

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. If you _____ (be) in Steve's shoes, would you take the job?
2. What _____ (you/do) since last I saw you? I'm sure you've been busy.
3. If we _____ (know) of his track record we would never have invested with him.
4. I cannot make heads or tails of all these graphs and statistics. _____ (you/have) time to explain things to me?
5. I _____ (go) to London last weekend. I _____ (not/manage) to get tickets to the show I wanted to see but I _____ (make) most of my time there. Unfortunately I _____ (be) mugged on my way to the station but they only _____ (steal) my remaining few pounds. I _____ (have) my tickets and passport in a safe place, so they weren't able to find them.
6. I _____ (take) part in a Zoom call when you _____ (phone). I _____ (turn) off my phone before the meeting started so that's why I _____ (not/answer).
7. All the old and derelict buildings in my neighbourhood _____ (be/renovate) or _____ (tear/down) at the moment.
8. What _____ (you/do) tomorrow evening?

9. I _____ (not/see) my siblings for ages. I must organise a party or a dinner.

10. _____ (you /wait) long? I'm sorry that I'm late.

11. I _____ (not/do) that if I were you.

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

1. My office _____, so we cannot use it. Let's use the conference room instead.
a) is doing up b) has been doing up c) is being done up d)
done up
2. They always say that they're interested in doing something about the distribution of aid, but when we organise a meeting very _____ people turn up.
a) less b) few c) little d) much
3. I would avoid _____ there after dark if I were you.
a) to be b) being c) was d) be
4. We are not used _____ up so early. At least we are staying in a comfortable hotel so we can go to bed early tonight.
a) to getting b) to get c) got d) get
5. Our new CEO makes us _____ overtime every Saturday. It's paid very well so for the moment I don't mind.
a) working b) work c) to work d) worked
6. I wonder _____.
a) where she works
b) where does she work
c) where is she working
d) where did she work
7. Rarely _____ such an amazing spectacle.
a) have I seen b) I have seen c) I saw d) I see

8. You cannot _____ that! It's forbidden.
a) doing b) to do c) done d) do
9. He is much younger _____ the others, but he has the experience we are looking for.
a) than b) like c) that d) as
10. Last summer, I worked _____ two months in a vineyard. It was hard work, but I enjoyed it and I learnt a lot.
a) during b) while c) for d) pending

Part B - Translate the following text into French.

Climate change can disturb the accuracy of trees' biological clocks

New Scientist April 11th 2024

Trees use circadian genes to time photosynthesis and reproduction – but as temperatures rise, the clocks may not work as well

The higher temperatures brought on by global warming can disrupt trees' ability to track time, with potential consequences for their capacity to sequester carbon or even survive.

Climate change is already disturbing the timings of events in ecosystems by shuffling migrations, breeding, and food cycles that have historically been intricately coordinated. But like humans and other animals, plants have a genetic ability to track time that functions independently of their ecosystems.

María Verónica Arana at Argentina's National Scientific and Technical Research Council (CONICET) and her colleagues studied saplings of *Nothofagus pumilio*, a southern *beech that is common in the forests of Patagonia. They found that the accuracy of time-keeping genes in the species' circadian clock was severely compromised when the trees were planted at temperatures warmer than their typical niche.

The circadian clock is governed by many genes. Their expression, and the amount of proteins they encode, oscillates throughout the day. While light and temperature cues help keep the clock in sync with the environment, this ebb and flow continues even without these

external signals. The circadian clock helps plants *time photosynthetic activity and coordinate things like growth and dormancy.

[...]

Even when the saplings were “trained” to reset their clocks in the lab, with controlled day-night cycles of light, the warming-induced disruption was still visible in the patterns of genetic oscillation. The saplings also had lower survival rates and were smaller than those of a closely related cousin, *Nothofagus obliqua*, which can cope with warmer temperatures.

Overall, the team wrote, *N. pumilio*'s preference for cold temperatures and higher elevations means it is a species potentially threatened by climate change.

