



# 2026학년도 한국외국어대학교 편입학전형 필답고사 문제지 (T1-2)

A형

출제문항: 영어 25문항, 수학 20문항(90분)

| 지망학부(과) | 수험번호 | 성명 |
|---------|------|----|
|         |      |    |

[배점 1-8: 각 2점; 9-10: 각 3점; 11-12: 각 4점; 13-20: 각 5점; 21-25: 각 6점. 총 100점]

[배점 26-29: 각 4점; 30-31: 각 4.7점; 32: 4.8점; 33-38: 각 5점; 39: 5.2점; 40-41: 각 5.3점; 42-45: 각 6점. 총 100점]

[1~8: 2 points each]

[1-3] Choose the one that best completes the sentence.

1. Despite the chaos surrounding her, she maintained a remarkable \_\_\_\_\_, responding to each crisis with steady nerves.

- ① evanescence                      ② equanimity  
③ animosity                        ④ futility

2. She delivered her critique in a \_\_\_\_\_ tone, careful not to offend senior scholars.

- ① brazen                            ② diffident  
③ peremptory                      ④ strident

3. His apology was \_\_\_\_\_, filled with polished phrases but lacking any genuine sense of remorse.

- ① palpable                        ② forthright  
③ unfeigned                      ④ perfunctory

[4-6] Choose the one that best replaces the underlined word.

4. A single overlooked variable can vitiate the results of an otherwise rigorous experiment.

- ① annul                            ② exculpate  
③ explicate                      ④ reprimand

5. With funding frozen, the renovation plans remained in abeyance until inspectors approved safety reports.

- ① purgatory                      ② quiescence  
③ equilibrium                    ④ suspension

6. The author aims to adumbrate the key argument without revealing every detail.

- ① enervate                        ② confabulate  
③ controvert                      ④ delineate

[7-8] Choose the one that is closest in meaning to the CONTEXTUAL meaning of the underlined word.

7. The author submitted the first draft of her novel before revising it carefully.

- ① current                            ② enlistment  
③ version                          ④ sketch

8. Integrity and resilience are the essential qualities that mark a great leader.

- ① record                            ② soil  
③ deface                          ④ designate

[9~10: 3 points each]

[9] Choose the one that is closest in meaning to the given sentence.

9. Neither the committee's clarification nor its subsequent revision proved sufficient to render the policy less ambiguous.

- ① The policy became unambiguous after the committee clarified and revised it.  
② Either the clarification or the revision removed the ambiguity of the policy.  
③ Both the clarification and the revision failed to make the policy any clearer.  
④ The revision disambiguated the policy more effectively than the clarification did.

[10] Choose the one that best completes the sentence.

10. If you have a heart, lock it carefully away like a treasure and \_\_\_\_\_ or you will be lost.

- ① do not let anyone know it  
② let it anyone do not know  
③ do not know anyone let it  
④ let anyone do know it not

[11~12: 4 points each]

[11] Choose the one that makes the sentence grammatically INCORRECT.

11. She must ①have worked on the project all night; she appeared ②exhausted but ③had been completed a significant portion ④of her new experiment.

[12] Choose the one that is grammatically INCORRECT.

12.

- ① What had I been expecting from him?  
 ② What does the lack of things he likes tell you about him?  
 ③ What remains surprising is about which professor is teaching the course.  
 ④ What is less clear is who among the creators earns a living by creating.

[13~20: 5 points each]

[13~25] Read the following passages and answer the questions.

[13~14] Rumination involves repetitive thinking or dwelling on negative feelings and their causes and consequences. The repetitive, negative aspect of rumination can contribute to the development of depression or anxiety and worsen existing conditions. When a person who is in a depressed mood ruminates, they are more likely to remember negative things that happened to them in the past. They interpret situations in their current lives more negatively, and they are more hopeless about the future. The preoccupation with problems also makes it difficult to move forward and allow for a focus on problem solving. Research has found that the most important way that a person's past experiences, especially traumatic life events, led to depression or anxiety was by leading a person to ruminate and blame themselves for the problem. "Depression and anxiety are not simple conditions and there is no single cause," a researcher noted. "While we can't change a person's family history or their life experiences, it is possible to help a person to change the way they think and to teach them (A)positive coping strategies that can assuage and reduce stress levels."

