# IECPE

**Screening Test** 

2021 FORMAT

Distributed by the Hellenic American Union.

**FREE OF CHARGE** 

This publication is not endorsed or approved by MLA.

copyright © Hellenic American Union HELLENIC AMERICAN UNION

The test questions and any other testing information were developed by the Hellenic American Union. No endorsement of this publication by MLA

should be inferred.

## Introduction

The ECPE Screening Test has been designed to function as a useful tool for teachers who would like to have an indication of the level of their students and of how well they may perform on the ECPE. It is expected that the Screening Test would be administered before registering students for the ECPE examination.

The Test comprises a Listening Section and a Grammar, Cloze, Vocabulary & Reading (GCVR) Section. The items in these sections have been carefully chosen to test a variety of levels of difficulty appropriate for students at this level and so provide information on the potential success of ECPE candidates, based on their performance at this stage of their studies.

#### **Procedure**

A panel of twelve judges was selected based on their qualifications and experience in language teaching. The judges rated both individually and in groups, assigning a code to each item according to their evaluation of its place on a scale directly related to the CEFR levels. The median of these codes was calculated for each item and the results were then assigned to three categories: easier items; items expected to be approximately at the level of potential candidates at this stage of their studies; and a range of more difficult items above the expected level.

#### Results

The largest category of items included in the screening test are those the judges evaluated as being at the expected level of a student in the process of preparing for the ECPE, with sixty-four percent of the items in the Listening section at this level and fifty-three percent of the items in the GCVR section (Table 1). The proportion of easier and more difficult items included in the test are mostly balanced across the sections, but with a higher proportion of more difficult items in the Reading and Vocabulary sections. Note that percentages have been rounded.

The number of items per section is shown in Table 2. Nine of the items in the Listening section are those judged as easier than the expected level, with nine judged as more difficult, while twelve of the GCVR items are those judged as easier and twenty-one as more difficult. Ratings for items in the components of the GCVR section are also given in Table 2.

Table 1: Percentage of items per category (rounded figures)

PART	% of easier items	% of medium items	% of more difficult items	Total % of Items
LISTENING	18	64	18	100
GRAMMAR	25	56	19	100
CLOZE	25	45	30	100
VOCABULARY	13	56	31	100
READING	6	56	39	100
TOTAL GCVR	17	53	30	100

Table 2: Number of items per category

PART	No. of easier items	No. of medium items	No. of more difficult items	Total number of items
LISTENING	9	32	9	50
GRAMMAR	4	9	3	16
CLOZE	5	9	6	20
VOCABULARY	2	9	5	16
READING	1	10	7	18
TOTAL GCVR	12	37	21	70

## Introduction

#### **Using the ECPE Screening Test Grid (Table 3)**

Teachers can use the Screening Test to identify the level of students who are intending to sit a C2-level examination. Students should sit the Screening Test under examination conditions, with care taken to ensure that they do not copy or exchange answers during the test.

The ECPE Screening Test Grid in Table 3 can be printed or photocopied.

- · Each part of the Grid represents a section of the ECPE Screening Test.
- The numbers on the Grid represent the item number of the Screening Test: for example, items 1, 2 and 3 are found in the first three rows of Listening Part 1; item 87 is in the first row of the Vocabulary Section; and item 120 in the last row of the Reading Section.
- The item numbers of each section are arranged in three columns according to their estimated level of difficulty: Easier,
   Medium, and Harder.

Once students have finished the Test, the numbers of all the questions the student answered correctly should be marked on the Grid, for example by using a tick or a circle.

The Grid provides the teacher with an at-a-glance assessment of each student's level. It is important to think of each student's answers in terms of a **pattern**, since this is what gives the best indication of the student's level.

- Students approaching the level expected at the ECPE should show a pattern of answers for each Section demonstrating
  that they correctly answered almost all the easier items, many of the medium range items, but few of the more difficult
  items.
- More advanced students will show a *pattern* whereby they correctly answered almost all the easier items, most of the medium range items, and many of the more difficult items.
- Teachers should be aware that students with a noticeably random *pattern* of correct answers may have been employing a certain amount of guesswork.

#### **Predicting Success in the ECPE**

Students with more than **25** answers correct in the Listening Section of the Screening Test and more than **35** answers correct in the GCVR are expected to be in a favorable position to improve their English to a level which would gain a Pass at ECPE, provided they continue diligently with their studies during the school year. It is hoped the Screening Test will also help teachers identify which Sections of the ECPE require extra study on the part of their students.

# Introduction

Table 3: ECPE Screening Test Grid.