Maria Eriksson at Umeå University in Sweden says the research is consistent with studies in other plants, including a type of cress, *Arabidopsis thaliana*, often used in lab experiments. Similar results are also seen in trees like *chestnuts and *aspen, where temperature cues can trigger clock gene disruption and out-of-season dormancy. But she says there are still many gaps in our understanding of how circadian clocks function in plants and which physiological processes they affect.

Much of the circadian clock research in trees is still at the foundational stage, says Eriksson, and different species may have different sensitivities to changing temperatures. Because both light and temperature can affect clock synchronisation, it will also be important in the long run to understand which genes are more sensitive to which external cues.

“We don’t know how this connects to physiological outputs,” she says, “but it’s a clear indication that something is out of balance.”

*beech =le hêtre

*time = chronométrer, calculer

*chestnut= châtaignier

*aspen = le tremble

Part C - Translate the following text into English .

Crise des agriculteurs : ces chiffres qui révèlent l'ampleur du problème

Par Pauline Verge Les Echos

le 24 janv. 2024

La mobilisation des agriculteurs durera « le temps qu'il faudra pour que les réponses soient apportées », prévient Arnaud Rousseau, le président de la FNSEA. A travers blocages et manifestations, la France des tracteurs connaît une poussée de fièvre éruptive, réclamant de nombreuses mesures d'urgences et des ajustements plus globaux.

Une mobilisation qui est le fruit de l'évolution des conditions de travail et de vie des agriculteurs français au cours des dernières années.

Après deux années de forte hausse, la rémunération des agriculteurs a reculé en 2023. La valeur ajoutée au coût des facteurs par actif est en baisse de 9 % en 2023, calcule l'Insee, qui évoque une « rupture » à ce niveau. Autrement dit, le revenu agricole diminue, l'inflation aggravant la situation.

Selon une étude de l'Insee datée de 2021, le revenu disponible moyen annuel des ménages agricoles s'élevait à 52.400 euros en 2018, mais un tiers seulement provient de l'activité agricole, soit 17 700 euros.

Le reste provient principalement des salaires liés à l'activité du conjoint, de la vente de produits artisanaux, du tourisme à la ferme, ou encore de revenus du patrimoine. De plus, on constate des disparités importantes selon l'activité agricole du ménage.

Enfin, « les ménages agricoles sont également davantage exposés à la pauvreté monétaire : 18 % de leurs membres vivent sous le seuil de pauvreté contre 13 % des membres des ménages ayant des revenus d'activité », souligne l'Insee.

La proportion d'agriculteurs exploitants en France a fortement diminué. S'ils représentaient 7,1 % de l'emploi total en 1982, ils ne pesaient plus que pour 1,5 % en 2019, soit 400.000 personnes.

Ils sont considérablement plus âgés que l'ensemble des personnes en emploi : 55 % d'entre eux ont 50 ans ou plus, contre 31 % pour le reste des travailleurs. Seul 1 % d'entre eux a moins de 25 ans. Ils déclarent également un temps de travail hebdomadaire bien au-dessus de l'ensemble des personnes en emploi : 55 heures par semaine en moyenne, contre 37 heures pour le deuxième groupe.

En parallèle, la taille des exploitations agricoles augmente, tandis que leur nombre diminue. Selon le recensement agricole de 2020, on compte environ 389.800 exploitations en France métropolitaine. C'est 100.000 de moins qu'il y a 10 ans. En moyenne, elles s'étendent sur 14 hectares supplémentaires qu'en 2010.

• Production en hausse et prix en baisse

Selon les projections de l'Insee, la valeur totale de la production agricole, hors subventions, devrait baisser de 0,8 % en 2023. Une contraction qui fait à la suite de deux années de forte hausse.

Si le volume de l'ensemble de la production a augmenté de 2,9 % entre 2022 et 2023, son prix a, pour sa part, chuté de 3,7 % sur la même période.

La baisse des prix entre 2022 et 2023 est particulièrement tirée par ceux des céréales, dont la ***récolte** au niveau mondial s'annonce « à un niveau record », pointe l'Insee. Ils pourraient ainsi diminuer de 28,4 % en 2023, après avoir augmenté de 31,8 % en 2021 puis de 24 % en 2022.

***récolte = harvest**