注意：考試開始鈴響前，不得翻閱試題，並不得書寫、畫記、作答。

國立清華大學 115 學年度碩士班考試入學試題

系所班組別：科技管理研究所
乙組

科目代碼：5002

考試科目：英文

一作答注意事項一

1. 請核對答案卷（卡）上之准考證號、科目名稱是否正確。
2. 考試開始後，請於作答前先翻閱整份試題，是否有污損或試題印刷不清，得舉手請監試人員處理，但不得要求解釋題意。
3. 考生限在答案卷上標記「由此開始作答」區內作答，且不可書寫姓名、准考證號或與作答無關之其他文字或符號。
4. 答案卷用盡不得要求加頁。
5. 答案卷可用任何書寫工具作答，惟為方便閱卷辨識，請儘量使用藍色或黑色書寫；答案卡限用 2B 鉛筆畫記；如畫記不清（含未依範例畫記）致光學閱讀機無法辨識答案者，其後果一律由考生自行負責。
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7. 其他應考規則、違規處理及扣分方式，請自行詳閱准考證明上「**國立清華大學試場規則及違規處理辦法**」，無法因本試題封面作答注意事項中未列明而稱未知悉。

國立清華大學 115 學年度碩士班考試入學試題

系所班組別：科技管理研究所乙組(0550)

考試科目（代碼）：英文(5002)

 *請在【答案卡】作答

2.5 points each
選擇題共 40 題，每題 2.5 分，答錯不扣分，總計 100 分。

I. Sentence Completion
Direction: Choose the word or words that best logically complete the given sentences. (Cited from https://reurl.cc/eGzNxL, https://reurl.cc/Q5Rvdo, https://reurl.cc/Y4EA6O, https://reurl.cc/zKQOVN, https://reurl.cc/b3VORd)

1. Merriam-Webster's human editors _____ *slop* as the 2025 Word of the Year. We define *slop* as 'digital content of low quality that is _____ usually in quantity by means of artificial intelligence.
(A) choose…to produce
(B) have chosen…produced
(C) chose…produce
(D) are choosing…product
(E) had chosen…producing

2. Throughout 2025, when Republicans and Democrats used _____to increase their electoral _____, *gerrymander* became a popular search term.
(A) redistricting…advantages
(B) districts…advances
(C) retributing…advocates
(D) contribution…adventures
(E) distribution…disadvantage

3. The idiomatic phrase *touch grass* means "to participate in normal activities in the real world, especially as opposed to online experiences and interactions." The phrase is often _____ individuals who spend excessive time online, becoming increasingly _____ reality.
(A) aimed at…disconnected from
(B) tamed on…detached at
(C) claimed on…disoriented in
(D) shamed on…constructed about
(E) slammed at…disassociated above

4. In the age of social media, when all the world's a cellphone-sized stage, the steep rise in lookups of *performative* _____ not from any particular news item, but instead from the _____ of what it describes. *Performative* means "made or done for show (as to bolster one's own image or make a positive impression on others)."
(A) stemmed…rarity
(B) caused…popularity
(C) originated…scarcity
(D) derived…absence
(E) resulted…pervasiveness

5. Early in 2025, as President Trump began _____ the *tariffs* he had promised in his campaign, people following the resulting news and debates wanted to understand what *tariffs* are. *Tariff* refers to "a schedule of _____ imposed by a government on imported or, in some countries, exported goods."
(A) executing…debts
(B) imposing…doubts
(C) implementing…duties

(D) enforcing...downs
(E) applying...denials

6. Roman Catholic cardinals from around the world gathered at the Vatican to elect a successor at the meeting called a *conclave*. Even before Pope Francis's death, we were already seeing a higher volume of searches for the word in 2025. This interest was _____ by the film *Conclave*, which _____ a fictional version of the secret vote.
(A)driven...features
(B)motivated...casts
(C)led...displays
(D)resulted...performs
(E)caused...acts

7. With 2025's news cycle _____ by social unrest, debates about the regulation of online content, and concerns over digital wellbeing, our experts noticed that the use of *rage bait* this year has evolved to _____ a deeper shift in how we talk about attention, engagement, and ethics online.
(A) inundated ... conceal
(B) dominated ... signal
(C) preoccupied ... trigger
(D) saturated ... nullify
(E) influenced ... disguise

8. *Parasocial* is the Cambridge Dictionary's Word of the Year, defined as a relationship felt by someone between _____ and a famous person they do not know. Its examples include the *parasocial* interest _____ by fans when singer Taylor Swift and American footballer Travis Kelce announced their engagement.
(A) them...displaying
(B) their...display
(C) themselves...displayed
(D) they...to display
(E) theirs...displays

