第一部分：英文選擇題與問答題（共 50 分）

I. Please read the following three abstracts from articles published in the American Journal of Agricultural Economics and choose the most appropriate words or phrases for the missing blanks. One point for each correctly answered question, zero points for each unanswered question, and minus one point for each incorrectly answered question. (20%)

I-1 Harnessing farm-level fluctuations in **(1)** over time, we investigate the impact of extreme heat on farm-level agricultural productivity and adaptation strategies in Nigeria. We employ data from the Nigeria Living Standards Measurement Study-Integrated Surveys on Agriculture (LSMS-ISA) from the years 2010, 2012, and 2015. Our findings show that although current high temperatures decrease crop **(2)**, the overall agricultural output value is not affected by high temperatures, primarily due to **(3)** in the area under cultivation. Our analysis also reveals that farmers **(4)** farm inputs in the face of high temperatures. Specifically, farmers shift from productivity boosting inputs, like **(5)**, to protective measures such as **(6)**. This is accompanied by a greater dependence on hired labor after experiencing high temperatures in the previous year. Additionally, we find an increase in the adoption of **(7)** practices as a response to the high temperatures in the current season, indicating differential effects of high temperatures on crop production decisions.

Source: Mayorga, J., Villacis, A. H., & Mishra, A. K. (2025). Farm-level agricultural productivity and adaptation to extreme heat. American Journal of Agricultural Economics.

1. (A) weather (B) price (C) interest (D) rate
2. (A) yields (B) production (C) prices (D) areas
3. (A) increments (B) reductions (C) changes (D) destructions
4. (A) reallocate (B) increase (C) decrease (D) sell
5. (A) fertilizers (B) insurance (C) training programs (D) government subsidies
6. (A) pesticides (B) air condition (C) bio-char (D) burning
7. (A) mixed-cropping (B) irrigation (C) land abandonment (D) cover crop

I-2 A systematic component of wine quality is believed to depend on the **(8)** factors of its production conditions. This belief has long motivated the development of geographical indications (GIs) for wines. American viticulture areas (AVAs) represent the most common geographic identifier firms use to differentiate their products in the United States. In this paper we contribute new empirical evidence on the effectiveness and impact of GIs by studying consumers' valuation of US wine appellations within a **(9)** model of wine demand. The model is rooted in the discrete-choice framework, under the basic premise that **(10)** information concerning wine attributes is credible and key to consumers' choices. Specifically, we develop a two-level, nested-logit model featuring many wine products and characteristics—including wine type, brands, and varietals, in addition to geographic origin. The model is estimated using **(11)** data over the 2007–2019 period. We find that US consumers place a relatively high value on wines' geographic origins, distinct from the value of brand and varietal information, as documented by their **(12)** estimates. Furthermore, a **(13)** experiment shows significant **(14)** impacts from information about the geographic origin of wines.

Source: Chandra, R., Moschini, G., & Lade, G. E. (2025). Geographical indications and welfare: Evidence from US wine demand. American Journal of Agricultural Economics.

8. (A) geoclimatic (B) demand (C) varying (D) market
9. (A) structural (B) reduce-form (C) regression (D) new
10. (A) observable (B) unobservable (C) asymmetric (D) safety
11. (A) NielsenIQ Consumer Panel (B) US Census (C) Google Mobility (D) administrative
12. (A) marginal willingness to pay (B) coefficient (C) preference (D) attitudes
13. (A) counterfactual (B) lab (C) randomized (D) field

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14. (A) welfare (B) demand (C) climate (D) environmental

I-3 This study investigates whether cover crop adoption reduces extreme-weather-related crop insurance losses. To achieve this objective, we utilize a county-level **(15)** data set with information on cover crop adoption acres, crop insurance losses (i.e., specifically due to drought, excess heat, or excess moisture), and a number of weather variables. The data cover the main row crop production region in the Midwestern United States (US) for the period 2005 to 2018. We utilize **(16)** econometric models and a number of robustness checks in the empirical analysis (i.e., a fractional regression approach, two "external-instrument-free" estimation procedures, and a variety of alternative empirical specifications). The estimation methods used take advantage of the panel nature of the data to address various specification and **(17)** issues. We find evidence that counties with higher cover crop adoption tend to have **(18)** crop insurance losses due to drought, excess heat, or excess moisture. Our analysis also indicates that cover crops likely have stronger loss mitigation effects against excess **(19)** events (like floods) and somewhat weaker loss mitigation impacts against droughts and excess heat. Nonetheless, our results overall suggest that cover crops can enhance resilience to extreme weather events and have the potential to be an effective climate change **(20)** strategy in US agriculture.

Source: Aglasan, S., Rejesus, R. M., Hagen, S., & Salas, W. (2024). Cover crops, crop insurance losses, and resilience to extreme weather events. American Journal of Agricultural Economics.

15. (A) panel (B) time-series (C) cross-sectional (D) big
16. (A) linear fixed effects (B) logistic (C) OLS (D) causal
17. (A) endogeneity (B) incomplete information (C) imperfect competition (D) externality
18. (A) lower (B) higher (C) stable (D) minimum
19. (A) moisture (B) adverse weather (C) natural disaster (D) climate
20. (A) adaptation (B) mitigation (C) sequestration (D) empirical

II. The master's thesis is a core degree requirement. Eventually, every student in our program will have to write an abstract for their own thesis. Does reading the above abstracts (with missing blanks) from one of the leading academic journals in agricultural and environmental economics make you feel more or less excited about our master's program? Why? Please keep your answer within, excluding punctuation, 200 Traditional Chinese characters or 100 English words. (10%)

III. Many of our graduates, like most in business schools, pursue careers in the financial sector. In your opinion, what jobs and career paths would our graduates have comparative advantages in? Are you seriously interested in any of these jobs or careers? Why? Please keep your answer within, excluding punctuation, 200 Traditional Chinese characters or 100 English words. (20%)

第二部分：中文問答題（50 分）

一、農業保險法於民國 110 年 1 月 1 日正式施行。請簡要說明，目前我國主要農業保險之保單型態。其次，評析農業保險完全取代農業天然災害救助辦法的可能性。(25 分)

二、蛛網理論（cobweb theorem）經常用來解釋生產期比較長產品之價格與數量的循環變動現象。請先說明蛛網理論之重要假設；其次運用該理論，繪圖詳細說明農產品價格暴漲與暴跌之現象。(25 分)

試題隨卷繳回