④ Problems with a prototype have been detected and have to be corrected, and then thoroughly checked before production can progress.
 - ⑤ The production line worker is instructing the manager on the procedures that must be followed before the production can continue.

(B) Woman: I ran into Frank last weekend. He looked really stressed because he was going to take his midterms this week.
 Man: Yeah, he tends to get too stressed because he takes it all too seriously. That's probably why he has such a reputation for being so competitive.
 Woman: So, how did he do on the test, then?
 Man: Well, it sounds like he did extremely well.

- (35) What have we learned about Frank?
- ① Frank met the man last weekend.
 - ② Frank was very upset with the woman.
 - ③ Frank was so stressed that he failed the exam.
 - ④ Frank has always been more successful than others.
 - ⑤ Frank is very serious about examinations.

VI 次の(A)の英文の意味が論理的に最もよく通るように、また(B)については日本語の文の意味を表すように、それぞれ①～⑩の語(句)を各空欄に一つずつ入れて英文を完成させ、(36)～(43)の空欄に入るものを選びなさい。ただし、選択肢は一度しか使えません。

(A) For a culture of peace to persist, priority must be placed on values, attitudes, and modes of behavior, based on non-violence and respect for (36) rights and freedoms of all people. For such a culture, power comes not () the barrel of a gun, but from participation, dialogue, cooperation and from (37) common ground. Inherent in such a () will be a very strong () on protecting (38)() the weak, both young and old, and of the socially (), including ()(39) are physically handicapped.

- ① who
- ② disadvantaged
- ③ of
- ④ the rights
- ⑤ caring society
- ⑥ finding
- ⑦ focus
- ⑧ from
- ⑨ the fundamental
- ⑩ those

(B) 世代間の断絶の一つの原因は、我々の社会で起こる変化の速度である。高齢者は概してその知恵ゆえに尊敬されたが、現代社会の急速に変わる現実の中では一生をかけて蓄積されてきた特定の種類の知識が一夜で役に立たなくなってしまうかもしれないので、そのような知恵は注目されにくいのである。

One of the causes of the gap ()(40) is ()(41)()() (42) in our society. Elderly people were broadly respected for () in the past, but in the fast-paced realities of modern society, (43) attention is given to such wisdom because some specific types of such knowledge, () over a lifetime, may become useless overnight.

- ① the speed
- ② which
- ③ the generations
- ④ changes
- ⑤ their wisdom
- ⑥ amassed
- ⑦ take place
- ⑧ between
- ⑨ less
- ⑩ at