國立彰化師範大學110學年度碩士班招生考試試題

系所：英語學系、兒童英語研究所　　科目：英文（含作文與翻譯）

☆☆請在答案紙上作答☆☆　　

I. Vocabulary and Grammar (30%; 2% for each item)

1. According to the investigation, the fire in the house was caused by candles left _____.
   (A) unheard (B) unneeded (C) unattended (D) unrequited
2. It is so nice _____ you to give a hand to those in need.
   (A) for (B) of (C) on (D) off
3. The housing in that district is _____ to many young couples.
   (A) disposable (B) incredible (C) accountable (D) affordable
4. Long-term _____ to PM2.5 is associated with an increase in the risk of lung disease.
   (A) condition (B) exposure (C) pressure (D) effect
5. _____ hearing the tsunami alarm, the residents evacuated immediately to the higher ground.
   (A) Upon (B) From (C) Of (D) Within
6. This passport will _____ on June 21, 2021.
   (A) inspire (B) perspire (C) respire (D) expire
7. The president candidate claimed she will be committed to _____ minimum wage.
   (A) increase (B) increasing (C) decrease (D) decreasing
8. _____ Feb. 18, 2021, the United States has about 27 million confirmed cases of COVID-19.
   (A) As of (B) As for (C) As to (D) As if
9. Although all age groups are at risk of _____ COVID-19, older people face significant risk of developing severe illness.
   (A) connecting (B) conceiving (C) perceiving (D) contracting
10. This special plant is _____ to the island where it grows mostly in the high mountains.
    (A) pandemic (B) epidemic (C) endemic (D) academic
11. When there was a national lockdown, the government demanded that everyone _____ at home in order to control the spread of the disease.
    (A) stays (B) stay (C) must stay (D) stayed
12. To maintain international peace and security, it is crucial to _____ a conversation between hostile nations.
    (A) hang up (B) screw up (C) strike up (D) wind up
13. _____ all the factories operate at full capacity, they will not be able to produce enough quality masks to fulfill the requirements of the government.
    (A) Because (B) Whenever (C) Despite (D) Even if
14. If negotiation fails, the company is prepared to _____ the law.
    (A) resort to (B) attach to (C) adjust to (D) accommodate to
15. Before the performance begins, audience members _____ to turn off all electronic devices.
    (A) reminding (B) are reminding (C) are reminded (D) to remind

II. Reading Comprehension (30%; 2% for each item)

Questions 1-7 are based on the following passage.

In 1955, a farmer named Vince Kosuga had a villainous idea: He would corner the market on me, the common onion. Kosuga set about buying up all the onions in the country, storing millions of pounds of me in the cavernous, corrugated warehouses he built on his New York farm and around the country. Then he bought up all the onions that were still in the ground, too, in the form of futures. As you might expect, Kosuga took advantage of his monopoly by raising my price. Then he flooded the market with his stockpiled (and by this point, rotting) wares while making bet after bet in the commodities market that the price would drop. By the time Kosuga had made his fortune—$8.5 million, to be exact—a 50-pound bag of me cost less than the sack I came in.

The Great Onion Corner was a devastating moment for the onion-eating American public, and for onion farmers too. Congress subsequently passed the Onion Futures Act, and to this day, I am the only crop for which it is illegal to buy futures.

Lest you think the OFA is the only bizarre law associated with pungent old me: In Dyersburg, Tennessee, for a time, one was not allowed to enter a movie theater within four hours of eating raw onions, and it was against the law in Lexington, Kentucky, to carry one or more of me in your pocket. Meanwhile, women in Wolf Point, Montana, were thought to be justified in forcing their spouses to eat raw onions if they were found drinking.

Just sitting there in your pantry or in the produce section, I look innocent of all charges. Whether yellow, red, white, or sweet like Walla Wallas and Vidalias, I am a simple dirt-growing bulb, with stem and root ends and not a whiff of the stink that might cause you to write harsh laws in my name.

But when you cut into me, the forensic truth reveals itself: I am an allium, a botanical genus that includes garlic, leeks, and chives, all of us built to defend ourselves via noxious, eye-watering fumes. When my cells are crushed or cut, an enzyme called alliinase and another called lachrymatory factor synthase react via a molecule called syn-propanethial-S-oxide. To translate those fancy scientific terms: I fight back.

