

# EXAMEN DE FIN D'ÉTUDES SECONDAIRES CLASSIQUES Sessions 2022

DISCIPLINE	SECTION(S)	ÉPREUVE É	E ÉCRITE		
		Date de l'épreuve :	09/06/2022		
ANGLAIS	CB/CC/CD/CE/CF/CG/CI	Durée de l'épreuve :	14h15 – 16h55		
		Numéro du candidat :			
Partie obligatoire					
Question	Nb points	Sujet	Obligatoire		
Task 1	10	Autoimmune Disease	x		
Task 2	20	Homework	х		
Partie au choix Choisissez <u>une</u> question parmi les	quatre suivantes et indique	ez votre choix avec un x.			
Question	Nb points	Sujet	Choix du candidat		
Task 3	30	1. Air Travel			
Task 3	30	2. Equality			
Task 3	30	3. Obesity			
Task 3	30	4. Technology			

# I. <u>Task 1 – Reading Comprehension</u> (10 marks)

## Global Spread of Autoimmune Disease Blamed on Western Diet<sup>1</sup>

New DNA research by London-based scientists hopes to find cure for rapidly spreading conditions

More and more people around the world are suffering because their immune systems can no longer tell the difference between healthy cells and invading micro-organisms. Disease defences that once protected them are instead attacking their tissue and organs.

Major international research efforts are being made to fight this trend – including an initiative at London's Francis Crick Institute, where two world experts, James Lee and Carola Vinuesa, have set up separate research groups to help pinpoint the precise causes of autoimmune disease, as these conditions are known.

<sup>&</sup>lt;sup>1</sup>https://www.theguardian.com/science/2022/jan/08/global-spread-of-autoimmune-disease-blamed-on-western-diet by Robin McKie, 9<sup>th</sup> January 2022 (808 words, adapted)

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"Numbers of autoimmune cases began to increase about 40 years ago in the west," Lee told the *Observer*. "However, we are now seeing some emerge in countries that never had such diseases before. For example, the biggest recent increase in inflammatory bowel disease\* cases has been in the Middle East and east Asia. Before that they had hardly seen the disease."

Autoimmune diseases range from type 1 diabetes to rheumatoid arthritis\*, inflammatory bowel disease\* and multiple sclerosis\*. In each case, the immune system **gets its wires crossed** and turns on healthy tissue instead of infectious agents.

In the UK alone, at least 4 million people have developed such conditions, with some individuals suffering more than one. About 24 million people in the United States are affected by an autoimmune disease and internationally it is now estimated that cases are rising by between 3% and 9% a year. Most scientists believe environmental factors play a key role in this rise. "Human genetics hasn't altered over the past few decades," said Lee, who was previously based at Cambridge University. "So something must be changing in the outside world in a way that is increasing our predisposition to autoimmune disease." This idea was backed by Vinuesa, who was previously based at the Australian National University. (1)........... "Fast-food diets lack certain important ingredients, such as fibre, and evidence suggests this alteration affects a person's microbiome – the collection of micro-organisms that we have in our gut and which play a key role in controlling various bodily functions," Vinuesa said. "These changes in our microbiomes are then triggering autoimmune diseases, of which more than 100 types have now been discovered."

Both scientists stressed that individual susceptibilities were involved in contracting such illnesses, diseases that also include celiac disease\* as well as lupus\*, which triggers inflammation and swelling and can cause damage to various organs, including the heart. "If you don't have a certain genetic susceptibility, you won't necessarily get an autoimmune disease, no matter how many Big Macs you eat," said Vinuesa. "There is not a lot we can do to halt the global spread of fast-food franchises or to fundamentally change people's eating habits. In the U.S, the Centers for Disease Control and Prevention (CDC) reports that from 2013-2016, 36.6% of adults consumed fast food on a given day. So instead, we are trying to understand the fundamental genetic mechanisms that **underpin** autoimmune diseases and make some people **susceptible** but others not. We want to tackle the issue at that level."

This task is possible thanks to the development of techniques that now allow scientists to pinpoint tiny DNA differences among large numbers of individuals. **2).......** "Until very recently, we just didn't have the tools to do that, but now we have this incredible power to sequence DNA on a large scale and that has changed everything," said Lee. "When I started doing research, we knew about half a dozen DNA variants that were involved in triggering inflammatory bowel disease. Now we know of more than 250."

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Such work lies at the core of Lee and Vinuesa's efforts, which aim to find out how these different genetic pathways operate and unravel the many different types of disease doctors are now looking at. "If you look at some autoimmune diseases – for example, lupus – it has become clear recently there are many different versions of them, that may be caused by different genetic pathways," said Vinuesa. "3)......... We have lots of potentially useful new therapies that are being developed all the time, but we don't know which patients to give them to, because we now realise we don't know exactly which version of the disease they have. And that is now a key goal for autoimmune research. We have to learn how to group and **stratify** patients so we can give them the right therapy."

