

There are three parts to this exam: A, B and C. Each part is compulsory.

Part A

Complete these sentences with the correct form of the verb in brackets (write your answers directly on this page)

1. I _____ (work) on this translation for almost two days and I've only done 10 pages. _____ (you/think) you could help me?

2. Where _____ (you /go) on holiday last summer?

3. She _____ (not/wish) to come back to the office until you've installed some air purifiers.

4. If she asked you to help her, _____ (you/do) it?

5. James _____ (go) to London last weekend. He _____ (see) two shows at the West End. He _____ (be/attack) on his way home from the theatre by a gang of young men. Luckily, he _____ (manage) to get away and _____ (be) not injured.

6. I _____ (watch) a series on my iPad when you _____ (phone) me, so _____ I (not/hear) your call. If you _____ (send) me an SMS as I suggested, I would have noticed your message.

7. The old hospital _____ (renovate) and it looks splendid. It is now part of a social housing scheme accommodating elderly people and single mothers. It _____ (work) out well and some elderly residents are more than happy to babysit.
8. "Where _____ (your husband/come) from?" "He's Italian."
9. _____ (you/do) anything next weekend? Would you like to come to our country house?
10. I _____ (not/see) you for ages. You _____ (look) wonderful!

Choose the best option to complete the sentences. (a, b, c or d.) Only one is correct.

1. The head office _____ so we cannot go there. Let's use my office instead.
 a) is renovating b) has renovating c) is being renovated d) has been renovating
2. We are really disappointed because there were too _____ people present last night and we had to cancel the meeting.
 a) less b) few c) little d) much
3. He denied _____ in the neighbourhood at the moment of the murder but his phone records say otherwise.
 a) to be b) being c) was d) be
4. Why not _____ until the storm passes? There is no point in getting soaked.
 a) waiting b) to wait c) waited d) wait

5. I'm just not used _____ working in such bad conditions.
a) to b) at c) with d) for
6. Our new CEO lets us _____ flexitime and it's made a huge difference in terms of work/life balance for all the staff.
a) working b) work c) to work d) worked
7. I wonder _____ .
a) where she lives
b) where does she live
c) where is she living
d) where live
8. Never _____ such a wonderful sight. Everyone says that the Aurora Borealis is marvellous, but I wasn't expecting to be blown away.
a) have I seen b) I have seen c) I saw d) I see
9. You must all _____ before 9.
a) arriving b) to arrive c) arrive d) arrived
10. He is not as experienced _____ the other candidates, but I feel he would fit in perfectly with the team.
a) than b) like c) that d) as

Part B - Translate the following text into French.

Plastic wrap made from seaweed* withstands heat and is compostable

A thin material made from seaweed can handle high temperatures but only takes a few weeks to break down in a composting bin

1 April 2023

By Karmela Padavic-Callaghan

A cling film made from an invasive seaweed can withstand high temperatures yet is still easily compostable. The material could eventually become a sustainable choice for food packaging.

Large quantities of thin plastic films, like those for wrapping produce or baked goods, are used every year. Most end up as garbage, either because they require specialised recycling facilities or can't be recycled at all. Some biodegradable plastics do exist, but they can take months or even years to decompose. Keeran Ward at the University of Leeds in the UK and his colleagues wanted to create a thin plastic that can be easily composted instead.

They started with a brown seaweed called sargassum (*Sargassum natans*), an invasive species that inundates the shores of Trinidad and Tobago where Ward is from. Sargassum contains long, chain-like molecules similar to those that make up conventional plastic, which made it a good raw material. The researchers mixed it with some acids and salts to get a solution full of these molecules, then blended in chemicals that thickened it and made it more flexible and pliable.

The team shaped this material into thin films, then tested how it **held up*** when heated or thrown in the composting bin. The bioplastic could sustain heat up to 230°C but in conditions like household composting bins over 90 per cent of it degraded in less than three weeks. For composting conditions like in industrial facilities the process took only 11 days – about a third as long as it takes the best existing biodegradable plastics to degrade, says Ward.

Additionally, when left in water for 10 days, the film didn't leach out any chemicals, which implies that it could safely touch moist food, like cut fruits, for a few days, says Koon-Yang Lee at Imperial College London, part of the team. However, he says that they need to run more tests to see whether it could also be suitable for longer uses, like wrapping candies that can be stored for months.

