2022 (令和4) 年度

1日 [60分] *

外 国 語 (英 語)

注 意

- 1. 監督者の指示があるまで問題を見ないこと。
- 2. 声を出して問題を読まないこと。
- 3. 問題は24ページ、11 から 5 まである。
- 4. 問題や解答用紙に落丁、乱丁、汚損あるいは印刷不鮮明の箇所があれば、手をあげて監督者に申し出ること。
- 5. 解答は必ず鉛筆を使用し、解答用紙に記入すること。
- 6. 解答は解答用紙の解答欄の記号にマークすること。
- 7. 訂正箇所は、消しゴムできれいに消すこと。
- 8. 解答欄には、関係のない符号や文字あるいはメモなどを記入しないこと。
- 9. 解答用紙を折ったり汚したりしないこと。
- 10. 問題用紙は持ち帰ること。

1	_	意味の通る文法的にī [各 1 点]	Eしい文を完成させ	るのに	こもっとも適切	なものを選びなさ							
		Since he takes uickly.	a walk every o	lay,	his shoes w	ill () very							
		A. break up	B. put on	С.	take off	D. wear out							
	2.	2. The book is all about how to make () well in life.											
		A. out	B. off	С.	over	D. away							
	3. There should be more signs in English for foreign tourists, (in places they are most likely to visit.												
		A. at times	B. at least	С.	at most	D. at last							
	4.	Susan was (A. looked) up in a large B. thought		•								
		The government ooner.	was () for	failir	ng to react to	the depression							
		A. appreciated	B. criticized	С.	appointed	D. pulled							
		Some people won	nder how Hallowe	en be	ecame such a	big () in							
		A. location	B. decision	С.	occasion	D. population							
	7	This is a hospital	l () emokij	na is	not allowed h	noro							
	٠.	A. Needless to s			Not to menti								
		C. On the other	·		Strangely sp								

8.	I () the weather to be much	n co	oler here so I did not pack									
a	ny T-shirts.											
	A. have been expecting	В.	have expected									
	C. had expected	D.	. expect									
9.	Be sure to () us of your test	rest	ılts.									
	A. cure B. deprive	С.	inform D. prevent									
10.	Pam asked Mike to leave her ()	and let her sleep.									
	A. only B. single	С.	alone D. lonely									
	If you find a job that () you Apply" button.	r sk	sills and experience, click the									
	A. serves on	В.	counts up									
	C. plays for	D.	corresponds to									
12.	If it still won't start, my car battery	y ma	ay be ().									
	A. in full		beyond help									
	C. at a price		in control									
13.	Sometimes we have to () even	n th	ough we want to hold on.									
	A. have things be	В.	make things held									
	C. let things go	D.	get things given									
	It's a must to take time to stud	ly () before attempting an									
	A. slightly	В.	mostly									
	C. thoroughly		increasingly									

15. For many people, 1	these injuries of	can ta	ike months o	r even years to						
().										
A. receive	3. suffer	С.	heal	D. appeal						
16. You just have to	() your	hand	and wave it	t until you are						
noticed.										
A. shake	3. raise	С.	nod	D. roll						
17. We felt disappointed	d that the new	stadi	um became () than we						
had budgeted for.										
A. by far expensiv	e	В.	much more	expensive						
C. by far inexpens	ive	D.	many more inexpensive							
18. I love this idea for	() of rea	asons.	First, it give	es you a specific						
goal to work towards.										
A. amounts	3. sums	С.	dozens	D. figures						
19. Though I had no m	nemory of that	promi	se, I still war	nted to ().						
A. make many wo	rds	В.	keep my wor	rd						
C. bring word		D.	have a word							
20. I am having diff	iculties repayi	ng m	y student l	oan because of						
financial ().										
A. prevention		В.	hardship							
C. hesitation		D.	certification							