LIS	LISTENING 1				TENIN	G 2
EASIER	MEDIUM	HARDER		EASIER	MEDIUM	HARDER
	1				21	
	2					22
	3				23	
	4				24	
5					25	
6					26	
	7				27	
		8				28
	9				29	
10					30	
	11			31		
12						32
	13				33	
14						34
	15					35
	16				36	
17				37		
		18			38	
	19					

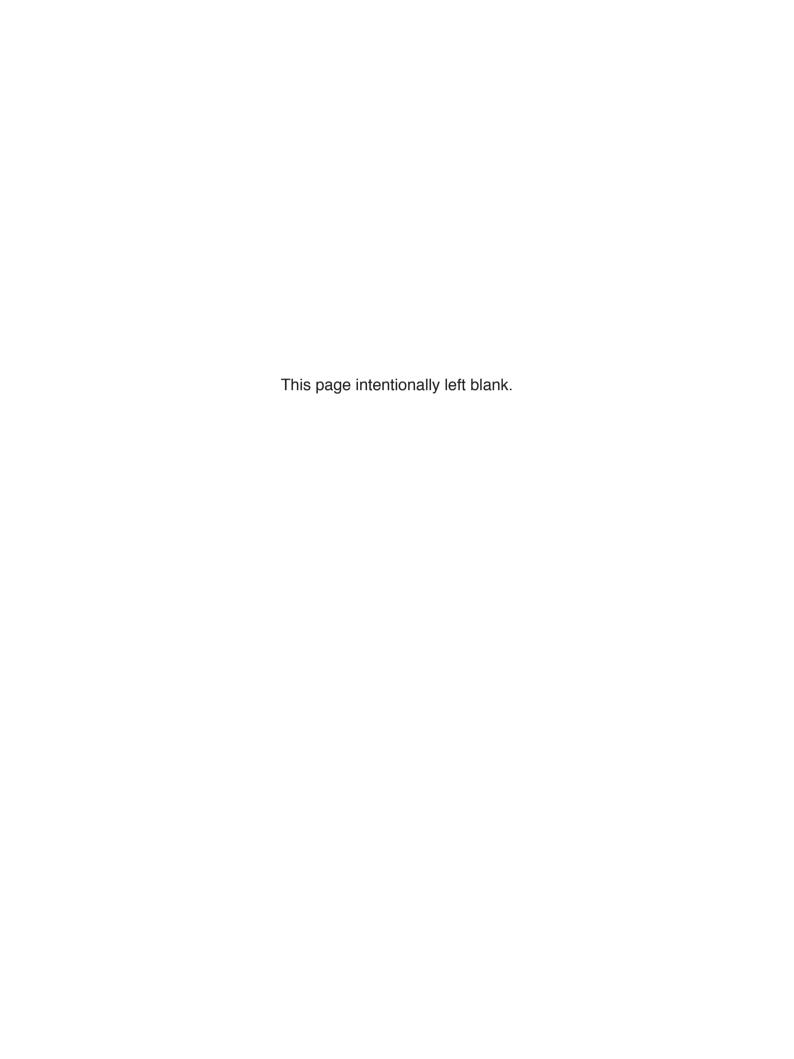
20

LIS	TENIN	G 3	GF	RAMM	AR
EASIER	MEDIUM	HARDER	EASIER	MEDIUM	HARDER
	39		51		
40					52
	41			53	
	42		54		
	43			55	
	44				56
	45			57	
	46			58	
		47		59	
		48	60		
	49			61	
	50			62	
				63	
				64	