13. Which of the following is the best title for the passage?

- ① Negative Effects of Rumination on Mental Health  
 ② Family, Experience, and Rumination  
 ③ Pros and Cons of Rumination  
 ④ Genetic Factors Contributing to Rumination

14. Which of the following is closest in meaning to (A)?

- ① beneficial routines to reduce stress which can be manipulated by their family  
 ② helpful reaction techniques that relieve and reduce their mental burden  
 ③ strategic processes they can implement to mitigate life experiences  
 ④ ways to systematically cope with reduced stress levels

[15~16] Is there a difference between remembering information versus remembering where to find it? Cognitive offloading, the act of delegating mental work to external tools, should concern anyone who values their own intelligence. When given the choice between thinking through a problem or letting technology handle it, we typically choose the tool, even when we're perfectly capable of succeeding on our own. This is a problem. The traditional argument for cognitive offloading has always been straightforward: There is no point in learning facts which you can look up instantly when you can save your mental energy for higher-order thinking. This framing misunderstands how the brain works. Knowledge isn't separate from thinking. It's the foundation that thinking requires. Across every subject domain, expertise depends on having vast amounts of information readily accessible in working memory—not theoretically accessible through an AI search, but immediately present in your mind. For example, a doctor diagnosing a patient relies on the instant availability of relevant content knowledge. If you only remember where information exists, but you don't actually know it, you have the illusion of knowledge without the substance. AI may be making us feel knowledgeable because we can quickly retrieve information, but this doesn't allow us to develop the internalized understanding that enables genuine expertise.

15. Which of the following is the major topic of the passage?

- ① The best way to remember expert knowledge  
 ② A common misunderstanding of how AI works  
 ③ The threat to cognitive offloading posed by AI use  
 ④ The way AI makes us feel smarter than we really are

16. According to the passage, which of the following is true?

- ① People tend to use technology even when it is not needed.  
 ② There is no need to memorize facts if you can look them up easily.  
 ③ Higher-order thinking is independent of internalized knowledge.  
 ④ Genuine expertise depends on knowing where to find needed information.

[17-18] Serban Sarbu thought he'd seen it all, until he stepped into Sulfur Cave. Here, he uncovered a thriving ecosystem, home to over 111,000 spiders entangled in the world's largest spider web. The web spans approximately 1,140 square feet, roughly the size of a small home. It hangs in a low, narrow passage within a network of limestone rooms carved by the Sarantaporos River. "To find so many spiders in one spot in a cave, that was a great surprise," Sarbu told reporters. "So, what's keeping them alive?" Caves are generally devoid of life. The absence of light means no photosynthesis, so no green plants and very little organic matter for animals to feed on. Cave-dwelling creatures are often small, blind, and slow to conserve every bit of energy they can, so there should be no spiders. The cave's unusual abundance of life is fueled by its sulfur-rich environment. This gives an opportunity for microbes to live, using the chemical energy that's produced from the oxidation of hydrogen sulfide. In addition to spiders, the cave is also home to other creatures such as centipedes, bats, and the insect larvae of flies. Once these larvae mature, many of the adult flies get trapped in the webs and get eaten by the spiders.

17. Which of the following is the major topic of the passage?

- ① A description of a thriving underground home for bats
- ② An explanation for the presence of spiders in the cave
- ③ The relationship between photosynthesis and microbe life
- ④ An account of spiders' roles in flourishing ecosystems

18. According to the passage, which of the following is true?

- ① Photosynthesis provides most of the organic matter in Sulfur Cave.
- ② When hydrogen sulfide oxidizes, energy is produced.
- ③ Typical animals that live in caves have excellent night-vision.
- ④ The spiders feed primarily on centipedes that the web ensnares.