21.	We were running	g out of gas, and	() was v	worse,	my mobile
p	hone was not work	xing at all.				
	A. which	B. what	С.	it	D.	that
22.	I grew up in a w	ar zone but never	() my dre	eams.	
	A. lost sight of		В.	drew an ey	re to	
	C. gave a focus	to	D.	kept a min	d on	

2	語句を	を並べ替えてもっとも	自然	然な英文を完成させ、	. 2章	番目と	5番目	に入	入れる	b
	のの記号	号を書きなさい。[各	2 点]						
	1. Ms.	. Smith (1)	(2)(3)(4) (5) (6)
	collea	gues as a leader.								
	Α.	by	В.	up	С.	looke	ed			
	D.	her	Ε.	is	F.	to				
	2. Thi	s play is (1)(2)(3)(4) (5)	(6)	far.	
	Α.	best	В.	S0	С.	have				
	D.	I	Ε.	seen	F.	the				
	3. The	e rain (1)(2	2)	(3)(4)(5)(6)	the	rive	r.
	Α.	from	В.	going	С.	in				
	D.	prevented	Ε.	swimming	F.	the k	ooys			
	4. The	e manager of the	e d	epartment (1)(2)	(3) (4)
	(5)(6) very ca	ıpab	le.						
	Α.	her	В.	be	С.	to				
	D.	young	Ε.	thinks	F.	staff				
	5. It	was already past	mid	night. (1), n	ny s	ister	(2) (3)
	(4)(5)(6)								
	Α.	the	В.	for	С.	still				
	D.	kept	Ε.	preparing	F.	exam	ı			

6. Robin (1) (2)(3)(4)(5) (6) a large
audience.		
A. before	B. found	C. hard
D. speak	E. it	F. to
7. You will always be	a parent to your	children, (1)(2)
(3)(4)(5))(6).	
A. become	B. how	C. matter
D. no	E. old	F. they
8. Please (1)(2)(3)(4)(5	5) (6) anything we
can do to help you.		
A. know	B. us	C. there
D. let	E. if	F. is
9. Her father's (1)	(2)(3)(4) to cancel her plan to
(5)(6).		
A. caused	B. death	C. abroad
D. her	E. go	F. sudden
10. Mr. Jones would (1)(2)(3)	sooner (4)(5)
(6) a better preser	ntation.	
A. been	B. had	C. have
D. he	E. given	F. promoted

11.	The	n	ews	; (1) (. 4	2)) (3)	sur	prise	ed	(4)	(5)
(6)	my	mo	ther	cry.														
	Α.	ma	de				В.	us					С.	ou	ır	grar	ıdn	not	her	
	D.	and	ł				Ε.	tha	t				F.	ha	ad	pas	sed	l a	way	
12.	We	(1)(2) (3) (4)	En	glisl	h fo	rs	six	ye	ars	0	r n	ore
W	hen	we	(5)(6) ł	nigh	scho	ool.										
	Α.	bee	n				В.	gra	duat	e			С.	st	ud	ying	;			
	D.	hav	7e				Ε.	fror	n				F.	wi	ill					

次のページに進みなさい

3 次の文章を筋の通ったものにするために、枠内にあるA~Dからもっとも適切なものを選び()の中に入れなさい。[各3点]

(A)

- A. All babies are special, and those born aboard airplanes are rare enough to be considered extra-special.
- B. Such a situation is not as rare as one might think, and solutions vary around the world.
- C. Yet, some nations grant citizenship to any child born over their airspace.
- D. Of course, each airline has strict rules to avoid such births.

Immigration and citizenship have become important legal issues in today's globalized world. Yet, what happens when a mother gives birth on an international flight? For example, if a pregnant American woman flies from Japan to Sweden and her baby is born while over Russia, what citizenship does the newborn have — American, Japanese, Swedish or Russian? ((1))

Inflight births are uncommon, but they certainly occur. British Airways has stated that a child is born aboard one of its planes about once every year. ((2)) Typically, passengers cannot fly if they are past the 24th week of their pregnancy, though different airlines may have different limits. But in the end, it does not matter. Babies pay no attention to rules. They come whenever they wish.