Yael Vodovotz at the Ohio State University says that making the new film in large quantities in industrial facilities may require tweaking its properties. In factories, plastics are turned

into thin films by being blown into large bubbles first, so they must start off being very flexible. And starting with sustainable ingredients like overabundant seaweed may not be enough to make the final plastic product sustainable, says Vodovotz. Researchers must evaluate how much energy and water would be used during the production process if it were done in large quantities, she says.

“Studying the whole supply chain really is where ideas for sustainable materials make it or don’t. We want to find one best application for our material and study the environmental impact of pursuing it from the lab to the consumer,” says Lee.

The team presented the work at a meeting of the American Chemical Society in Indianapolis, Indiana, on 26 March.

* seaweed = *algue*

*to hold up = *tenir bon*

Part C - Translate the following text into English.

Face aux cyberattaques, les Européens veulent muscler leur coopération militaire

La part des attaques visant des pays de l'UE serait passée de 9,8 % à 46,5 % depuis six mois
Élise Vincent Et Cédric Pietralunga (À Paris) le Monde 1/4/2023

Alors que la guerre en Ukraine provoque une explosion des cyberattaques en tout genre, les chefs européens des opérations cybermilitaires étaient réunis, vendredi 31 mars, à Bruxelles, dans le cadre d'un tout nouveau format d'échange baptisé « Cyberco ». Ce cercle de discussions lancé en 2022, quelques semaines seulement avant le début du conflit, a pour objectif de développer une coopération plus fluide entre les commandements de la cyberdéfense (comcyber) européens, domaine où le partage de renseignements est loin d'être une évidence.

« *Le but est de créer de la solidarité stratégique, mais en étant pragmatiques et sans créer une usine à gaz** », explique le général Aymeric Bonnemaïson, le patron du commandement de la cyberdéfense français, qui présidait cette réunion au rythme bisannuel, née d'une initiative hexagonale. Il s'agit d'« éviter tout doublon » avec les cercles d'échanges de l'OTAN, dominés par les Etats-Unis, mais malgré tout de ne pas se priver des « proximités naturelles » entre Européens.

Selon un rapport publié, mercredi 29 mars, par la direction d'analyse de la menace cyber de Thalès, la part des cyberattaques visant les pays de l'Union européenne (UE) est passée de 9,8 % à 46,5 % ces six derniers mois. Une hausse directement liée au conflit ukrainien, alors que 61 % des attaques enregistrées dans le monde depuis un an sont d'origine russe, affirme le groupe industriel français. Ce sont les pays qui soutiennent le plus Kiev qui sont visés en priorité, précise Thalès.

[...]

« *A chaque fois que nous avons augmenté notre aide à l'Ukraine, nous avons subi des attaques. Et celles-ci ont non seulement augmenté en quantité, mais en qualité* », appuie le général Rafael Garcia Hernandez, patron du comcyber espagnol. « *Ces vagues d'attaques restent toujours sous le seuil de la guerre, mais elles sont suffisamment importantes pour avoir un impact sur l'opinion publique* », abonde le vice-amiral Giovanbattista Raimondi, adjoint du comcyber italien, confronté au même phénomène d'indexation des incidents au gré du soutien à Kiev.

Entrisme américain

Jusqu'à présent, ces cyberattaques restent peu dangereuses et sont surtout caractérisées par des opérations dites de « *distributed denial of service attack (DDoS)*, qui consistent à rendre inaccessible un serveur Internet. Selon Thalès, les opérations cyber à but militaire ne

représentent que 2 % des attaques enregistrées ces derniers mois. Mais la méthode « *de harcèlement systématique* [à travers des opérations de DDoS], *souvent à faible impact opérationnel, met sous tension les équipes de sécurité et les décideurs* », analyse-t-on chez l'industriel.

Un contexte de fragilité qu'ont bien compris les Etats-Unis, leader mondial en matière cyber. Depuis le début de la guerre en Ukraine, ils multiplient les opérations de soutien technique aux pays européens qui en font la demande. Baptisée « Hunt Forward Operations » (HFO, littéralement « opérations avancées de chasse »), en 2022, ce type d'opération a notamment été menée en Lituanie et en Croatie. Cette approche ne plaît guère à Paris, où on considère que cet **entrisme*** américain sur les réseaux européens n'est pas sans risques en matière de souveraineté en raison de risques d'espionnage.

[...]

une usine à gaz* = a white elephant

entrisme* = entryism