Lee also stressed that **surging** cases of autoimmune diseases across the world meant new treatments and drugs were now urgently needed more than ever before. "At present, there are no cures for autoimmune diseases, which usually develop in young people – while they are trying to complete their education, get their first job and have families," he said. "That means growing numbers of people face surgery or will have to have regular injections for the rest of their lives. **4)........** Hence the urgent need to find new, effective treatments.

Medical glossary				
inflammatory bowel disease	el disease an illness characterized by chronic inflammation of the digestive system			
rheumatoid arthritis	a disease that is characterized by pain, stiffness, inflammation or swelling of joints			
multiple sclerosis	an illness affecting the brain and spinal cord which can leave you physically disabled			
celiac disease	a person who has this cannot eat gluten without having an immune response			
lupus	a long-term disease that can cause inflammation and pain in any part of your body			

<sup>\*</sup> For definitions of these diseases, see medical glossary below.

#### **READING COMPREHENSION QUESTIONS**

## A) Insert sentences into the text (-1 per wrong or missing answer)

Choose which sentences (A-F) <u>best</u> fit into the gaps (1-4) in the text. Write the correct numbers into the box below. There are two sentences you do not need to use.

- A. She commented on the potential benefits of fibre-rich diets.
- B. It can be grim for patients and a massive strain on health services.
- C. And that has a consequence when you are trying to find the right treatment.
- D. She pointed to changes in diet that were occurring as more and more countries adopted western-style diets and people bought more fast food.
- E. Doctors are hopeful they will get the necessary funding for this project.
- F. In this way, it is possible to identify common genetic patterns among those suffering from an autoimmune disease.

## Write your answers here:

Gap in text:	1	2	3	4
Sentence:				

# B) **Vocabulary** (-1 per wrong or missing answer)

Match the expressions from the article with the definition/synonym that is closest to their meaning in the text. Circle the best option – a, b or c. There is only  $\underline{ONE}$  correct answer per example.

1.	to get one's wires crossed (line 13)	a)	to fail to understand information
		b)	to get angry
		c)	to break apart
2.	to underpin (line 36)	a)	to provide the starting point for
		b)	to deliver the cure for
		c)	to strengthen or replace the
			foundation of
3.	susceptible (line 37)	a)	capable of enduring
		b)	easily affected
		c)	immune
4.	to stratify (line 52)	a)	to survey
		b)	to divide into categories
		c)	to give the most suitable medicine
5.	surging (line 53)	a)	requiring surgery
		b)	worrying
		c)	rising

C) <u>True / False / Not Stated</u> (-1 per wrong or missing answer)
Decide if the statements are True (T), False (F) or Not Stated (NS) in the text. For each sentence, circle T, F or NS.

1.	Autoimmune diseases are a more recent phenomenon in the west than in the east.	T	F	NS
2.	There are people who suffer from more than one autoimmune condition.	T	F	NS
3.	It might be easier to find individual susceptibilities to autoimmune disease than to fight what triggers them.	T	F	NS
4.	There are somewhere between six and 250 DNA variants involved in the triggering of inflammatory bowel disease.	T	F	NS
5.	The main goal of autoimmune research is to develop a single therapy that can help every patient.	T	F	NS
6.	The stress of going to university, finding a job, or starting a new family can trigger autoimmune diseases.	Т	F	NS

## II. <u>Task 2 – Reading into Writing</u> (20 marks)

You are going to read two texts in which the authors tackle the issue of <u>homework</u>.

### Text 1: Why I Think All Schools Should Abolish Homework<sup>2</sup>

With my youngest child just months away from finishing high school, I'm remembering all the needless misery and missed opportunities all three of my kids suffered because of their endless assignments. When my daughters were in middle school, I would urge them into bed before midnight and then find them clandestinely studying under the covers with a flashlight. Now, even as a senior with a moderate course load, my son, Zak, has spent many weekends studying, finding little time for the exercise and fresh air essential to his well-being. Zak logs a lot more than the 40 hours adults traditionally work each week. I can't count the number of shared evenings, weekend outings and dinners that our family has missed and will never get back.

Studies have long shown that there is no academic benefit to high school homework that consumes more than a modest number of hours each week. In a study of high schoolers conducted by the Organization for Economic Cooperation and Development (OECD), researchers concluded that "after around four hours of homework per week, the additional time invested in homework has a negligible impact on performance."

In elementary school, where we often assign overtime even to the youngest children, studies have shown there's no academic benefit to any amount of homework at all.

Our unquestioned acceptance of homework also flies in the face of all we know about human health, brain function and learning. Brain scientists know that rest and exercise are essential to good health and real learning. Even top adult professionals in specialized fields take care to limit their work to concentrated periods of focus.

Yet we continue to overwork our children, depriving them of the chance to cultivate health and learn deeply, burdening them with an imbalance of sedentary, academic tasks. American high school students, in fact, do more homework each week than their peers in the average country in the OECD.