Perhaps the easiest way to handle the citizenship problem is to award the child the same nationality as the mother. Another common process is to grant citizenship according to the nation where the airline company is registered. The United Nations backs this approach, with the place of birth then designated as the land from which the plane departed. ((3)) The United States is one such country that does this.

While airlines try to avoid inflight deliveries, many are also honored to welcome babies into the world. Some even present their newborns with significant gifts. A handful of companies grant such children free flights—for life! Others may present scholarships for the child's future study. (4) They are a clear reminder that our world is truly international and that the lines between countries are not as precise as they perhaps once were.

(B)

- A. Some great literary works provide people with guiding principles to create better societies.
- B. It includes creative works of poetry and drama as well as fiction, non-fiction, essays and technical writing.
- C. Illustrated books also inspire young readers by fostering their creativity and imaginative skills.
- D. Literature took on a romantic note in the early 19th century when folk traditions and legends were popular.

What is literature and why is it important in our lives? Literature is a broad term used to describe all written and spoken material.

Literature has evolved through the different historical periods, with each period emphasizing a different characteristic of literature. In the 18th century, literary works were often religious in nature. ((6)) The latter half of the 19th century saw a more realistic and natural literary style that progressed into the modern literature of the 20th century.

The importance of literature for both adults and children cannot be stressed enough. Literature introduces us to new worlds through books, magazines, film and drama. Reading gives us new insights into an author's interpretation of things and helps us think and learn about diverse topics. It is a means of expanding one's knowledge and vocabulary. By reading about a subject, a person can express his or her views on the matter even without being an expert in that particular field.

(7) A well-known example is found in Mark Twain's Adventures

of Huckleberry Finn. Through this novel, Mark Twain argued against slavery and the racist beliefs that most Americans held at the time. Furthermore, books set in certain time periods help readers learn the history and culture of the given period. Research works by famous inventors and scientists also serve as a valuable information base. As for children, they can learn correct spelling, punctuation and grammar through reading, which in turn enhances their own writing skills.

It can thus be said without exaggeration that although language is the medium of expression for literature, the real value of literature to society cannot be summed up in a few words. **4** 次の英文を読んで、質問に答えなさい。(*印の語(句)は注を参考にすること)[各3点]

(A) Born in the German city of Weil der Stadt, the astronomer and mathematician Johannes Kepler is credited with describing some of the fundamental principles of astrophysics. He was initially a teacher of mathematics at a religious institution, but was hired by various noblemen and members of royalty to carry out research in mathematics and astronomy. In addition to his work on astrophysics and mathematics, he helped to develop better telescopes by inventing a new version of the refracting* telescope. His work was referred to by Galileo Galilei in his work on telescopy.

Although his work was wide-ranging with various important contributions, Kepler's Laws of Planetary Motion are the most significant. There are three of these laws which describe how planets orbit the sun. These laws also apply to other objects in the solar system too. For example, these laws also apply to comets that orbit the sun or satellites that orbit the Earth. He was able to establish these laws through observations of objects in the night sky and subsequent calculations. The first law tells us the orbit of planets around the sun is elliptical*, not circular. The second law describes how the speed of the planet changes at different points when travelling on the elliptical orbit. The third law tells us information about the orbits of multiple planets orbiting the sun. This third law is arguably the most important. He found that there was a relationship between the time it took each planet to complete a single orbit and distance from each object to the sun. This can be seen when comparing Mercury with Neptune. Mercury is the closest planet to the sun and completes one orbit in 88 days, while Neptune, the furthest

known planet from the sun completes one orbit in 165 years. He spent his life trying to figure out why this was the case but was unable to do so.

His work became the basis for others, such as Isaac Newton, to develop their theories. Having studied Kepler's work and conducting his own research, Newton was able to develop his universal law of gravitation. This law includes similar values to those mentioned in Kepler's third law. However, it was Newton who worked out that the mass of the objects was important. He was also able to establish the Universal Gravitational Constant*, also known as G. The existence of this constant, G, and the relationship between it and an object's mass was the missing part to explain what Kepler had described in his third law. It is arguable whether Newton would have been able to make his discoveries without the work of Kepler.