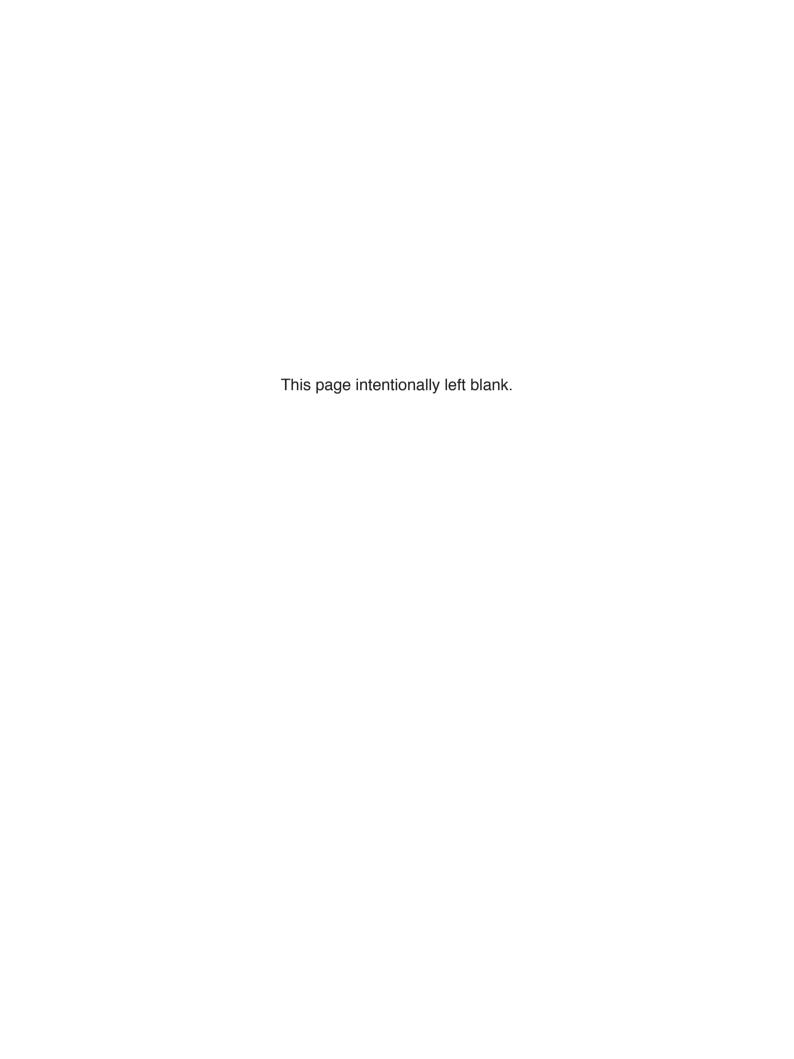
66

R	CLOZE							
HARDER	EASIER	MEDIUM	HARDER					
	67							
52		68						
		69						
			70					
		71						
56		72						
	73							
			74					
			75					
			76					
	77							
	78							
		79						
		80						
65		81						
		82						
			83					
	84							
		85						
			86					

voc	VOCABULARY			READING			
EASIER	MEDIUM	HARDER		EASIER	MEDIUM	HARDER	
87						103	
	88				104		
89						105	
	90			106			
	91					107	
	92					108	
		93			109		
		94			110		
		95			111		
		96			112		
	97				113		
	98				114		
	99					115	
		100				116	
	101				117		
	102				118		
						119	
					120		



# Screening Test



#### **Listening Section Instructions**

This section of the test has three parts. Mark all your answers on the separate answer sheet. Do not make any stray marks on the answer sheet. If you change your mind about an answer, erase your first answer completely. If you do not know the answer, you may guess. Try to answer as many questions as possible.

#### Part 1

In this part, you will hear 20 short conversations. After each conversation, you will hear a question about it. You will hear each conversation and question once. The questions and answer choices are printed in the test booklet. Mark your answers on the separate answer sheet, not in the test booklet. You should mark A, B, C, or D.

Do you have any questions?

- 1. What will the man probably do next?
  - A. log on his computer
  - B. charge his phone
  - C. speak to his boss
  - D. attend a work meeting
- 2. What will the woman email Dr. Adams about?
  - A. what students must do for their assignment
  - B. what the topic of the presentation should be
  - C. what the word length of the paper should be
  - D. what the syllabus for their course will be
- 3. What does the man want to do?
  - A. have a document officially stamped
  - B. obtain a copy of his transcript
  - C. get his personal information updated
  - D. inquire about accommodation
- 4. Why does the woman mention her brother?
  - A. to describe her brother's studies
  - B. to give her opinion on a teacher
  - C. to explain why she quit a class
  - D. to offer to do the man a favor
- 5. What are the speakers discussing?
  - A. a new colleague
  - B. selling smartphones
  - C. their managers
  - D. difficult customers

- 6. What will the man probably do this weekend?
  - A. move to a new apartment
  - B. bring the woman new furniture
  - C. help the woman redecorate
  - D. show the woman his apartment
- 7. What does the man plan to do next year?
  - A. apply to university
  - B. travel to another country
  - C. get a job in East Asia
  - D. complete his degree
- 8. Why does the man mention New York?
  - A. to ask for ideas about New York attractions
  - B. to show why he likes cities like Port Albert
  - C. to give his details to the hotel clerk
  - D. to explain why he prefers quiet places
- 9. What does the man ask the woman to do?
  - A. provide food and drink at the meeting
  - B. change the time of the meeting
  - C. let teachers leave the meeting earlier
  - D. arrange the meeting on another day
- 10. What does the man imply about the university?
  - A. The library needs renovating.
  - B. There are too many assignments.
  - C. Students often face difficulties.
  - D. Semesters should last longer.

- 11. What does the woman imply about the basketball training classes?
  - A. Student numbers have dropped.
  - B. Admission procedures have changed.
  - C. Younger students find training difficult.
  - D. Coaches need more information.
- 12. What is the man asking the woman to do?
  - A. pay for her meal
  - B. book an appointment
  - C. give him her order
  - D. vacate her table
- 13. Why is the man pleased?
  - A. He wanted to visit the Town Hall.
  - B. He has had his parking fine cancelled.
  - C. He will pay less than he expected.
  - D. He found out where to make a complaint.
- 14. What does the man advise the woman to do?
  - A. allow Ian to take the class photographs
  - B. pay for a professional photographer
  - C. reduce lan's teaching workload
  - D. ask lan to show last year's photographs
- 15. How does the woman feel about the situation?
  - A. indifferent
  - B. desperate
  - C. angry
  - D. optimistic
- 16. What are the speakers discussing?
  - A. the performance of their department
  - B. a draft of the man's acceptance speech
  - C. the need for humor in the workplace
  - D. the importance of dressing formally
- 17. What is the problem with the student's consent form?
  - A. It shows an incorrect date.
  - B. It is the wrong form for the trip.
  - C. He has not signed it properly.
  - D. There is a signature missing.