9. *Vibe coding*, an _____ software development that turns natural language into computer code using AI, has been named Collins' Word of the Year 2025. The term was popularized by Andrej Karpathy, former Director of AI at Tesla and founding engineer at OpenAI, _____ how AI enables creative output while he could "forget that the code even exists."
(A)emerged...describing
(B)emerging...described
(C)emerge...describe
(D)emerging...to describe
(E)emergency...description

10. There's the *broligarchy*, a term that emerged to label the small clique of very wealthy tech billionaires _____ outsized political influence. With figures like Elon Musk, Jeff Bezos, and Mark Zuckerberg _____ prominently at the presidential inauguration, the word captures a growing unease about concentrated power in the hands of a few men who operate at the intersection of technology, wealth, and politics. It's an oligarchy with a Silicon Valley twist, and it's reshaping democracy in real time.
(A) wielding...seated

(B) wielded…seating
(C) wield…seat
(D) wielding…seating
(E) to wield…seated

II. Antonyms
Direction: Choose the word that means the most opposite of the given word in capital letters.

11. ESPOUSE
(A) advocate
(B) champion
(C) uphold
(D) adopt
(E) renounce

12. ALLEVIATE
(A) exacerbate
(B) assuage
(C) mitigate
(D) palliate
(E) pacify

13. ENIGMATIC
(A) obscure
(B) arcane
(C) ambiguous
(D) lucid
(E) cryptic

14. CONCILATORY
(A) amicable
(B) placating
(C) propitiatory
(D) mollifying
(E) antagonistic

15. LANGUID
(A) torpid
(B) sluggish
(C) energetic
(D) listless
(E) lethargic

16. TRUCULENT
(A) pugnacious
(B) gentle
(C) bellicose
(D) defiant
(E) fierce

17. IMPROVIDENT
(A) wasteful

(B) prodigal
(C) thriftless
(D) reckless
(E) prudent

18. CANDOR
(A) probity
(B) frankness
(C) sincerity
(D) duplicity
(E) openness

19. MULTITUDINOUS
(A) profuse
(B) myriad
(C) copious
(D) infinite
(E) scant

20. JOVIAL
(A) morose
(B) ebullient
(C) blithe
(D) mirthful
(E) festive

III. Synonyms
Direction: Choose the word most similar to the given word in capital letters.

21. AMALGAMANTE
(A) estrange
(B) coalesce
(C) rescind
(D) bifurcate
(E) isolate

22. SERENDIPITY
(A) design
(B) fortuity
(C) adversity
(D) calamity
(E) pragmatism

23. PALTRY
(A) prodigious
(B) meager
(C) valiant
(D) substantial
(E) lush

24. BLOVIATE
(A) whisper
(B) condense

(C) understate
(D) pontificate
(E) mumble

25. CAJOLE
(A) wheedle
(B) dissuade
(C) bully
(D) coarse
(E) command

26. OBVIATE
(A) necessitate
(B) facilitate
(C) preclude
(D) instigate
(E) augment

27. ICONOCLAST
(A) mimic
(B) idolater
(C) traditionalist
(D) dissenter
(E) sycophant

28. PERDITON
(A) purgatory
(B) damnation
(C) salvation
(D) beatitude
(E) solace

29. PEREMPTORY
(A) diffident
(B) tentative
(C) indulgent
(D) imperious
(E) obsequious

30. VOCIFEROUS
(A) laconic
(B) taciturn
(C) subdued
(D) reticent
(E) clamorous

IV. Reading comprehension
Directions: Read the following articles. Answer the questions. Refer to the texts to check your answers. Cited from https://reurl.cc/Zl22vp

Amazon is in talks to invest at least $10 billion in OpenAI, according to a report from The Information, in a deal that could push the value of the startup past $500 billion.

Analysts say the deal looks like a marriage of necessity: OpenAI needs help funding its enormous burn rate, while Amazon needs proof that its custom Trainium chips matter in a world still dominated by Nvidia.

According to two veteran industry watchers—Charles Fitzgerald, a cloud infrastructure investor, former Microsoft employee, and self-described "capex obsessive," and Anshel Sag, a principal analyst at Moor Insights & Strategy—the Amazon talks look less like a partnership and more like a framework. But even the framework shows how OpenAI has the capacity to set the rules of the AI economy, using vendors as financiers and its own scale and urgency as leverage in negotiations.

To understand the deal, follow the money—or, more precisely, the absence of it.

Fitzgerald points out that OpenAI does not have the cash to honor the $38 billion cloud-spending commitment it announced with Amazon earlier this year—let alone a "fraction of a percentage" to the more than $1 trillion in aggregate spending commitments it has floated across cloud providers, chipmakers, and infrastructure partners.