In 2009, NASA launched the Kepler Space Telescope, in honor of Johannes Kepler. The Kepler Space Telescope had a nine-and-a-half-year mission, about three times longer than originally planned. During this time the telescope observed over 500,000 stars and detected 2,662 planets—a fitting honor to connect to this great scientist.

[注] refracting: 屈折の elliptical: 楕円の

the Universal Gravitational Constant: 万有引力定数

- 1. 本文の内容と一致するものはどれか。
 - A. ガリレオと協力してケプラーは屈折望遠鏡を開発した。
 - B. 惑星の軌道に関するケプラーの法則は彗星の軌道にも当てはまる。
 - C. ケプラーの業績が認められるようになったのは現代になってからである。
 - D. ケプラーの法則は数学と物理学の知識から導き出された後、観測で実証された。

- 2. 本文の内容と一致するものはどれか。
 - A. ケプラーは太陽からの惑星の距離とその公転にかかる時間の関係を発見した。
 - B. ニュートンの万有引力定数の存在はケプラーによって証明された。
 - C. ニュートンの万有引力定数にはケプラーが提唱した質量の観点が欠けていた。
 - D. ケプラーは惑星が軌道上を一定の速度で公転することを発見した。

次のページに進みなさい

(B) As time passes, we expect that with technological progress things will get better in some way. This usually means things becoming faster, more efficient and more powerful. There is, however, in the area of commercial flight, an interesting case of the opposite being true, where a considerably faster transport alternative was scrapped completely in favor of low speed options. It is the case of the Concorde, a supersonic airliner.

Supersonic is a term that refers to a speed greater than the speed of sound. This is a relative value and is measured using the term Mach, where Mach 1 is equal to the speed of sound. Many modern commercial jet liners travel at a cruising speed of about Mach 0.85, which is subsonic flight, also known as slower than the speed of sound flight. In contrast, the Concorde's maximum speed was Mach 2.05. In practical terms, the 5,834 km journey between Paris and New York takes a modern commercial jet over 8.5 hours, while the Concorde could complete this same journey in less than 3.5 hours.

When an aircraft is designed to cross the sound barrier, there are many aerodynamic* and material science considerations. One thing is shock waves that are generated when crossing the sound barrier. These shock waves cause loud booms that cause disturbances to people on the ground nearby and can even cause minor damage to buildings. To reduce the effect of these shock waves, the Concorde had some noticeable differences in design. It was long and sleek with a pointed nose. When viewed from above, the wings formed a Greek letter delta (Δ) shape. The engines were placed at the rear and near the main body, as opposed to out on the wings away from the main body. These differences helped to reduce the shock waves generated and enabled pilots to keep control at supersonic speeds. Another unique feature was the nose, which could be tipped downwards at takeoff and landing to allow the flight crew to see more clearly.

Its first test flight took place in 1969, and then it came into commercial use in 1976. Due to the problems caused by the shock waves, the airspace where they could fly at supersonic speeds was limited to over oceans only. This meant that transatlantic flights were the main routes flown. British Airways and Air France were the main carriers to use the plane, mainly serving business people travelling between New York and London or Paris. Flying on the Concorde was too expensive for most people.

On July 25, 2000, an Air France flight from Paris to New York tragically crashed soon after takeoff, causing the deaths of 109 passengers and crew and four others on the ground. The cause of the crash was found and adjustments were made to the aircraft, but the image of the plane was harmed. Passenger numbers gradually reduced, causing the planes to be taken out of service in October 2003. This marked a symbolic step back in the progress of air transport.

