

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 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

科目代碼：2402

考試科目：英文

— 作答注意事項 —

1. 請核對答案卷（卡）上之准考證號、科目名稱是否正確。
2. 作答中如有發現試題印刷不清，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。
6. 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 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文（2402）

共 17 頁，第 1 頁 *請在【電腦卡】作答

Part One: Grammar (20 questions, 1% each)

Direction: Select all correct choices to complete each sentence.

1. He missed so much at school that he found it difficult to catch _____.
A. up
B. over
C. on
D. off
E. in

2. I was looking _____ my mobile phone, but I couldn't find it.
A. at
B. after
C. for
D. into
E. up

3. The plane took _____ from the airport.
A. away
B. after
C. off
D. in
E. upon

4. Peter and I met in the clinic _____ chance.
A. by
B. on
C. at
D. in
E. out of

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 2 頁 *請在【電腦卡】作答

5. We have to pay the tuition _____ September 15 at the latest.
- A. by
 - B. on
 - C. at
 - D. in
 - E. out of
6. It was the first time I spoke _____ public. I was extremely nervous.
- A. by
 - B. on
 - C. at
 - D. in
 - E. out of
7. Those trousers you have on look really _____ date.
- A. by
 - B. on
 - C. at
 - D. in
 - E. out of
8. I didn't break the vase _____ purpose. It was an accident.
- A. by
 - B. on
 - C. at
 - D. in
 - E. out of

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 3 頁 *請在【電腦卡】作答

9. There's paper _____ the floor. Please put it _____ the trash can.
- A. at, into
 - B. top, in
 - C. on, at
 - D. over, out
 - E. on, in
10. There were _____ students in the library, so we weren't completely alone.
- A. fewer
 - B. very little
 - C. only a little
 - D. a few
 - E. fewest
11. The music in the restaurant was so loud that all the diners had to shout to make _____ heard.
- A. oneself
 - B. himself
 - C. them
 - D. he
 - E. themselves
12. The cabinet _____ we put our papers and other valuable written reports was stolen by a bunch of thieves last night.
- A. whom
 - B. that
 - C. whose
 - D. in which
 - E. when

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 4 頁 *請在【電腦卡】作答

13. I bought three books on Python programming the last time I _____ to the university bookstore.
- A. have gone
 - B. go
 - C. went
 - D. had gone
 - E. going
14. The meeting was scheduled to be held in March but was _____ due to the earthquake that hit India, Sri Lanka and the Maldives.
- A. dropped in
 - B. paid off
 - C. turned down
 - D. put off
 - E. crossed out
15. I look forward to _____ from you.
- A. hear
 - B. hearing
 - C. be heard
 - D. being heard
 - E. be hearing
16. "Can I borrow your car for this evening?" "Sure, but Amy is using it now. If she _____ it back in time, you are more than welcome to borrow it."
- A. would bring
 - B. was going to bring
 - C. brought
 - D. had brought
 - E. brings

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 5 頁 *請在【電腦卡】作答

17. Betty _____ the door and then sat down at our table.
- A. came over
 - B. came through
 - C. opened
 - D. went off
 - E. went about
18. If you want to know what _____ in this ground-breaking AI project so far, you _____ the full report at our website.
- A. has been completed, may be visited
 - B. completed, will be found
 - C. has been completed, can find
 - D. was completed, had been found
 - E. will be completed, should be found
19. My mother said I _____ her anything for her birthday, but I think I _____ her some flowers at least.
- A. may not buy, may have bought
 - B. should have bought, must buy
 - C. had to buy, can't have bought
 - D. didn't need to buy, should buy
 - E. don't need to buy, don't have to buy
20. I always tell the students _____ both short-term and long-term goals in life are critical _____ their motivation high.
- A. have, keep
 - B. having, to keep
 - C. having, keeping
 - D. to be having, to keeping
 - E. have, to keeping

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 6 頁 *請在【電腦卡】作答

Part Two: Vocabulary (20 questions, 2% each)

Direction: Select all correct choices to complete each sentence.

21. She was unable to move her arm after the stroke; in addition, the stroke _____ her ability to speak.
- A. satisfied
 - B. impeded
 - C. helped
 - D. assisted
 - E. hindered
22. Although the lab assistant openly apologized for allowing the samples to spoil, her _____ did not appease the research head, and she was let go.
- A. insincerity
 - B. frankness
 - C. carelessness
 - D. hesitation
 - E. falsehoods
23. Her last-minute vacation was _____ compared to her usual trips, which are planned down to the last detail.
- A. expensive
 - B. ridiculous
 - C. spontaneous
 - D. predictable
 - E. satisfying

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 7 頁 *請在【電腦卡】作答

24. After staying up all night, she felt _____; however, she still ran three miles with her friends.
- A. sluggish
 - B. exhausted
 - C. vigorous
 - D. apprehensive
 - E. energetic
25. After naturally occurring smallpox was eradicated, the World Health Organization chose to _____ the remaining samples of the virus in hopes that they may be used later in developing means to combat other viruses.
- A. eliminate
 - B. duplicate
 - C. preserve
 - D. retain
 - E. cultivate
26. The advent of the Internet has created an unprecedented increase in communication _____, as it allows for near-instant transmission of information.
- A. limitations
 - B. controversies
 - C. revolutions
 - D. theories
 - E. potential