[19-20] When maintaining ice for winter sports, a specialized machine, named the Zamboni after its inventor, is used. Operating a Zamboni involves the precise management of its sharp blade's pitch and depth to manipulate the ice's crystalline structure for specific athletic needs. While spectators see a simple tractor moving around the ice, the Certified Ice Technician (CIT) behind the wheel is performing high-stakes mechanical engineering involving friction physics. The blade must be sharp and angled enough to remove exactly 1/32nd of an inch of "scowed" ice, the damaged, snowy top layer, without striking the underlying refrigeration pipes. The hidden genius of the machine is the wash-water system, which uses hydrostatic pressure to deep-clean the pores of the ice before a fresh layer of hot water, about 60°C, is applied. Using hot water is counterintuitive to the layperson, but it's essential because it contains less dissolved air, creating a denser, clearer, and faster ice surface. In professional arenas, the CIT must be skilled enough to tune the ice for different uses: harder, colder ice for ice hockey and thicker, softer ice for figure skating. Mastering this requires an understanding of thermodynamics and the mechanical tolerances of the conditioning deck.

19. What is the best title for the passage?

- ① The Science of Professional Ice Resurfacing
- ② A Historical Overview of the Zamboni Invention
- ③ Essential Maintenance Tips for Modern Skating Rinks
- ④ Comparing Hockey Rinks to Figure Skating Surfaces

20. According to the passage, which of the following is **NOT** true?

- ① The wash-water system utilizes hydrostatic pressure to clean the pores of the ice.
- ② CITs must adjust the blade depth to avoid hitting the refrigeration pipes.
- ③ Cold water is used during resurfacing to create a denser and faster ice surface.
- ④ Hockey requires a harder and colder ice surface than figure skating does.

[21~25: 6 points each]

[21-22] Have you ever wanted to have the ineffable quality that makes some people effortlessly popular? Perhaps you need to brush up on your *nunchi*, a traditional Korean concept of situational awareness. *Nunchi* is the art of understanding what people are thinking or feeling, a quality held by those who are sensitive to the dynamics within a given group. Koreans cultivate *nunchi* from a young age. Kids in Korea know the word by age three. They usually learn it in the negative. If everyone is standing on the right side of the escalator and a kid is lounging on the left, the parent will say, "Why don't you have any *nunchi*?" It's partly about not being rude, but it's also partly "(A)Why are you not plugged into your environment?" The word *nunchi* translates to "eye-measure," a sort of sizing-up not of individuals but of the overall context and atmosphere of a situation. It's applicable to about every possible social setting. In action, *nunchi* involves noticing who, in any given context, is speaking, listening, interrupting, apologizing, or rolling their eyes. From there, one can make potentially useful assessments about the nature of relationships and hierarchies within the group, the overall mood, and how to behave accordingly. As the truly skilled discern such cues intuitively even as they're constantly in flux, Koreans don't say someone has "good" *nunchi*, but "quick" *nunchi*, the ability to rapidly process changing social information.

21. According to the passage, which of the following is **NOT** true?

- ① Korean children typically understand the term *nunchi* by age three.
- ② *Nunchi* is used primarily in Korea to teach children how to speak politely.
- ③ Practicing *nunchi* involves observing subtle social behaviors such as eye-rolling gestures.
- ④ Skilled *nunchi* involves interpreting social cues even as group dynamics are constantly changing.