"This is a fake deal," Fitzgerald told Fortune plainly. "Or, more politely, it's a framework." That is where the new $10 billion comes in. In Fitzgerald's view, the investment functions less like traditional venture capital and more like a financing scheme designed to paper over that gap.

"If OpenAI wins the lottery, then they'd have the money to pay for this," he said. "In practice, the deal will be much, much smaller."

The mechanics of what some have called the "circular" trade are simple, if quite dizzying: Amazon would move $10 billion from its balance sheet to OpenAI's bank account. OpenAI would then effectively hand that money right back to Amazon's cloud division (AWS) to pay for the compute it promised to buy. Amazon, thus, gets to book $10 billion in "new" cloud revenue—juicing its growth numbers for Wall Street—while OpenAI gets $10 billion worth of free computing power without actually burning its own cash.

"It certainly looks like circular financing," Fitzgerald said. "But they've got to do something to come up with the money."

Sag argues that in 2025, these types of deals will have become the standard cost of doing business at the frontier. The sheer capital required to train modern models is so high that traditional revenue models can't support it yet.

"There's a lot of circular economics happening right now," Sag told Fortune. "Companies want to potentially profit from the relationship beyond just a regular business engagement … By making those financial investments, it does inherently increase the risk."

However, Sag notes, the loop also provides a safety net. By funding OpenAI directly, Amazon is effectively buying itself a guaranteed customer for its massive infrastructure build-out, ensuring its new data centers don't sit empty.

What does Amazon get, and what does OpenAI get?

Sag sees the deal less as financial maneuvering and more as part of OpenAI's frantic hunt for computing power. "OpenAI is trying to secure as much compute as it can, from as many places as possible," he said.

That reflects the reality of the AI economy going into 2026: Demand for AI chips still exceeds supply. Nvidia remains the gold standard for training models, but capacity is constrained. Microsoft's infrastructure is heavily committed, so if OpenAI wants to keep scaling, it can't afford to be loyal to any one ecosystem. By pulling Amazon closer, OpenAI gains access not just to capital but to additional pools of hardware—including Amazon's Trainium and Inferentia chips. They may not match Nvidia's latest offerings on raw performance, but they're available and might even be preferable in "commercial contexts," Sag said.

For Amazon, the appeal is simpler: credibility.

Despite being the world's largest cloud provider, Amazon has struggled to position itself as a first-tier player in generative AI. While Microsoft locked in OpenAI early on, and Google built Gemini around its own in-house ecosystem, Amazon has spent years pitching its silicon to a market that is skeptical.

Amazon, however, has already committed at least $8 billion to Anthropic, which trains and runs its Claude models on Amazon infrastructure, including its Trainium chips. But Sag suggested Amazon's deal with Anthropic happened largely because Anthropic couldn't get the chips from Nvidia, which is known to be "pretty preferential" with the companies it chooses to supply.

Landing OpenAI, even partially, changes that narrative overnight, getting Amazon squarely into a chair before the music (and capital) runs out.

"ChatGPT is still seen as the Kleenex of AI," Sag said. "If OpenAI uses your hardware at any scale, that's a huge validation."

If OpenAI publicly treats Amazon's chips as "good enough," it sends a signal to enterprise customers that Trainium is safe, viable, and future-proof.

Fitzgerald cautions that Amazon may be paying for the wrong kind of exposure.

The structure of the relationship suggests Amazon would primarily handle training workloads, the compute-intensive process of building new models. So far, that's been a brutal business for cloud providers: expensive to stand up, short-lived in value, and constantly made obsolete by the next refresh of chips.

"Training clusters are the worst business," Fitzgerald said. "They're massively expensive, used intensely for a short period, and then Nvidia makes them irrelevant."

The more stable and lucrative side of the AI economy—inference, distribution, and ongoing customer interaction—remains firmly in Microsoft's hands. When users interact with ChatGPT, they're still hitting Microsoft servers, Fitzgerald says. But by pulling Amazon into its orbit, OpenAI weakens its dependence on Microsoft and

creates a multiparty standoff. Fitzgerald describes it as a deliberate effort to play suppliers against one another.

"They can go back to Nvidia or Microsoft or Oracle and say, 'If you don't give us better terms, we'll just use Amazon,'" he said.

It's a powerful strategy for a company that, paradoxically, doesn't have the cash to pay for what it's promising. OpenAI is betting its technology is essential enough—and its collapse unthinkable enough—that rivals will keep funding the ecosystem just to stay close, Fitzgerald said.

That doesn't mean we're in a bubble, though, he added. There is real demand, real revenue, and real scarcity—alongside very real excess.

