

Họ và tên:SBD:.....

ĐIỂM	HỌ TÊN, CHỮ KÍ GIÁM KHẢO	SỐ PHÁCH
Bảng số:.....	Giám khảo 1:	
Bảng chữ:.....	Giám khảo 2:	

SECTION A. LISTENING (50 points)

Part 1: You will listen to a lecture about the helix shape. For questions 1-15, complete the sentences WITH NO MORE THAN 3 WORDS / PHRASES. (30pts)

I'd like to turn now to the object which is the main point of this talk: the helix. This is a fascinating mathematical object which (1)_____ many parts of our lives. Movement, the natural world, the manufactured world and our (2)_____ are all connected to the shape of the helix.

A helix is a type of (3)_____ curve that goes around a central cylindrical shape in the form of a spiral, like a corkscrew or a spiral staircase. The helix is a very popular shape in nature because it is very (4)_____. In fact, helices are sometimes (5)_____ to as 'nature's space saver'. In architecture too, the helix shape of a spiral staircase is an attractive option in buildings where space is very (6)_____.

The (7)_____ type of helix is probably the double helix of DNA, or deoxyribonucleic acid. DNA is made of two helices that curve around each other, a bit like (8)_____. DNA contains the genetic information or 'code' that (9)_____ the development and functioning of all known living things. The helix shape is a very (10)_____ way to store a long molecule like DNA in the limited space of a cell.

There are different types of helices. Helices can twist clockwise, right-handed, or (11)_____, left-handed. An interesting experiment is to hold a clockwise helix, such as a corkscrew, up to a mirror. The clockwise helix appears to become counterclockwise.

We can perceive examples of helices in many areas of our world. Spiral staircases, cables, screws and ropes can be right-handed or left-handed helices. A helix that (12)_____ a cone is called a conical helix. Examples of conical helices are screws or the famous spiral (13)_____ designed by the architect Frank Lloyd Wright in the Guggenheim Museum in New York.

Helices are also (14)_____ in the natural world. The horns of certain animals, viruses, seashells and the structure of plants, flowers and leaves can all contain helices. The human umbilical cord is in fact a triple helix.

With the discovery that the helix is the shape of the DNA molecule, it is not surprising that the helix is found in so many areas. It's one of the most natural shapes in nature.

Let's turn our attention now to the mathematical description of the helix. You'll need a pen and paper for the next part of the talk as I am going to give you some (15)_____ to write down. Take your time to notice the different ...

Your answers:

1.	4.	7.	10.	13.
2.	5.	8.	11.	14.
3.	6.	9.	12.	15.

3. Mike _____ on our conversation to tell us that Andrew had just been rushed to hospital.
A. cut in B. faced up C. broke up D. got ahead
4. The manufacturer is worldly-known for selecting only ingredients that meet their very strict _____ of quantity and renewability.
A. necessities B. demands C. requirements D. criteria
5. I thought we were saying goodbye forever. But we _____ again, many years later, under very strange circumstances.
A. are going to meet B. will meet C. met D. were to meet
6. President Donald Mack demanded and got more and more power, although he was _____ unable to use it effectively.
A. faintly B. rarely C. hardly D. virtually
7. We did have a lot of arguments and disagreements but that's water _____ now.
A. in the sea B. down the river C. under the bridge D. back in the day
8. It's your decision – you have to _____ the responsibility if things go wrong.
A. bear B. make C. maintain D. carry
9. Right now all the seats on that train are taken, madam. _____ there is a cancellation, I will call you.
A. Nevertheless B. In the event that C. Even if D. But
10. Nam and his classmate are at his home now and he would like to offer him something to drink.
Nam: "Would you like another drink?" **- John:** "_____"
A. I wouldn't say no. B. You said it!
C. You can say that again. D. I couldn't agree more.

Mark the letter A, B, C, or D to indicate the word or phrase that is CLOSEST in meaning to the underlined part in the following question. Write your answer in the corresponding numbered box.

11. It was when we started living together that we found we just weren't compatible.
A. well-suited B. corresponding C. sociable D. incompatible

Mark the letter A, B, C, or D to indicate the word or phrase that is OPPOSITE in meaning to the underlined part in the following question. Write your answer in the corresponding numbered box.

12. He does not pay attention to his lessons and much of the school day is wasted on superfluous activities.
A. excessive B. redundant C. dispensable D. necessary

Your answers:

1.	2.	3.	4.	5.	6.
7.	8.	9.	10.	11.	12.