22. Which of the following is closest in meaning to (A)?

- ① Why don't you speak up and dominate the conversation
- ② Why don't you follow the law like everyone else
- ③ Why aren't you sensitive to the context of the situation
- ④ Why aren't you physically connected to the people around you

[23-25] When people picture fine dining, they typically think of small portions. Renowned chef Paul Bocuse once humorously commented, "Fine dining is nothing on the plate and everything on the bill." Diners often wonder why fine dining restaurants have small portions. Do (A)they not provide value for money? (B)They surely do. But the value is not about the amount of food. It's the entire dining experience. Fine dining restaurants prioritize premium and freshest ingredients. (C)They source these ingredients locally or import them. However, (D)they come at a significant cost, especially when considering seasonal fare. Small portions help to manage these costs effectively. Fine dining restaurants often offer tasting menus or degustation menus. These menus feature seven to eight courses in a single setting. Further, each course is diverse in style, taste, and texture. If restaurants were to serve multiple courses in regular portions, they might overwhelm diners. When diners sample smaller portions, they can engage most or all of their senses. In essence, small portions make the dining experience more engaging, immersive, and more memorable. The art of plating is also intrinsic to fine dining. Such attention to refinement is only possible if the portion is small. Chefs get ample space on the plate to arrange meal components precisely. But why is aesthetic plating an essential part of fine dining? A beautifully plated dish stimulates diners' sense of sight, increases their appetite, and enhances their perception of flavor and quality. It also makes them more excited to taste the meal. Therefore, aesthetic plating is (E)\_\_\_\_\_ to taste and flavor, uplifting the overall fine dining experience.

23. Which of the following is the best title of the passage?

- ① Tasting Menus: The Future of Fine Dining
- ② Smaller Portions with Less Value in Fine Dining
- ③ The Art of Aesthetic Plating in Fine Dining
- ④ Fine Dining: Beyond Quantity to Experience

24. Which of the following is different from the others in what it refers to?

- ① (A)                      ② (B)                      ③ (C)                      ④ (D)

25. Which of the following best fits into (E)?

- ① a costly supplement
- ② an equal companion
- ③ an optional garnish
- ④ a decorative feature

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26.  $0 \leq \theta \leq 2\pi$  일 때, 이차방정식

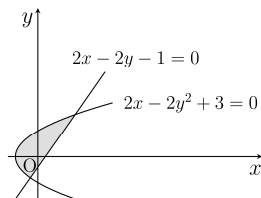
$$x^2 - (2\sin \theta)x + 3\cos^2 \theta = 0$$

이 오직 하나의 실근을 가지도록 하는 모든  $\theta$ 의 값의 합은? [4점]

- ①  $\frac{\pi}{3}$                       ②  $\pi$   
③  $\frac{5}{3}\pi$                     ④  $\frac{7}{3}\pi$   
⑤  $4\pi$

27. 직선  $2x - 2y - 1 = 0$  과 곡선  $2x - 2y^2 + 3 = 0$  으로 둘러싸인 영역의 넓이는? [4점]

- ①  $\frac{7}{2}$                       ②  $\frac{9}{2}$   
③  $\frac{11}{2}$                     ④  $\frac{13}{2}$   
⑤  $\frac{15}{2}$



28. 방사성 물질인 아이오딘-131의 반감기는 8일이다. 24일 후 남은 아이오딘-131의 양이 10g일 때, 처음 아이오딘-131의 양은? [4점]

- ① 20g                      ② 30g  
③ 40g                      ④ 80g  
⑤ 160g

29. 어느 대학교 학생 중 A 생성형 AI 서비스를 이용하는 학생은 전체의  $\frac{1}{2}$ , B 생성형 AI 서비스를 이용하는 학생은 전체의  $\frac{2}{5}$ , A와 B 생성형 AI 서비스를 모두 이용하는 학생은 전체의  $\frac{1}{4}$ 이다. 이 대학교 학생 중 임의로 택한 한 학생이 A 또는 B 생성형 AI 서비스를 이용하는 학생일 확률은? [4점]