- 18. What are they discussing?
  - A. recent damage to the company's computers
  - B. new protection for a computer system
  - C. the need for more staff in the IT department
  - D. the costs of the current computer system
- 19. What are they discussing?
  - A. the advantages of the university venue
  - B. the importance of medical developments
  - C. the need to find a new location for an event
  - D. the growing interest in comic book festivals
- 20. What does the man imply about Professor Stewart?
  - A. He places heavy demands on students.
  - B. He makes documentaries for his students.

D. He has changed his approach to teaching.

C. He prefers to assign homework online.

#### Part 2

In this part, you will hear three short talks. After each talk, you will hear six questions about it. Before each talk begins, you will have time to preview the questions that are printed in the test booklet.

You will hear each talk and the questions once. If you want to, you may take notes in your booklet as you listen. Mark your answers on the separate answer sheet, not in the test booklet. You should mark A, B, C, or D.

Do you have any questions?

Now you will hear the first talk. Look at the questions.

#### Listen to a tour guide.

- What is the speaker's main purpose? 21.
  - A. to introduce a little-known landmark
  - B. to show visitors a famous city hospital
  - C. to give a tour of an apartment building
  - D. to talk about recent architecture
- 22. What does the speaker imply about her audience?
  - A. They would prefer to see other sights around New York.
  - B. They have already learned a lot on the tour.
  - C. They can understand why they are visiting Staple Street.
  - D. They are in a hurry to move on to the next stop.
- 23. According to the speaker, what feature of the bridge is unusual for New York?
  - A. its poor materials
  - B. its old age
  - C. its central location
  - D. its small size
- What was one purpose for which the bridge was originally 24. built?
  - A. to attract more tourists
  - B. to facilitate hospital workers
  - C. to store medical supplies
  - D. to reduce overcrowding
- 25. What is true about the bridge today?
  - A. It has been made larger.
  - B. It is open to the public.
  - C. It is no longer in use.
  - D. It is part of a private home.
- 26. What will the speaker do next?
  - A. take the group to another location
  - B. inform the group about their next stop
  - C. invite the tourists inside a building
  - D. ask the tourists to photograph the bridge

Now you will hear the second talk. Look at the questions.

#### Listen to a theater director.

- 27. What is the speaker's main purpose?
  - A. to praise the cast's performance
  - B. to inform the cast when the premiere will be
  - C. to point out how the actors can improve
  - D. to assign new roles to some of the actors
- 28. What does the speaker say about the character of Jake?
  - A. He plays a minor role in the drama.
  - B. He frequently gets emotional.
  - C. He has a large number of relatives.
  - D. He makes a shocking discovery.
- 29. What advice does the speaker give to Paul, one of the actors?
  - A. He should raise his voice more.
  - B. He should speak at a lower volume.
  - C. He should demonstrate strong emotion.
  - D. He should change to a different role.
- 30. According to the speaker, why should the actors speak certain lines slowly?
  - A. to increase the impact of their words
  - B. to hide their emotions better
  - C. to help the audience hear everything
  - D. to make sure the play is not too short
- 31. What will the speaker probably do next?
  - A. read the script again
  - B. continue the rehearsal
  - C. socialize with the actors
  - D. rush to another engagement
- What does the speaker mean when she says: 32.



- A. Paul should have been given a larger role.
- B. Paul has been given a role that is too difficult.
- C. Paul has less experience than the other actors.
- D. Paul is not the only one who still has work to do.

Now you will hear the third talk. Look at the questions.

#### Listen to a race instructor.

- 33. What is the speaker's main purpose?
  - A. to warn the runners of certain dangers
  - B. to outline the procedure for the race
  - C. to reveal the winners of the stair race
  - D. to talk about the history of stair racing
- 34. What does the speaker imply about the competitors?
  - A. Many have not taken part in a stair race before.
  - B. Many will be unable to complete the stair race.
  - C. Many are already aware of how the race happens.
  - D. Many are competing despite low levels of fitness.
- 35. What is the aim of the race?
  - A. to run from the top of a flight of stairs to the bottom
  - B. to be the first to reach the top of the Rockwell office
  - C. to run to the top of sixty flights of stairs in the quickest
  - D. to go up more flights of stairs than any of the other
- 36. Why are the runners wearing badges?
  - A. to show which event they are participating in
  - B. to show the order in which they will each start
  - C. to show their performances on previous races
  - D. to show which teams they each belong to
- 37. What will happen at 12 o'clock?
  - A. the first runner will begin the race.
  - B. the man will announce the winner
  - C. the athletes will receive their badges
  - D. the runners will all start the race together
- 38. What does the speaker mean when he says:



- A. There are many false assumptions about stair running
- B. High-endurance athletics can be dangerous to participants.
- C. Techniques from marathon running can be used in stair
- D. Stair running is more exhausting than marathon running.

#### Part 3

In this part, you will hear two segments from a radio program. After each segment, you will hear six questions about it. Before each segment begins, you will have time to preview the questions that are printed in the test booklet.