The more I'm cut, the more vigorously I do so. Finely pureed raw onion will be more noxious than thick slices. Ring cuts will be more pungent than stem-to-root cuts, since pole-to-pole slicing damages fewer of my cells. Even knife selection makes a difference: A dull blade crushes more of my cells than a sharp one, which means more tears on your cutting board.

That combative tendency is what made humans fear me, along with garlic. When God tossed Satan from heaven, Turkish folklore has it, the ground where one foot landed sprouted garlic; the other gave you onions. But for modern humans, with your hankering for pungent flavor and willingness to cry to get it, nearly every cuisine has repurposed me from bad omen to bedrock aromatic vegetable. Today I play key roles in stocks, soups, stews, braises, and sauces everywhere. In France, I'm a component, along with carrot and celery, of the ever-present mirepoix; I'm a member of the holy trinity in Cajun and Creole cooking alongside celery and green bell pepper; and I'm pounded, often in the form of shallots, into Thai chile pastes. In Italy, I'm sautéed into the soffritto that adds depth to everything from meatballs to Bolognese sauce; in Spain and much of Latin America they make a similar base but spell it sofrito.

The list of my uses in cooking is endless, and these aren't even my starring roles (see: French onion soup, stuffed onions, caramelized onion tarts, and more). To you today, there seems to be only one rule

about me: Eat me often, and any which way—pickled or boiled in soups and sauces, dried and pulverized into onion powder, raw on bagels and sandwiches and in all sorts of salads.

If you love raw onion but want less intensity, soak me sliced or diced in cold water, or wash me briefly in warm running water, or soak me in vinegar to make a quick pickle in 15 to 30 minutes. And of course, cooking tames me, turning me increasingly soft and sweet as my natural sugars caramelize and the Maillard (browning) reaction takes place. Enjoy me grilled, sautéed, slowly sweated, caramelized, and roasted. Or roast me whole in my skins directly on live embers. (I don't have that thick papery exterior until I'm "cured," by the way, which basically means dried.) There is no culinary downside to me! Plus I'm high in vitamin C and antioxidants, especially an anti-inflammatory one called quercetin.

As for avoiding eye irritation, there are tricks that work and tricks that don't. Chilling onions seems to help reduce the enzymatic reactions, as does avoiding the root end, which has higher concentrations than the stem end. Or just get over it—it's all part of my acrid, controversial, entirely lovable package.

1.What is the article mainly about?
(A) To describe the various facts about onions.　(B) To discuss the laws concerning onions.
(C) To provide the recipes of cooking onions.　(D) To introduce the cuisines made of onions.

2.From whose viewpoints is this article most likely to be written?
(A) The farmers.　(B) The nutrition experts.　(C) The gourmet cooks.　(D) The onions.

3.Which of the following **nutrients** is mentioned in the article?
(A) Quercetin.　(B) Enzyme.　(C) Iron.　(D) Calcium.

4.Which of the following words can best describe the tone of this article?
(A) Academic.　(B) Humorous.　(C) Sarcastic.　(D) Affectional.

5.What is the theme of the seventh paragraph?
(A) To explain the uses of onions in different cuisines.
(B) To offer the tips of avoiding tearing when cutting onions.
(C) To suggest the health advantages of eating onions.
(D) To illustrate how to effectively sauté onions.

6.According to the article, which of the following sentences can best describe the nature of onions?
(A) They are strangely tasted.
(B) They are tearfully delicious.
(C) They are easily cooked.
(D) They are interestingly structured.

7.According to the article, which of the following messages is NOT correct?
(A) Onions are available in different color varieties.
(B) Cooking onions can turn their intense flavors into sweet tastes.
(C) More onion cells are damaged, more tearful the person gets when cutting onions.
(D) Soak onions in warm water first can help avoid tearful eyes when we cut onions.

Questions 8-15 are based on the following passage.

Everyone would like a solution to the problem of rising college costs. While students worry that they cannot afford a college education, U.S. colleges and universities know they cannot really afford to educate them either. At a technology-intensive research university like the Massachusetts Institute of Technology, it now costs three times as much to educate an undergraduate as we receive in net tuition—that is, the tuition MIT receives after providing for financial aid. To push the research frontier and educate innovators in science and engineering demands costly instrumentation and unique facilities. Even for institutions with substantial endowments, subsidizing a deficit driven by these and other costs is, in the long run, unsustainable.