There's an easy way to tell whether this deal mattered, according to Fitzgerald. Two years from now, "look at how much of that headline number actually turned into AWS revenue."

Until then, OpenAI's check might be in the mail.

"Now, they just have to find the other $28 billion," Fitzgerald said, laughing.

31. According to the article, what is the primary strategic motivation for Amazon to invest in OpenAI?
(A) To directly compete with Nvidia by manufacturing its own GPUs for public sale.
(B) To secure exclusive rights to the next version of ChatGPT for Amazon Prime members.
(C) To acquire a controlling stake in OpenAI and merge it with Anthropic.
(D) To replace Microsoft as the primary cloud provider for OpenAI's inference workloads.
(E) To obtain market validation and proof of viability for its custom Trainium chips.

32. Why does analyst Charles Fitzgerald describe the potential transaction as a "fake deal" or merely a "framework"?
(A) Because Microsoft has exclusivity clauses that prevent any other investments.
(B) Because the investment amount is too small to make a difference in AI development.
(C) Because OpenAI lacks the actual cash to honor its $38 billion cloud-spending commitment.
(D)Because Amazon has not actually signed any paperwork with OpenAI yet.
(E) Because the regulatory bodies in the US have already blocked the merger.

33. Which of the following best describes the mechanics of the "circular trade" mentioned in the text?
(A) Amazon invests in OpenAI, and OpenAI immediately returns the money to Amazon to pay for cloud compute.
(B) Amazon pays OpenAI, and OpenAI uses the funds to pay dividends to Microsoft.
(C) OpenAI borrows money from Nvidia to pay Amazon for server space.
(D) Amazon gives OpenAI credits, which OpenAI sells to third-party startups for cash.
(E) OpenAI issues stock to Amazon, which Amazon sells to the public to fund data centers.

34. According to Anshel Sag, why are deals involving "circular economics" becoming the standard in 2025?
(A) Because tech giants are trying to avoid paying taxes on their surplus profits.
(B) Because AI startups refuse to accept traditional venture capital anymore.
(C) Because the capital required to train modern models is too high for traditional revenue models to support.
(D) Because companies have run out of real cash and are trading only in debt.
(E) Because government regulations now require vendors to invest in their clients.

35. Why does Fitzgerald characterize the "training clusters" business—which Amazon would likely handle—as the "worst business"?
(A) Because Amazon lacks the technical expertise to maintain the clusters.
(B) Because Microsoft has a legal monopoly on all training activities.
(C) Because it requires manual labor that is difficult to scale.
(D) Because there is very little demand for training AI models.
(E) Because the hardware is massively expensive, used intensely for a short time, and quickly becomes obsolete.

36. What strategic advantage does OpenAI gain by bringing Amazon into its ecosystem alongside Microsoft?
(A) It allows OpenAI to stop paying Microsoft for any services immediately.
(B) It gives OpenAI ownership of Amazon's data centers.
(C) It provides OpenAI with a direct consumer retail platform via Amazon.com.
(D) It ensures that OpenAI's models will only run on Trainium chips in the future.
(E) It creates a multiparty standoff that allows OpenAI to play suppliers against one another for better terms.

37. According to Anshel Sag, why did Amazon primarily land the deal with Anthropic previously?
(A) Nvidia refused to do business with Anthropic due to safety concerns.
(B) Anthropic could not get enough chips from Nvidia, which is preferential with its supply.
(C) Anthropic preferred Amazon's chips over Nvidia's for performance reasons.
(D) Anthropic's founders are former Amazon executives.
(E) Amazon offered Anthropic significantly more money than Microsoft offered OpenAI.

38. What does the phrase "ChatGPT is still seen as the Kleenex of AI" imply in the context of this article?
(A) ChatGPT has poor durability and crashes often.
(B) ChatGPT is the generic term used for the category, representing the gold standard or market leader.
(C) ChatGPT is a temporary solution that will soon be discarded.
(D) ChatGPT is disposable and cheap.
(E) ChatGPT is primarily used for cleaning up data.

39. Which part of the AI economy does the article describe as the "more stable and lucrative side," currently held by Microsoft?
(A) Inference, distribution, and ongoing customer interaction.
(B) Building data centers.
(C) Recruiting AI talent.
(D) Training workloads.
(E) Chip manufacturing.

40. How does Charles Fitzgerald suggest one should evaluate the success of this deal in two years?
(A) By looking at how much of the headline investment number actually turned into AWS revenue.
(B) By observing if the price of Nvidia stock has dropped.
(C) By checking if OpenAI has gone public.
(D) By counting how many new models OpenAI has released.
(E) By seeing if Amazon has overtaken Microsoft in market cap.