[注] aerodynamic: 空気(航空)力学の

- 3. 超音速機について本文の内容と一致するものはどれか。
 - A. 2000年の事故の原因は究明されなかった。
 - B. 飛行速度が音速に近づくと衝撃波が起こった。
 - C. 大陸上空では超音速飛行の利便性が生かせなかった。
 - D. エンジンは胴体から離れた左右翼の先端にあった。
- 4. 本文の内容と一致するものはどれか。
 - A. コンコルドは実際には音速を超える飛行はしなかった。
 - B. コンコルドは離着陸時に機体の形を変更できた。
 - C. パリの墜落事故での生存者は4人だった。
 - D. コンコルドの開発によって航空交通技術は一歩後退した。

5 次の英文を読んで、質問に答えなさい。(*印の語(句)は注を参考にすること)[各3点]

(A) Acid indigestion is a common problem affecting millions of people around the world. There are several other names for acid indigestion, including upset stomach, acid reflux*, indigestion and heartburn*. As the name suggests, there is usually too much acid in the stomach, which causes a burning sensation in the stomach that can move up into the throat. The intensity can range from being mildly uncomfortable to extremely painful. Some people suffer from it permanently, while most people only experience it once in a while. Overeating, a poor sleeping position or eating too much oily or spicy food can cause it. Sugary foods and alcohol can also cause it.

Being a common problem, a variety of remedies are sold in drugstores, and in some countries, you can even get remedies at convenience stores. One widespread myth about acid indigestion is that the best way to reduce the symptoms is by drinking milk. This is probably because milk is viewed as a comfort food, and it is often considered to be good for the stomach. However, milk actually contains acid, so it is not the best remedy for reducing stomach acid. Despite this, many still believe in the milk myth.

One scientifically surprising phenomenon is that freshly squeezed lemon juice is much more effective for acid indigestion than milk. Everyone knows lemons are high in acid, so how could they possibly be good for reducing acid? Oddly enough, when consumed, fresh lemon juice magically neutralizes the acid in our system. So, if you are ever suffering from acid indigestion, instead of drinking milk, try fresh lemon juice mixed with cold or hot water. Make sure it is juice from fresh

lemons because canned or bottled lemon juice usually has added sugar, which can make acid indigestion worse. Fresh lemons may be one of the best ways to reduce acid in the stomach.

[注] reflux: 逆流 heartburn: 胸やけ

- 1. What is the main topic of this passage?
 - A. Acid indigestion and the benefits of drinking milk.
 - B. Stomach acid and how it can damage our health.
 - C. Acid indigestion and an effective remedy.
 - D. Why sweetened lemon juice reduces stomach acid.
- 2. According to the passage, which of the following is true?
 - A. Milk is often considered a good remedy for stomach acid.
 - B. Eating meat and less oily food can reduce acid indigestion.
 - C. The low acidity of lemon juice is the best cure for stomach acid.
 - D. Sleeping too much can sometimes cause acid indigestion.

(B) In recent years, the United States has been challenged by controversies over whether or not monuments celebrating some of the delicate aspects of American history should remain in public places. This is seen most in debates about the legacy of the Southern Confederacy*, the governing body of slave-owning states that declared secession* in 1861, leading to the American Civil War. These monuments include statues like that of Confederate President Jefferson Davis in New Orleans, Louisiana and of significant military leaders, like General Robert E. Lee in Charlottesville, Virginia (both of these statues have recently been removed). Many of these statues were built decades after the Civil War. As some point out, this implies that such monuments were erected to demoralize* southern black people who were fighting for their civil rights.

In the wake of Black Lives Matter* and other movements seeking equal justice for the African American community, this issue has only gotten larger over time. Many argue that statues like these memorialize men who—while they may have been brave leaders—were fighting to preserve slavery in America. This makes the monuments symbols of racial oppression and violence that should not be maintained in public spaces, which, by definition, are meant to be accessible to all citizens equally. Advocates for their removal say these monuments would be better suited in museums or private collections, which people can visit voluntarily, and where experts can place them within a historical context for educational purposes.