- ①  $\frac{11}{20}$                       ②  $\frac{3}{5}$   
③  $\frac{13}{20}$                     ④  $\frac{7}{10}$   
⑤  $\frac{3}{4}$

30. 한 내각의 크기가  $30^\circ$ 이고 네 변의 길이의 합이 40인 평행사변형의 넓이의 최댓값은? [4.7점]

- ①  $\frac{25}{2}$                       ②  $\frac{25}{2}\sqrt{3}$   
 ③ 25                        ④  $25\sqrt{3}$   
 ⑤ 50

31.  $\lim_{n \rightarrow \infty} \sum_{k=1}^{2n} \frac{1}{2n+k}$ 의 값은? [4.7점]

- ①  $\frac{\ln 2}{2}$                       ②  $\frac{\ln 3}{2}$   
 ③  $\ln 2$                       ④  $\frac{\ln 5}{2}$   
 ⑤  $\frac{\ln 6}{2}$

32. 모든 실수  $x$ 에 대하여 부등식  $3x^4 + ax^3 + 3 \geq 0$ 이 성립하도록 하는 정수  $a$ 의 개수는? [4.8점]

- ① 7                              ② 8  
 ③ 9                              ④ 10  
 ⑤ 11

33. 삼차함수  $f(x) = x^3 + x$ 의 역함수  $g(x)$ 는 실수 전체의 집합에서 두 번 미분가능하다.  $g''(2)$ 의 값은? [5점]

- ①  $-\frac{3}{32}$                       ②  $-\frac{3}{16}$   
 ③  $-\frac{9}{32}$                       ④  $-\frac{3}{8}$   
 ⑤  $-\frac{15}{32}$

34.  $(x^4 + x^3 - 1)^{10}$ 의 전개식에서  $x^{26}$ 의 계수는? [5점]

- ① -1260                      ② -1890  
 ③ -2520                      ④ -3150  
 ⑤ -3780

35. 좌표평면에서 다음 조건을 만족시키는 삼각형의 개수는? [5점]

- (가) 삼각형의 한 꼭짓점은 원점  $O(0, 0)$ 이다.  
 (나) 삼각형의 각 꼭짓점은  $O(0, 0)$ ,  $A(2, 0)$ ,  $B(2, 2)$ ,  $C(0, 2)$ 를 꼭짓점으로 하는 정사각형의 내부나 경계 위에 있고,  $x$  좌표와  $y$  좌표가 모두 정수이다.  
 (다) 삼각형은 둔각삼각형이다.

- ① 5                              ② 6  
 ③ 7                              ④ 8  
 ⑤ 9

36. 다음 조건을 만족시키는 곡선  $y = -x^3 + 1$  위의 점  $P$ 의 개수는? [5점]

곡선  $y = -x^3 + 1$  위의 점  $P$ 에서의 접선은 점  $(-2, 5)$ 를 지난다.

- ① 0                              ② 1  
 ③ 2                              ④ 3  
 ⑤ 4

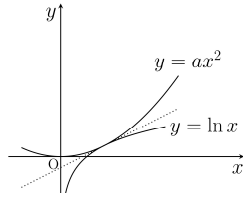
37. 수열  $\{a_n\}$ 이

$$a_1 = \frac{1}{2}, \quad 2a_{n+1} = a_n + \frac{1}{2^n} \quad (n = 1, 2, 3, \dots)$$

을 만족시킬 때,  $\sum_{n=1}^{\infty} a_n$ 의 값은? [5점]

- ① 2                              ② 3  
 ③ 4                              ④ 6  
 ⑤ 8

38. 그림과 같이 곡선  $y = ax^2$  이 곡선  $y = \ln x$  에 접하도록 하는 실수  $a$  의 값은? [5점]