Part 2: For questions 13-20, read the passage below which contains 8 mistakes. Identify the mistakes and write the corrections in the corresponding numbered boxes. (8pts)

Line	Passage
1	When another old cave is discovered in the south of France, it is not usually news. Rather, it is an
2	ordinary event. Such discoveries are so frequentlee these days that hardly anybody pays heed to
3	them. Therefore, when the Lascaux cave complex was discovered in 1940, the world was amazed.
4	Painted directly on its walls were hundreds of scenes showing how people lived thousands of
5	years ago. The scenes show people hunt animals, such as bison or wild cats. Other images depict
6	birds and, most noticeably, horses, which appear in more than 300 wall images, by far
7	outnumbering all another animals. Early artists drawing these animals accomplished a
8	monumental and difficult task. They did not limit themselves from the easily accessible walls but
9	carried their painting materials to spaces that required climbing steep walls and crawling into
10	narrow passages in the Lascaux complex. Unfortunately, the paintings have been exposed to the
11	destroyable action of water and temperature changes, which easily wear the images away.

12	Because the Lascaux caves have many entrances, air movement has also damaged the images inside. Although they are not out in the open air, which natural light would have destroyed them long ago, many of the images have deteriorated and are barely recognizable. To prevent further damage, the site was closed to tourists in 1963, 23 years after it was discovered.
13	
14	
15	

Your answers:

	<i>Line</i>	<i>Mistake</i>	<i>Correction</i>		<i>Line</i>	<i>Mistake</i>	<i>Correction</i>
13.				17.			
14.				18.			
15.				19.			
16.				20.			

SECTION C. READING (70 points)

Part 1: For questions 1–15, read the following passage and decide which answer (A, B, C, or D) best fits each gap. Write your answers in corresponding numbered boxes. (15pts)

In 1967, a research team from an American university (1)_____ out to explore the Well of Sacrifice at Chechen Itza. Unfortunately, however, the water in this well was so dark that it was impossible for divers to see, so the team had to use filters to clean it.

Just as this work was about to begin, some (2)_____ Indians told the team that the well was (3)_____ by the spirit of a rain god. The god was (4)_____ as Chic, and they warned the team that Chic would (5)_____ revenge if his home was disturbed. The team listened politely but (6)_____ these warnings and went on with their research. (7)_____ the summer, pumps and filters were used, but it wasn't until (8)_____ months later that the water was clear enough for divers to go down into the well.

When they got (9)_____ to work they began to discover various objects at the (10)_____ of the well. (11)_____ the things they brought back to the surface were human bones, and by the time they had (12)_____, they had discovered more than 50 skeletons. This was (13)_____ that the well had indeed been used for human sacrifice.

Perhaps it would have been better if the team had (14)_____ to the warnings of the Indians, because within a year, several members of the team had been (15)_____ in mysterious accidents.

- | | | | |
|---------------|------------|---------------|--------------|
| 1. A. put | B. broke | C. set | D. looked |
| 2. A. local | B. natural | C. near | D. close |
| 3. A. lived | B. housed | C. resided | D. inhabited |
| 4. A. named | B. called | C. told | D. known |
| 5. A. have | B. make | C. do | D. take |
| 6. A. ignored | B. refused | C. denied | D. rejected |
| 7. A. Along | B. Within | C. Throughout | D. Inside |
| 8. A. few | B. several | C. various | D. any |
| 9. A. down | B. through | C. about | D. at |
| 10. A. end | B. ground | C. depth | D. bottom |

11. A. Between B. Around C. Within D. Among
12. A. ended B. finished C. concluded D. achieved
13. A. clear B. proof C. evident D. obvious
14. A. listened B. heard C. noticed D. watched
15. A. died B. wounded C. killed D. missed

Your answers:

1.	2.	3.	4.	5.
6.	7.	8.	9.	10.
11.	12.	13.	14.	15.

Part 2. For questions 16-30, read the text below and think of the word which best fits each space. Use only ONE word in each space. Write your answers in the corresponding numbered boxes. (15pts)

PANDEMICS IN HISTORY

Serious outbreaks of infection have happened many times throughout history.