You will hear each segment twice. Then you will hear the questions once. If you want to, you may take notes in your booklet as you listen. Mark your answers on the separate answer sheet, not in the test booklet. You should mark A, B or C.

Do you have any questions?

Look at the questions. Then, listen to the first segment.

Now you will hear the first segment.

- 39. What current situation does the first speaker refer to?
  - A. the increase in writing by hand
  - B. a new keyboard called QWERTY
  - C. changing the existing keyboard
- 40. According to the reporter Matthew Simmons, what was a feature of the first typewriter keyboards?
  - A. Letter keys were arranged alphabetically.
  - B. There were no number keys, only letters.
  - C. Only capital letters were included.
- 41. According to Professor Davies, when did the first typewriters get stuck?
  - A. when the user hit the same key more than once
  - B. when the user hit keys that were next to each other
  - C. when the user hit a number key and a letter key
- 42. What is one problem with the QWERTY keyboard design?
  - A. The keys get stuck.
  - B. It takes longer to type.
  - C. Not all keys are used.
- 43. What does the reporter imply about QWERTY keyboards?
  - A. The design is already perfect.
  - B. The design is unlikely to be replaced.
  - C. The design is outdated.
- 44. What is the main purpose of this report?
  - A. to compare natural and design evolution
  - B. to appeal for a certain design to be replaced
  - C. to explain why a current design exists

Look at the questions. Then, listen to the second segment.

Now you will hear the second segment.

- What does Dr. Bates say about population growth?
  - A. It is affected by a decline in agricultural output.
  - B. It occurs in areas which already have food shortages.
  - C. It has resulted in fewer natural resources.
- What are the 'factory foods' mentioned by Dr. Henderson? 46.
  - A. man-made foods produced in laboratories
  - B. an economical solution to food shortages
  - C. an alternative to high-tech food production
- 47. Why does Dr. Henderson think that post-harvest losses are significant?
  - A. They can cause serious food shortages.
  - B. They mostly occur in developed countries.
  - C. They are not very appealing to consumers.
- 48. Why does Dr. Bates mention cereal grains?
  - A. to warn that all foods require refrigeration
  - B. to highlight the problem of poor storage
  - C. to explain why food waste is a serious problem
- What does Dr. Bates say is the most effective way to prevent 49. future food shortages?
  - A. increasing agricultural production
  - B. building more warehouses
  - C. improving current technology
- What is the purpose of this report?
  - A. to encourage consumers not to waste food
  - B. to highlight solutions to avoid food waste
  - C. to warn that technology is causing food shortages

Notes



End of the listening test

# READING: GRAMMAR

51.	To get the job you want, you have to have confidence in your abilities.	55.	Since Owen started his new job, not once or time.
	<ul><li>A. a great deal of</li><li>B. the greatest deal</li><li>C. greater deal</li><li>D. to a great deal</li></ul>		<ul><li>A. has he arrived</li><li>B. he does arrive</li><li>C. he arrives</li><li>D. he has arrived</li></ul>
52.	this matter is, we must discuss the other items on the agenda first.  A. Even though important  B. As important  C. Although important  D. Important as	56.	The car manufacturers recommend that the tires regularly, at least every ten years.  A. replacement B. to replace C. be replaced D. are to replace
53.	Because of his excellent research work, Professor Samson is by his colleagues.  A. high regard  B. regarding highly  C. highly regarded  D. regarding high	57.	After Alex missed so many classes, no one expected so quickly.  A. to catch him up  B. him to catch up  C. him caught up  D. catching him up
54.	I have many difficult responsibilities in my job, but duties is dealing with unsatisfied clients.  A. the one most challenged  B. most challenged one  C. one mostly challenging  D. one of the most challenging	58.	Some people still prefer writing down notes by hand them on a device.  A. to type B. typing C. than type D. to typing

# READING: GRAMMAR

59.	Susan well on her own, but she is also a good team member.	63.	traffic is heavy at this time, the subway seem like the best option.		
	A. only works		A. Having given		
	B. doesn't work		B. Giving that		
	C. not only works		C. Given that		
	D. doesn't work only		D. To give		
60.	Since repairs on the phone network, we have	64.	One thing I definitely won't miss about university		
	been unable to contact clients.		are the long hours and all the exams.		
	A. have been started		A. in studying privately		
	B. are starting		B. to study privately		
	C. have to start		C. to studying private		
	D. started		D. of private study		
61.	Georgia has written seven assignments this semester, was awarded a top grade.	65.	I sent in my job application last month, but the company send me a reply.		
	A. which each		A. hasn't yet		
	B. each of them		B. has yet to		
	C. which each of them		C. isn't as yet		
	D. each of which		D. hadn't as yet		
62.	"I called Jane but there was no reply."	66.	Sandra is very proud that a relative of once		
	"She her lunch break at the moment."		worked with Albert Einstein.		
	A. might be taking		A. herself		
	B. could take		B. hers		
	C. should have taken		C. her		
	D. may be taken		D. she		

# **READING: CLOZE**

76.