[注] the Southern Confederacy: 南部連合 secession: 脱退

demoralize: 士気をくじく

Black Lives Matter: 黒人に対する差別撤廃を訴える運動

- 3. What is the main topic of this passage?
 - A. Current debates regarding the removal of monuments.
 - B. The ongoing celebration of American history.
 - C. The reasons why slavery was abolished in the United States.
 - D. The life and legacy of President Jefferson Davis.
- 4. According to the passage, which of the following is true?
 - A. Nobody knows much about the American Civil War anymore.
 - B. All Confederate monuments have been taken down.
 - C. Many people view monuments to the Confederacy as symbols of racism.
 - D. The Confederacy worked hard to abolish slavery in the 19th century.

(C) One of the most basic necessities for human survival is shelter. Since the rise of our species around 300,000 years ago, we have needed protection from dangerous weather, rival humans and animal predators*. We have also needed a safe place to rest. Before learning to build structures, early humans sought shelter in caves and trees. Gradually, humans began building basic structures with large stones and tree branches, and later, as their tool-making technology developed, they made tents using animal skins and bones. For tens of thousands of years, as we slowly spread throughout the world, we used whatever materials were available, but our home-building skills didn't change much. This is because we were hunting and gathering to survive, not staying in one place for long.

The ancient Celts, by this time no longer wandering from place to place, built round houses supported by wooden poles, and walls made from wattle and daub—sticks woven together like fabric and coated with clay or mud. Ancient Egyptians and Assyrians learned how to make homes out of brick by drying clay in the sun. In colder, wetter climates, slanted roofs appeared, allowing gravity to shed rain and snow. Large, urban buildings in ancient Rome incorporated pipes with hot water to produce central heating.

European homes in the Middle Ages were mostly wet, cold and dark. The poor, in particular, lived in simple houses with one room, dirt floors, grass roofs and small windows without glass. People with more resources could build stronger homes with stone or brick walls, tiled floors, framed windows and better protection against harsh weather and intruders. The rich and powerful lived in castles and fortresses made of thick stone walls to protect their property and resources from enemies.

The Industrial Revolution in the 18th and 19th centuries brought vast improvements in house-building technology and the production, availability and quality of materials. Architects designed buildings based on durability, practicality and beauty. Apartment complexes were built in growing cities to provide housing to rising populations, while the rich and powerful built huge mansions on their large properties.

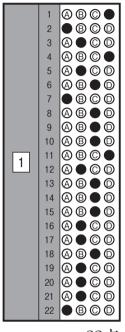
Modern housing varies greatly. Most children and young adults still aspire to start a family and raise their children in their own single-family house like many grew up in, or wished they had been able to. Others are unable or choose not to commit their time and income to a 30-year loan on a house, and they opt instead for rented accommodation in an apartment. Many apartment residents rent continuously for decades or more. Urban professionals and elders who can afford it choose to buy a condominium. These often look very much like apartment buildings. This option combines the convenience of not needing to spend so much time and money on home maintenance with the investment potential of owning a property. But wherever they call home, people generally have strong attachments toward it, hence the saying, "There's no place like home."

[注] predator: 捕食者

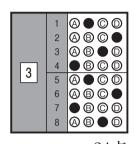
- 5. What is the main topic of this passage?
 - A. The different ways of furnishing a house.
 - B. An overview of the various roles of housing.
 - C. How housing has evolved with the times.
 - D. How architects design and build houses.
- 6. According to the passage, which of the following is true?
 - A. Most poor people in the Middle Ages lived in simple caves.
 - B. Tents made with animal skins were invented in ancient Egypt.
 - C. Housing technology declined during the Industrial Revolution.
 - D. A variety of housing exists today to meet people's needs.

外国語(英語)解答用紙

1日[*]

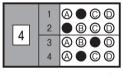


(2) (5) $AB \bullet DEE \bullet BCDEE$ ullet B C O E F A B C O ullet F ullet 2 24点

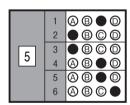


24点

22点



12点



18点