(a). In the 14th century, the bubonic plague is thought to have killed anywhere between 30% and 60% of Europe's (16)_____. In the late 1870s the bubonic plague emerged again, this time in south central China. Thousands of people were killed in Canton and the bubonic plague spread (17)_____ rivers and shipping routes. The pathogen spread to Hawaii and (18)_____ to San Francisco, transmitted on a regular trade route.

(b). The first bubonic plague victim in San Francisco (19)_____ lived in the city's poor, dirty and overcrowded Chinatown district died in March 1900. An incorrect conspiracy theory at the time was that people of European descent could (20)_____ catch the infection. The reality was that white Americans did not enter especially deprived areas where Asian populations lived and where the bacteria thrived, so they were not exposed to the dangers to (21)_____ same extent as the migrant workers that lived in those areas.

(c). Although knowledge at the time was limited as to what (22)_____ the infection, scientists trying to contain the outbreak understood that infected areas needed to be quarantined and cleaned. They faced opposition (23)_____ city officials, many of whom wanted to ignore the problem instead. The Governor of California, who didn't support the closing of state borders because of the problems it would create for the \$25-million fruit harvest, (24)_____ official letters about what he called the 'fake plague'. Science however prevailed and experts began to make the (25)_____ between the infection and how it was being passed around the community. It became clear that the problem was caused by flea-infected rats. Actions were subsequently taken to wipe out the rats and to disinfect the city, old buildings were also (26)_____.

(d). By 1905 the city of San Francisco was considered to be safe again;(27)_____, a 7.9 magnitude earthquake in 1906 caused damage to buildings and (28)_____ infrastructure which led to a new increase in infection because the rat population grew again as they took over devastated land and buildings and open sewers. After another (29)_____ effort to close down the infection, San Francisco was finally declared plague free in November 1908, though the disease was observed to have crossed over from the rat population to squirrels.

(e). The bubonic plague is still found in the area today. On average around seven people a year are still infected in the U.S.A., most of them picking up the infection while hiking, but nowadays it can be very (30)_____ treated by antibiotics.

Your answers:

16.	19.	22.	25.	28.
17.	20.	23.	26.	29.
18.	21.	24.	27.	30.

Part 3: For questions 31-40, read the following passage and write A, B, C, or D in the boxes to indicate the correct answer to each of the following questions.

The Moon has been worshipped by primitive peoples and has inspired humans to create everything from lunar calendars to love sonnets, but what do we really know about it? The most accepted theory about the origin of the Moon is that it was formed of the debris from a **massive** collision with the young Earth about 4.6 billion years ago. A huge body, perhaps the size of Mars, struck the Earth, throwing out an immense amount of **debris** that coalesced and cooled in orbit around the Earth.

The development of Earth is inextricably linked to the moon; the Moon's gravitational influence upon the Earth is the primary cause of ocean tides. In fact, the Moon has more than twice the effect upon the tides than the Sun does. The Moon makes one rotation and completes a revolution around the Earth every 27 days, 7 hours, and 43 minutes. This synchronous rotation is caused by an **uneven** distribution of mass in the Moon (essentially, it is heavier on one side than the other) and has allowed the Earth's gravity to keep one side of the Moon permanently facing Earth. It is an average distance from Earth of 384,403 km.

The Moon has no atmosphere; without an atmosphere, the Moon has nothing to protect it from meteorite impacts, and thus the surface of the Moon is covered with **impact craters**, both large and small. The Moon also has no active tectonic or volcanic activity, so the erosive effects of atmospheric weathering, tectonic shifts, and volcanic upheavals that tend to **erase** and reform the Earth's surface features are not at work on the Moon. In fact, even tiny surface features such as the footprint left by an astronaut in the lunar soil are likely to last for millions of years, unless obliterated by a chance meteorite strike. The surface gravity of the Moon is about one-sixth that of the Earth's. Therefore, a man weighing 82 kilograms on Earth would only weigh 14 kilograms on the Moon.

The geographical features of the Earth most like that of the Moon are, in fact, places such as the Hawaiian volcanic craters and the huge meteor crater in Arizona. The climate of the Moon is very unlike either Hawaii or Arizona, however; in fact the temperature on the Moon ranges between 123 degrees C. to -233 degrees C.