Some wonder whether today's online technologies—specifically, massive open online courses, or MOOCs, which can reach many thousands of students at a comparatively low cost—could be an answer. I am convinced that digital learning is the most important innovation in education since the printing press. Yet if we want to know whether these technologies will make a college degree less expensive, we may be asking the wrong question. I believe they will; we are assessing this possibility at MIT even now. But first we should use these tools to make higher education better—in fact, to reinvent it. When the class of 2025 arrives on campuses, these technologies will have reshaped the entire concept of college in ways we cannot yet predict. Those transformations may change the whole equation, from access to effectiveness to cost.

To understand the potential, it's important to focus on what digital learning is good for. At least at the moment, it is surely not very good at replacing a close personal connection with an inspiring teacher and mentor. However, it is incomparably good at opening possibilities for billions of human beings who have little or no other access to higher learning. The global appetite for advanced learning is enormous: MIT OpenCourseWare—the initiative we started in 2002 to post virtually all our course materials for free online—has attracted 150 million learners worldwide. Today learners from every state in America and every nation on earth are actually taking MIT online classes; the edX platform we launched with Harvard 17 months ago has enrolled 1.25 million unique learners—10 times the number of living MIT graduates. With our edX partner institutions, we see an immense opportunity to help people transform their lives.

Yet digital learning also offers surprising advantages even for students with access to the best educational resources. First, digital technologies are remarkably good at teaching content: the basic concepts of circuits and electronics, the principles of chemistry, the evolution of architectural styles. At an online-learning summit at MIT, one eminent professor of physics from a peer university explained that although he loves lecturing and receives top ratings in student reviews, he recently came to rethink his entire approach. Why? Because testing indicated that many students did not come away from his lectures ready to apply the concepts he aimed to teach. By contrast, comparable students taught through online exercises—including immediate practice, feedback and reinforcement—retained the concepts better and were better prepared to put them into practice. With so much introductory material moving online, instructors can take time that was previously reserved for lectures and use it to exploit the power of innovative teaching techniques. A 2011 study co-authored by physics Nobel laureate Carl Wieman at the University of British Columbia showed the benefits: when tested on identical material, students taught through a highly interactive "flipped classroom" approach did nearly twice as well as peers taught via traditional lectures.

Digital learning technologies offer a second advantage, which is harder to quantify but is deeply appealing to both students and faculty: flexibility. Just as college traditionally requires four years at the

same academic address, traditional courses require large groups of students to regularly gather at the same time and place. By making it possible to break the course content into dozens of small conceptual modules of instruction and testing, digital learning allows students to engage the material anytime, any day, as often as they need to, anywhere in the world. A student can now spend a year immersed in remote field research on an important problem while staying in sync with the courses in her major. A team of students working on a project can now reach for a new concept just at the moment they need it to solve a problem—the most powerful learning incentive of all.

And we are only beginning to benefit from a third advantage of digital learning: the ability to analyze and gain information from the vast data we are generating about how people actually learn best. By providing, on a huge scale, a systematic, data-driven way to learn about learning, online technologies will provide testable conclusions that could improve teaching methods and strategies for both online and in-person instruction.

For all the strengths of today's digital technologies, however, we know that some things—perhaps the most important elements of a true education—are transmitted most effectively face-to-face: the judgment, confidence, humility and skill in negotiation that come from hands-on problem solving and teamwork; the perseverance, analytical skill and initiative that grow from conducting frontline lab research; the skill in writing and public speaking that comes from exploring ideas with mentors and peers; the ethics and values that emerge through being apprenticed to a master in your field and living as a member of a campus community.

Online learning may not help students arrive at such lessons directly—but it may serve to clear the way. At MIT, faculty members experimenting with online tools to convey content in their courses are finding that it allows them more time to focus on education: detailed discussions, personal mentorship, project-based learning. They are developing a blended model that uses online tools strategically—and they are making education more engaging and more effective for more students than it has ever been before.