A. draw up

B. count on

# This passage is about sandstone rocks in an area of Montana, USA.

Sandstone rock formations are the result of natural processes occurring over millions of years. In areas where prehistoric rivers flowed slower or remained stagnant, grains of sand suspended in the water gradually sank to the (67) and accumulated. (68) time, the weight of overlying sand layers compressed the lower layers, (69) them into solid stone. The rivers (70) dried up, and the exposed rock was shaped by wind erosion.

At Medicine Rocks, in Montana, stunning sandstone rock formations, (71) as 'sandstone pillars', dot the landscape, (72) heights of up to 80 feet. These were used by Native Americans as look-out points for hunting bison. In (73) to their practical value, the pillars also took on metaphysical significance for the tribes, probably on account of their distinctive color and dramatic shapes.

Because sandstone is soft enough to carve, <u>(74)</u> strong enough to retain its shape, it has long been favored by sculptors. At Medicine Rocks, the tribespeople were no less creative in using the sandstone pillars as <u>(75)</u> of artistic expression. You can still <u>(76)</u> thousands of petroglyphs that were engraved into the stone, including names, line drawings, and odes commemorating historic battles and events.

67.	A.	side	C.	top
	B.	surface	D.	bottom
68.	A.	On	C.	Over
	B.	During	D.	At
69.	А.	turning	C.	switching
	В.	producing	D.	increasing
70.	A.	deliberately	C.	accordingly
	B.	respectively	D.	eventually
71.	A.	referred	C.	branded
	B.	known	D.	called
72.	A.	gaining	C.	reaching
	B.	touching	D.	completing
73.		addition consideration	C. D.	spite preference
74.	A. B.	yet as	C. D.	
75.	A.	a route	C.	an approach
	B.	a prospect	D.	a means

C. see to

D. make out

# **READING: CLOZE**

86.

enroll

apply

A.

В.

C. engage

D. involve

#### This passage is about hummingbirds.

The way hummingbirds fly is truly remarkable. Their wings beat around 50 times (77) second, fast enough to (78) in a continuous, audible hum – hence the (79). This rapid wing flapping, combined with the birds' light body weight, allows them to hover in a stationary position in midair and position (80) alongside flowers while drawing off nectar, their principal food source, (81) their beaks.

In windy conditions, hummingbirds instinctively alter the angle of their wings, broaden their wing strokes, and spread out their tail feathers. In this way, the birds resist the force of the wind and remain in a (82) position next to the flower from which they are feeding, without being blown away by sudden (83).

Hummingbirds can also pull off complex aerial maneuvers in mid-flight, such as swooping and revolving in mid-air. Males perform these impressive stunts in (84) to attract females. (85) to the high energy expended in doing so, males tend to be smaller than females. This means their overall metabolic needs are lower, and they can therefore (86) more frequently in the energetic courtship displays.

77.	A. B.	per in		the over
78.	A. B.	make lead		result give
79.	A. B.	birds speed	C. D.	sound name
80.	A. B.			itself themselves
81.	A. B.	on at	C. D.	through by
82.	A. B.	steady mobile		changeable stuck
83.		strikes air		gusts actions
84.	A. B.	hopes order	C. D.	effort purpose
85.	A. B.	Considering Owing	C. D.	Resulting Providing

# READING: VOCABULARY

87.	The hackers broke into the government computer system and secret information.  A. obtained B. consented C. awarded D. deprived	91.	You need at least a high school certificate to the entry requirements for this college.  A. attend B. replenish C. correspond D. fulfill
88.	The team will need to win the next game to a place in next year's competition.  A. enforce B. reinforce C. vindicate D. secure	92.	Newer computer program designs are not better than the old versions.  A. imminently B. necessarily C. utterly D. shortly
89.	The event to be a lot more successful than we had expected.  A. came across B. turned out C. fell through D. took on	93.	There are many jobs that communicating regularly in English.  A. entail B. consist C. order D. represent
90.	Paul may lack formal qualifications, but he has experience in the field.  A. considerable B. widespread C. commonplace D. excessive	94.	Everyone seemed to hold a different of view on the matter.  A. opinion B. attitude C. point D. stance

# READING: VOCABULARY

Reusing paper helps to reduce the of waste.	99.	The project must be finished by tomorrow, so we		
A. constraint		can't to waste any more time.		
B. appeal		A. afford		
C. volume		B. permit		
D. intensity		C. approve		
		D. condone		
It to me that there was a better way to go				
about my work.	100.	of the stricter anti-pollution proposals claim		
A. struck		they will vastly improve public health.		
B. occurred		A. Adversaries		
C. transpired		B. Rivals		
D. arose		C. Advocates		
		D. Detractors		
You must sign each page of the contract for it to be				
legally	101.	I accidentally deleted the file, so I had to start		
A. vibrant		writing the assignment again from		
		A. match		
		B. batch		
		C. patch		
•		D. scratch		
For this job position, successful applicants are				
	102.	The college is still some way from its goal of		
		increasing exam pass rates by 50%.		
•		A. arising		
_		_		
C. apparent		b. receiving		
C. apparent D. familiar		<ul><li>B. receiving</li><li>C. preceding</li></ul>		
	A. constraint B. appeal C. volume D. intensity  It to me that there was a better way to go about my work. A. struck B. occurred C. transpired D. arose  You must sign each page of the contract for it to be legally A. vibrant B. valid C. innovative D. prominent  For this job position, successful applicants are required to be with advanced computing. A. specialized B. knowing	A. constraint B. appeal C. volume D. intensity  It to me that there was a better way to go about my work.  A. struck B. occurred C. transpired D. arose  You must sign each page of the contract for it to be legally  A. vibrant B. valid C. innovative D. prominent  For this job position, successful applicants are required to be with advanced computing.  A. specialized B. knowing		