①  $\frac{1}{4e}$

②  $\frac{1}{2e}$

③  $\frac{1}{e}$

④ 1

⑤  $e$

39. 수열  $\{a_n\}$  이

$$a_1 = 1, a_2 = 3, a_{n+2} = 3a_{n+1} + 2a_n \quad (n = 1, 2, 3, \dots)$$

을 만족시킬 때,  $b_n = \frac{a_{n+1}}{a_n} (n = 1, 2, 3, \dots)$  으로 정의된 수열  $\{b_n\}$  은 수렴한다.  $\lim_{n \rightarrow \infty} b_n$  의 값은? [5.2점]

①  $\frac{3 + \sqrt{17}}{2}$

②  $2 + \frac{\sqrt{13}}{2}$

③  $2 + \frac{\sqrt{17}}{2}$

④  $\frac{5 + \sqrt{13}}{2}$

⑤  $\frac{5 + \sqrt{17}}{2}$

40. 두 실수  $a, b$  에 대하여  $\lim_{x \rightarrow 0} \frac{\sin(ax) + bx}{x^3} = 36$  일 때,  $a \times b$  의

값은? [5.3점]

① -144

② -36

③ 0

④ 36

⑤ 144

41. 실수 전체의 집합에서 도함수가 연속인 함수  $f(x)$  가 모든 실수  $x$  에 대하여  $f(x) > 0$  이고

$$\int_0^x (\ln f(x) - \ln f(t)) \cos t \, dt = -\frac{1}{2} \cos 2x + \frac{1}{2}$$

을 만족한다.  $f(0) = 2$  일 때,  $f\left(\frac{\pi}{2}\right)$  의 값은? [5.3점]

①  $e$

②  $2e$

③  $e^2$

④  $2e^2$

⑤  $e^3$

42. 열린구간  $(0, 3\sqrt{\pi})$ 에 속하는 방정식  $\sin(x^2+1)=0$ 의 모든 해를 작은 수부터 크기순으로  $a_1, a_2, \dots, a_n$ 이라 할 때,

$$(a_1+a_n) \times \left( \frac{1}{a_1+a_2} + \frac{1}{a_2+a_3} + \dots + \frac{1}{a_{n-1}+a_n} \right)$$

의 값은? [6점]

- ① 4                                  ② 7  
 ③ 8                                  ④ 9  
 ⑤ 10

43. 어느 회사에서 만든 독감 진단 키트는 독감에 걸린 사람을 독감에 걸렸다고 판정할 확률이 0.98, 독감에 걸리지 않은 사람을 독감에 걸리지 않았다고 판정할 확률이 0.95이다. 독감에 걸린 사람 100명과 독감에 걸리지 않은 사람 500명을 이 회사의 독감 진단 키트로 검사하였다. 이 600명 중 임의로 택한 한 명이 독감 진단 키트에 의해 독감에 걸렸다는 판정이 나왔다고 할 때, 이 사람이 실제로는 독감에 걸리지 않은 사람일 확률은? [6점]

- ①  $\frac{19}{120}$                               ②  $\frac{25}{123}$   
 ③  $\frac{19}{24}$                               ④  $\frac{98}{123}$   
 ⑤  $\frac{931}{1000}$

44. 양의 실수 전체의 집합에서 정의된 함수  $f(x) = -x + \frac{2}{x}$ 와

함수  $g(x) = x$ 에 대하여 다음 조건을 만족시키는 실수  $c$ 의 값은? [6점]

모든 양의 실수  $x$ 에 대하여  $(f(x)-c)(g(x)-c) \leq 0$ 이다.

- ①  $\frac{1}{4}$                                   ②  $\frac{1}{2}$   
 ③  $\frac{3}{4}$                                   ④ 1  
 ⑤  $\frac{5}{4}$

45. 이상적분  $\int_1^{\infty} \frac{x \sin x + \cos x}{x^2} dx$ 의 값은? [6점]

- ① 0                                  ②  $\sin 1 - \cos 1$   
 ③  $\cos 1$                               ④  $\sin 1$   
 ⑤  $\sin 1 + \cos 1$