Digital learning technologies present us with a tremendous opportunity to examine what college is good for, to imagine what colleges might look like in the future and to strive for ways to raise quality and lower costs. To teach what is best learned in person, do we need four years on campus, or could other models be even more effective? Could the first year of course work be conducted online as a standard for admission? Or could online tools allow juniors to spend a year working in the field? Then there's the question of our physical campuses. MIT has about 200 lecture halls. How many will we need in 20 years—and what different learning spaces should campuses include instead? Should we develop a new kind of blended education that combines the best of online and in-person learning? Would this lead to a new, more customized and valuable model of residential education—and what changes should we make to maximize that value?

Once we answer these questions, the college experience could look quite different in 10 or 20 years. I expect a range of options, from online credentialing in many technical fields all the way to blended online and residential experiences that could be more stimulating and transformative than any college program in existence now. Higher education will have the tools to engage lifelong learners anywhere, overturning traditional ideas of campus and student body. I believe these experimental years will produce many possibilities, so that future learners will be able to choose what is best for them. If you're wondering how much these options will cost, a better question might be, How much will these options be worth? I strongly

believe that by capitalizing on the strengths of online learning, we will make education more accessible, more effective and more affordable for more human beings than ever before.

8.What is the article mainly about?
(A) How digital learning can become a part of every campus.
(B) How MIT OpenCourseWare has improved digital learning.
(C) How higher education are getting more and more expensive.
(D) How international students can benefit from online courses.

9.When was this article most likely to be written?
(A) 2002　(B) 2010　(C) 2013　(D) 2025

10.Who is most likely to be the author of this article?
(A) An education critic.　(B) The president of MIT.
(C) The parent of an MIT student　(D) An IT-majored student at MIT.

11.What is the rhetoric purpose of the first sentence of the fourth paragraph?
(A) To introduce the benefits of digital learning.
(B) To discuss how digital learning can be promoted.
(C) To highlight the downsides of depending on digital learning.
(D) To encourage college students to make good use of digital learning.

12.What are the fourth, fifth and sixth paragraphs of this article mainly about?
(A) The various advantages of digital learning.
(B) The flexibility and affordability of digital learning.
(C) How MIT students benefit from digital learning.
(D) How MIT faculties apply digital technology in teaching.

13.What did the author attempt to discuss in the nineth paragraph?
(A) How digital learning can be constructed in the universities.
(B) How much investing in digital learning can cost the universities.
(C) How digital learning technologies may change the universities in the future.
(D) How long it will take for digital learning to transform the international students.

14.According to the article, which of the following is NOT the advantages of digital learning?
(A) Digital technologies are very effective in teaching content.
(B) Digital learning makes learning more flexible for students.
(C) Digital technologies can save students the time and money spent on commuting.
(D) Digital learning can collect vast data concerning how students can learn best.

15.Which of the followings can best describe the author's attitude toward digital learning?
(A) Neutral and uncertain.　(B) Pessimistic and disappointing.
(C) Skeptic and questioning.　(D) Positive and supportive.

III. Translation (20%)

英翻中（請勿翻譯括弧部份）

It's an international trend for music to move in the direction of being simultaneously cross-boundary and local. Although LUCfest and the Moonlight Sea Concerts are still relatively new music festivals, they already have developed their own unique styles, steadily setting down roots and moving forward.（from *Taiwan Panorama*, February 2021, LUCfest—貴人散步音樂節）(10%)

中翻英（請勿翻譯括弧部份）

1. 道不遠人。人之為道而遠人，不可以為道。（錄自《中庸》第十三章，遠，音『院』，遠離之意）(5%)
2. 行政院今年 1 月發現某機關連線至比特幣挖礦主機，經該機關調查後發現為內部同仁自行攜帶遭安裝挖礦程式的個人電腦連接至機關網路使用，進而觸發異常網路連線。（錄自 中國時報 2021 年 2 月 23 日報導，行政院—The Executive Yuan；比特幣挖礦主機—bitcoin mining computer）(5%)

IV. English Composition (20%)

With the arrival of the new year, everyone is hopeful for a bright and prosperous new beginning after the world wide troubles of the previous year. Much of the world has lived in quarantine during the CoVid19 pandemic, making online education a necessary replacement for going to school for traditional classroom learning.

Please write three paragraphs, (approximately 8 sentences each):

1. What are the benefits and difficulties of online university education?
2. What are the benefits and difficulties of traditional classroom university education?
3. After CoVid19 is eliminated, to what degree should university life focus on the physical classroom and campus community, compared to the online classroom community?

Give specific examples for each paragraph.