# **READING**

#### This passage is about ocean cartography.

Sea and ocean floors are invisible, since deep water absorbs light waves. The first attempts to put together images of these vast areas therefore involved using another form of wave: that of sound. Decades ago, ocean cartographers used sonar equipment mounted on ships to gather data about the topography of sea and ocean floors. This data was incomplete, however, and sometimes unreliable. The ships could only survey the ocean surface one thin strip at a time. Furthermore, large deep-sea shoals of fish often interfered with the sonar signals, the fish's massed bodies blocking the sound waves. Nevertheless, these early investigations furthered our understanding of plate tectonics, revealing the huge cracks in the ocean floor that connect with those on land to form the edges of tectonic plates.

The 1980s saw the arrival of more advanced sonar technologies, including "multi-beam" sonar. This allows ships to map not just a narrow strip of sea floor directly beneath, but the expanses to either side as well. This technology led to another remarkable discovery: the millions of sunken ships scattered across the sea and ocean floors, many of whose cargoes were still intact and were duly salvaged.

The latest breakthrough in mapping sea and ocean floors is 'altimetry', a technique used to calculate the height of the ocean surface. Satellites positioned at a specific height bounce radio waves off the ocean surface and measure the distance they travel. Areas where the surface is slightly raised indicate the presence of submerged mountains called 'seamounts'. The 10,000 seamounts so far discovered together represent an ecologically interesting habitat – one that adds up to an area about the size of Europe! – that has so far remained largely unexplored.

- 103. What is the main purpose of this passage?
  - A. to evaluate the different kinds of wave scientists use to make maps
  - B. to critisize research into what lies at the bottom of seas and oceans
  - C. to discuss the development of new navigational technology for ships
  - D. to describe scientists' attempts to work out the surface area of the ocean
- 104. What caused early cartography equipment to give inaccurate information?
  - A. The equipment used light instead of sound waves.
  - B. The sound waves did not pass through water.
  - C. Groups of fish got in the way of the signal.
  - D. There were too many cracks in the ocean floor.
- 105. What is the advantage of "multi-beam" sonar?
  - A. It specifically focuses on areas below the ship.
  - B. Its signals concentrate on a narrow strip of land.
  - C. It increases the area that can be mapped.
  - D. It can prevent ships from losing their cargo.
- 106. What does **whose** refer to in the third sentence of the second paragraph?
  - A. ships
  - B. floors
  - C. technologies
  - D. breakthroughs
- 107. What does 'altimetry' measure?
  - A. the strength of radio waves passing through water
  - B. how far radio waves travel beneath the ocean
  - C. how deep a body of water is
  - D. the height of the ocean surface
- 108. What can be inferred about altimetry?
  - A. It may lead to discoveries in the field of environmental studies.
  - B. It allows researchers to construct images of ocean floors and continents.
  - C. It offers a more effective alternative to sonar technology.
  - D. It has so far only been used to study a small area.

# READING

#### This passage is about biometric sensors.

There are already a range of wearable sensors that can provide continuous data about aspects of the wearer's body, such as heart rate, temperature, and blood sugar concentration. These 'biometric' devices are available to health-conscious consumers, but their main application is in the field of medicine, as they allow doctors to closely monitor patients' sensitive biological states. Most sensors fit onto the surface of the skin, but newer designs can actually be implanted underneath it. Shaped like thin lengths of thread, these implantable sensors can be sewn into muscle tissue, using the same straightforward techniques surgeons already use to stitch up open wounds. The thread-like sensors are also highly flexible, meaning they bend with the patient's movement, instead of restricting it, and do not become dislodged.

Some sensors are coated in an electrically conductive substance. The flow of electricity along the thread rises or falls depending on various factors. For example, physical pressure can cause the flow of electricity to become restricted. A low power reading can therefore indicate that too much strain is being placed on the part of the body where the sensor is located. This can be vital in protecting victims of recent skin and tissue damage. The patient can be alerted the instant some movement or posture risks tearing the tender new tissue growing over a wound that has yet to heal fully.

Other threads can siphon internal fluid samples into containers outside the body, so that these samples can be used for biochemical analysis. Compared to traditional methods of collecting fluid samples (e.g. using a syringe), not only is this new technique much more effective, but it also involves more convenience for the practitioner, not to mention less discomfort for the patient.