It is time that we call loudly for a clear and simple change: a workweek limit for children, counting time on the clock before and after the final bell. Why should schools extend their authority far beyond the boundaries of campus, dictating activities in our homes in the hours that belong to families? An all-out ban on after-school assignments would be optimal. Short

<sup>&</sup>lt;sup>2</sup> https://time.com/4740297/homework-should-be-banned-from-schools/ by Vicky Abeles, 14<sup>th</sup> April 2017 (509 words, adapted)

of that, we can at least sensibly agree on a cap limiting kids to a 40-hour workweek — and fewer hours for younger children.

As parents and students, we can organize to make homework the exception rather than the rule. We can insist that every family, teacher and student be allowed to opt out of assignments without penalty to make room for important activities, and we can seek changes that shift practice exercises and assignments into the actual school day.

We'll know our work is done only when Zak and every other child can clock out, eat dinner, sleep well and stay healthy — the very things needed to engage and learn deeply. That's the basic standard the law applies to working adults. Let's do the same for our kids.

## Text 2: Why Is Homework Important?3

There is a strong connection between regularly completing homework and higher accomplishments in subjects such as English, Maths and Science. The Department of Education in the United Kingdom advises that spending time doing homework brings several benefits, more so for the students who put in two to three hours a night.

Repeating a task multiple times can feel arduous, but it's necessary to help increase your child's skill and understanding of a subject. Regular homework will make certain concepts easier to understand and put them in an advantageous position should they seek a vocational career.

In addition, homework goes beyond just the task itself; it helps children take control of their workload and increase their time management skills. Taking ownership of deadlines helps them think independently and develop problem-solving skills. This is a prime example of why homework is important because time management is a vital life skill that helps children throughout higher education and their careers.

Homework can also act as a bridge and help teachers and parents learn more about how students like to learn, providing a deeper understanding of how to approach their learning and development. Plus, many parents want their child to receive homework so they can understand what they're learning at school.

Moreover, some children struggle to learn outside of their comfort zone, and while classrooms are designed to be warm and welcoming, there is often no place like home. Homework is an

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<sup>&</sup>lt;sup>3</sup> https://www.nordangliaeducation.com/news/2021/03/31/why-is-homework-important 31st March 2021 (507 words, adapted) (Nord Anglia Education is a company that owns over 70 private schools across the globe.)

opportunity to learn and retain information in an environment where they feel most comfortable, which can help accelerate their development.

Throughout a child's education, understanding how to use resources such as libraries and the internet is important. Homework teaches children to actively search for information using these resources to complete tasks, and this is a skill that will be fundamental throughout their lives.

Regular homework helps children discover a pattern that will help them when they're required to study for important tests and exams. Children who are familiar with a routine of completing homework will find it easy to adapt to a schedule of doing regular revision at home. Skills such as accessing learning materials, time management, and discipline will help improve how children revise, and ultimately, improve their grades.

Finally, children learn at different paces, and the time spent in the classroom might not be enough for some students to fully grasp the key concepts of a subject. Having additional time for learning at home can help children gain a deeper understanding than they would if they were solely reliant on their time in school. Homework gives parents and children the freedom and the time to focus on subjects that they may be struggling with. This extra time can make a big difference when it comes to exams and grades.

Admittedly, children can get overwhelmed with the workload. On homework-heavy nights, parents can help them make a plan and break down the work into sections. This will help make the work more manageable. In general, parents should not underestimate the role they can play in supporting their children.

#### Writing task

Write a structured **analysis** of **200-250 words** in which you do the following:

- Compare and contrast the overall points of view expressed in the two texts (by referring to 2-3 main arguments put forward in each text).
  - Your analysis must represent ± 2/3 of your answer, i.e. ± 140-170 words.
- Explain which point of view you agree with more, and why. If you agree with both or neither, explain why. Your personal opinion must represent ± 1/3 of your answer, i.e. 60-80 words.

Use your **own words** as far as possible. Do not copy from the texts, except for short quotes (with quotation marks) to support your statements.

Indicate your total word count at the end.

## III. <u>Task 3 – Essay Writing</u> (30 marks)

Write a well-structured essay of between 300 and 400 words on ONE of the topics below. Indicate your choice of topic clearly and include the word count.

- 1. In your opinion, is air travel a blessing or a curse?
- 2. 'Equality may perhaps be a right, but no power on earth can ever turn it into a fact.'

  (Honoré de Balzac, 1799-1850) To what extent do you agree?
- 3. In 2021, thirty-nine per cent of the world's adults were overweight or obese. What can we do as a society to fight the ongoing epidemic of obesity?
- 4. 'People will come to love their oppression, to adore the technologies that undo their capacities to think.' (Aldous Huxley, 1894-1963) In your opinion, did Huxley accurately predict the future?