31. The word "**uneven**" is closest in meaning to _____.
A. equally distributed B. orderly C. heavier D. not uniform
32. A person on the Moon would weigh less than on the Earth because.
A. the Moon has no active tectonic or volcanic activity B. the surface gravity of the Moon is less
C. of the composition of lunar soil D. the Moon has no atmosphere
33. According to the passage, the Moon is.
A. protected by a dense atmosphere B. composed of a few active volcanoes
C. older than the Earth D. the primary cause of Earth's ocean tides
34. Which of the following can be inferred from the passage?
A. the Moon is not able to support human life.
B. people living in Hawaii and Arizona would feel at home on the Moon.
C. if the Moon had no gravitational influence, the Earth would not have tides.
D. Mars could have been formed in a similar way to the Moon.
35. The word "**erase**" is closest in meaning to _____.
A. change B. impact C. obliterate D. erupt

36. All of the following are true about the Moon EXCEPT.
- A. it has a wide range of temperatures B. it is unable to protect itself from meteorite attacks
- C. it has less effect upon the tides than the Sun D. it is heavier on one side than the other
37. The word "**massive**" is closest in meaning to _____.
 A. impressive B. dense C. huge D. unavoidable
38. The word "**debris**" is closest in meaning to _____.
 A. rubbish B. earth C. satellites D. moons
39. Why does the author mention "**impact craters**"?
 A. to show the result of the Moon not having an atmosphere.
 B. to explain the corrosive effects of atmospheric weathering.
 C. to explain why the Moon has no plant life because of meteorites.
 D. to show the result of the Moon not having active tectonic or volcanic activity.
40. What is the passage primarily about?
 A. the Moon's effect upon the Earth. B. a comparison of the Moon and the Earth.
 C. the origin of the Moon. D. what we know about the Moon and its differences to Earth.

Your answers:

31.	32.	33.	34.	35.
36.	37.	38.	39.	40.

Part 4: Read the text and do the following tasks. (20pts)

CLIMATE CHANGE AND THE INUIT

The threat posed by climate change in the Arctic and the problems faced by Canada's Inuit people

A

Unusual incidents are being reported across the Arctic. Inuit families going off on snowmobiles to prepare their summer hunting camps have found themselves cut off from home by a sea of mud, following early thaws. There are reports of igloos losing their insulating properties as the snow drips and refreezes, of lakes draining into the sea as permafrost melts, and sea ice breaking up earlier than usual, carrying seals beyond the reach of hunters. Climate change may still be a rather abstract idea to most of us, but in the Arctic it is already having dramatic effects – if summertime ice continues to shrink at its present rate, the Arctic Ocean could soon become virtually ice-free in summer. The knock-on effects are likely to include more warming, cloudier skies, increased precipitation and higher sea levels. Scientists are increasingly keen to find out what's going on because they consider the Arctic the 'canary in the mine' for global warming – a warning of what's in store for the rest of the world

B

For the Inuit the problem is urgent. They live in precarious balance with one of the toughest environments on earth. Climate change, whatever its causes, its direct threat to their way of life. Nobody knows the Arctic as well as the locals, which is why they are not content simply to stand back and let outside experts tell them what's happening. In Canada, where the Inuit people are jealously guarding their hard-won autonomy in the country's newest territory, Nunavut; they believe their best hope of survival in this changing environment lies in combining their ancestral knowledge with the best of modern science. This is a challenge in itself

C

The Canadian Arctic is a vast, treeless polar desert that's covered with snow for most of the year. Venture into this terrain and you get some idea of the hardships facing anyone who calls this home. Farming is out of the question and nature offers meagre pickings. Humans first settled in the Arctic a mere 4,500 years ago, surviving by exploiting sea mammals and fish. The environment tested them to the limits: sometimes

the colonists were successful, sometimes they failed and vanished. But around a thousand years ago, one group emerged that was uniquely well adapted to cope with the Arctic environment. These Thule people moved in from Alaska, bringing kayaks, sledges, dogs, pottery and iron tools. They are the ancestors of today's Inuit people

D

Life for the descendants of the Thule people is still harsh. Nunavut is 1.9 million square kilometers of rock and ice, and a handful of islands around the North Pole. It's currently home to 2,500 people, all but a handful of the indigenous Inuit. Over the past 40 years, most have abandoned their nomadic ways and settled in the territory's 28 isolated communities, but they still rely heavily on nature to provide food and clothing. Provisions available in local shops have to be flown into Nunavut on one of the most costly air networks in the world, or brought by supply ship during the few ice-free weeks of summer. It would cost a family around £7,000 a year to replace meat they obtained themselves through hunting with imported meat. Economic opportunities are scarce, and for many people, state benefits are their only income