- 109. What is the purpose of this passage?
  - A. to warn of the dangers of some sensors
  - to compare the effectiveness of different kinds of sensors
  - C. to discuss the need for further medical research
  - D. to describe the range of functions of implanted sensors
- 110. What is different about the new type of biometric sensor?
  - A. They can be positioned inside a patient's body.
  - B. They can be used to surgically repair open wounds.
  - C. They are appealing to consumers as well as doctors.
  - D. They can be used by ordinary people, without a doctor.
- 111. What happens if a patient is in danger of damaging a part of his or her body?
  - A. The sensor becomes dislodged.
  - B. The sensor's power reading increases.
  - C. Less electricity flows through the sensor.
  - D. Movement in that area is restricted by the sensor.
- 112. Which word could best replace **tender** in paragraph 2?
  - A. medical
  - B. delicate
  - C. internal
  - D. tough
- 113. How do sensors assist in biochemical analysis?
  - A. They can be incorporated into medical syringes.
  - B. They introduce key chemical substances into the body.
  - C. They perform chemical tests inside the body.
  - D. They remove small amounts of fluid for testing.
- 114. What can we infer about the new design of sensor?
  - A. It is popular with medical professionals and those they treat.
  - B. It has led to a reduction in the number of people who suffer injuries.
  - C. It can only be used to measure one aspect of a person's biological state.
  - D. It is difficult for doctors to use effectively.

# **READING**

#### This passage is about languages in the field of science.

Scientists have traditionally published their work in one specific language, and for good reason. For centuries, all scientific discoveries were written up in Latin, allowing scholars from all over Europe to share their knowledge. Later on, it was German that served this purpose; today, it is English. A shared language has always been crucial for cooperation among scientists. With the relentless global spread of English, however, it is becoming increasingly evident that monolingualism and the exclusion of other languages can be counterproductive.

Now that English is predominant, other languages have taken a back seat, with potentially disastrous results. In 2004, at the height of the deadly H5N1 flu virus outbreak, key research received scant attention from the scientific community, simply because it was reported in Chinese. The only foreign-language science papers published in mainstream scientific journals are those that are accompanied by an English translation, but this hardly represents a comprehensive sample of all the science that matters.

It may be that the time has come to promote multilingualism in the field of science. Besides ensuring that important scientific work does not go unheeded, this could also bring many other benefits. Using a second language has been shown to encourage more deliberate and systematic thinking, while working in a native language can encourage greater flexibility and creativity. Scientists working in a multi-lingual setting could therefore have the best of both worlds. Furthermore, a greater emphasis on language variety might ensure that non-Anglophone scientists do not neglect their own languages. It would be a great shame if these languages did not keep up with new specialist terminology constantly being coined in English, thus losing their relevance in the scientific field.

- 115. What is the purpose of this passage?
  - A. to advocate the importance of multilingualism in science
  - B. to critisize the widespread use of English in science journals
  - C. to describe the historical need for an international language
  - D. to reject calls for scientists to publish articles in their own language
- 116. What does the writer mainly describe in paragraph 1?
  - A. the disadvantages of multiple languages in science
  - B. the unique features of English as a scientific language
  - C. the long history of scientists using a common language
  - D. important scientific discoveries that are reported in Latin
- 117. Why does the writer mention research on the H5N1 virus?
  - A. to suggest the dangers of ignoring scientific work that is not in English
  - B. to congratulate scientists battling infectious diseases
  - C. to criticize the quality of research conducted at that time
  - D. to illustrate the importance of scientific work published in English
- 118. According to the passage, what is true about papers in popular scientific journals?
  - A. Their biggest readership is in non-English speaking countries.
  - B. They must be translated if not originally written in English.
  - C. They include research on every single scientific subject.
  - D. They do not receive much attention from professional scientists.
- 119. According to the writer, what is one benefit of multilingualism for scientists?
  - A. They can combine creative and logical modes of thinking.
  - B. They can share their ideas and discoveries.
  - C. They can be more flexible in their work schedules.
  - D. They can draw greater public attention to their work.
- 120. What does the writer imply about languages that are not used by scientists?
  - A. They are ruined by constant change.
  - B. They are better used for other purposes.
  - C. They become outdated in the field.
  - D. They quickly become irrelevant and die out.



HELLENIC AMERICAN UNION

An educational public charity

CENTER FOR EXAMINATIONS AND CERTIFICATIONS

Athens: Massalias 22, 10680 Athens

T: (+30) 210 3680000, F: (+30) 210 3634200

Thessaloniki: Fragon 14, 54626 Thessaloniki

T: (+30) 2310 557600, F: (+30) 2310 553925

E-mail: exams@hau.gr

**URL:** www.hau.gr/exams



The Hellenic American Union Center for Examinations and Certifications applies a Management System in accordance with the ISO 9001: 2015 standard for the following scopes: "Planning, organization, and administration of examinations" and "Provision of support services to candidates, foreign-language schools, and teachers".