E

While the Inuit may not actually starve if hunting and trapping are curtailed by climate change, there has certainly been an impact on people's health. Obesity, heart disease and diabetes are beginning to appear in a people for whom these have never before been problems. There has been a crisis of identity as the traditional skills of hunting, trapping and preparing skins have begun to disappear. In Nunavut's igloo and email society, where adults who were born in igloos have children who may never have been out on the land, there's a high incidence of depression

F

With so much at stake, the Inuit are determined to play a key role in teasing out the mysteries of climate change in the Arctic. Having survived there for centuries, they believe their wealth of traditional knowledge is vital to the task. And the Western scientists are starting to draw on this wisdom, increasingly referred to as 'Inuit Qaujimajatuqangit', or IQ. 'In the early days, scientists ignored us when they came up here to study anything. They just figured these people don't know very much so we won't ask them' says John Amagoalik, an Inuit leader and politician. 'But in recent years IQ has had much more credibility and weight.' In fact, it is now a requirement for anyone hoping to get permission to do research that they consult the communities, who are helping to set the research agenda to reflect their most important concerns. They can turn down applications from scientists they believe will work against their interests, or research projects that will impinge too much on their daily lives and traditional activities

G

Some scientists doubt the value of traditional knowledge because the occupation of the Arctic doesn't go back far enough. Others, however, point out that the first weather stations in the far north date back just 50 years. There are still huge gaps in our environmental knowledge, and despite the scientific onslaught, many predictions are more than best guesses. I could help to bridge the gap and resolve the tremendous uncertainty about how much of what we're seeing is natural capriciousness and how much is the consequence of human activity

Questions 41-47

The reading passage above has eight paragraphs, A-G. Choose the correct heading for each paragraph from the list of headings below. Write the correct number i-x, in the box below.

LIST OF HEADINGS

- i. The reaction of the Inuit community to climate change*
- ii. Understanding of climate change remains limited*

- iii. *Alternative sources of essential supplies*
- iv. *Respect for Inuit opinion grows*
- v. *A healthier choice of food*
- vi. *A difficult landscape*
- vii. *Negative effects on well-being*
- viii. *Alarm caused by unprecedented events in the Arctic*
- ix. *The benefits of an easier existence*
- x. *Research projects on environment change*

Questions 48-50

Do the following statements agree with the information given in the Reading Passage.

Write your answer in the corresponding numbered boxes

- TRUE** *If the statement agrees with the information*
- FALSE** *If the statement contradicts with the information*
- NOT GIVEN** *If there is no information on this*

48. Climate change has undesirable impact on people's health and they have to face some ailments that have not been their matters over the past years.

49. The Western scientists have been attracted to do research on the Inuit's communities in recent years.

50. Scientists will, no doubt, emphasize the significance of traditional knowledge as they have enough information on the occupation of the Arctic.

Your answers:

41. Para A _____	42. Para B _____	43. Para C _____	44. Para D _____	45. Para E _____
46. Para F _____	47. Para G _____	48.	49.	50.

PART IV. WRITING (60 pts)

Part 1: For each of the sentences below, write a new sentence as similar in meaning as possible to the original sentence, using the word given in capital letters. This word must not be altered in any way. (10 points)

- He discontinues his studies because he is poor. **(POVERTY)**
His _____
- It seems that John doesn't really want to go fishing with us. **(MIND)**
It _____
- We only began to see the symptoms of the disease after several weeks. **(DID)**
Only _____
- It's almost 6 months since I stopped subscribing to that newspaper. **(SUBSCRIPTION)**
I _____
- No one stands a chance of beating Jokovic in this year's championship. **(CONCLUSION)**
It's _____

You had to return home after being out of job for a long time due to the impact of the Covid-19 pandemic. Unfortunately, you got involved in an accident on the way home and you were looked after by a person you did not know before. Write a special thank-you letter to express your gratitude.

- + introduce yourself and let him/her know why you are writing
- + express your appreciation
- + and offer him/ her to visit your home with his/her family

Use your name and address as Nguyen Van An – 69, Le Hong Phong, Vinh City.

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

Part 3: Write a composition at least 350 words on the following topic: (30pts)

Many famous people do a lot of work for charity as a way of advertising themselves. Some people think this is good for the community, while others think it is a negative.

Discuss both views and give your own opinion.

[illegible]

THE END