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 8 頁 *請在【電腦卡】作答

27. Because the architect had found evidence of decay in a supporting wall, her official report _____ the structural integrity of the building as a likely cause of the accident.
- A. suggested
 - B. rejected
 - C. condemned
 - D. validated
 - E. deplored
28. Their friendship has been tested many times without fracturing, and today I can still see that they are _____ each other.
- A. estranged from
 - B. inseparable from
 - C. distanced from
 - D. ambivalent to
 - E. acrimonious to
29. _____ commercial arsenic usage has diminished, its ongoing presence in water and soil continues to be a major public health concern, given the extremely high toxicity of the substance.
- A. After
 - B. While
 - C. Although
 - D. Whereas
 - E. Because

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 9 頁 *請在【電腦卡】作答

30. The doctor's handwriting was entirely _____, much to the frustration of the other staff of the hospital, but some wondered whether it was not intentionally so in order to prevent forgery of prescriptions.
- A. rudimentary
 - B. rustic
 - C. indecipherable
 - D. lucid
 - E. unprofessional
31. Many dressing styles that were seen daring initially have been so widely worn and imitated that the _____ styles are no longer considered as _____.
- A. revealing, copied
 - B. original, commonplace
 - C. proposed, outlandish
 - D. original, outlandish
 - E. proposed, copied
32. The _____ with which a sentence is conveyed is often more crucial to the listener in determining the intended meaning than the actual words _____. For instance, a compliment, when delivered sarcastically, will be perceived by the listener as fairly offensive.
- A. pitch, implied
 - B. inflection, utilized
 - C. accuracy, repudiated
 - D. pitch, repudiated
 - E. accuracy, implied

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 10 頁 *請在【電腦卡】作答

33. Though a movie studio produces films that are _____ and artistic, its priorities often dictate that creativity be _____ to a secondary position since the creative process can _____ the organizational hierarchy of a large studio.
- A. tedious, uplifted, respond to
 - B. expressive, compared, conflict with
 - C. expressive, uplifted, coexist with
 - D. tiresome, relegated, conflict with
 - E. expressive, relegated, conflict with
34. Both science and religion have core tenets that are _____. Nonetheless, because some scientific tenets are in conflict with some religious ones, these tenets cannot all be correct.
- A. disputable
 - B. empirical
 - C. axiomatic
 - D. historical
 - E. ubiquitous
35. Despite what _____ philosophies of child-rearing suggest, there is no imperative that the daily action of raising a child be simple, unambiguous, and unchanging. In other words, no requirement ensures that life follows philosophy.
- A. systematic
 - B. aggressive
 - C. shameless
 - D. random
 - E. inexact

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 11 頁 *請在【電腦卡】作答

36. Although we had planned the soccer match for weeks, no one could have predicted the _____ onset of rainfall that spoiled the match.
- A. fortunate
 - B. welcomed
 - C. unforeseen
 - D. fruitless
 - E. surprising
37. Although the young table-tennis player had the reputation of being excessively taciturn, he seemed not at all _____ conversation.
- A. opposed to
 - B. skilled at
 - C. capable of
 - D. averse to
 - E. included to
38. In recent years, the British seem to have become _____ Americanism: many TV advertisements fall into baseball metaphors, although very few Britons understand the rules of the game.
- A. aggrieved by
 - B. tired of
 - C. hooked on
 - D. enamored of
 - E. indifferent to

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 12 頁 *請在【電腦卡】作答

39. Since a large number of the ores are _____ on the riverbeds, where the chemical processing is less costly, recovery of underground ore veins is not likely to become a _____ procedure.
- A. abundant, cost-effective
 - B. abundant, valuable
 - C. scanty, cost-effective
 - D. preserved, rejected
 - E. scanty, valuable
40. Though she was also considered as a friend of the labor, her voting record in Congress _____ that impression.
- A. confirmed
 - B. belied
 - C. created
 - D. contradicted
 - E. implied

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 13 頁 *請在【電腦卡】作答

Part Three: Reading Comprehension (10 questions, 4% each)

Direction: Read the passage and select the best choice for each question.

SPY TECHNIQUES FROM THE AMERICAN REVOLUTION

The use of spies — people who secretly collect and report information on the activities, movements, and plans of an enemy — was an important factor America winning the American Revolution. Spies some 200 years ago used a variety of tools and techniques that were at the forefront of technology for their time; that, along with leveraging personal relationships, personal cunning, and much bravery.

Ciphers and coded letters were common ways of communicating secret information. In a cipher, letters represent and replace other letters so that the correspondence would appear nonsensical. Only someone with the key, which referenced corresponding pages and letters from a codebook, would be able to decode the real message. Some groups, such as the Culper Spy Ring, created secret codes which replaced letters with numbers and symbols.

Both the British and the American armies used invisible ink to pass messages. At that time, invisible ink was made from ferrous sulfate and water. James Jay created an invisible ink made of tannic acid. Spies would write their invisible messages between the lines of another letter. Their message could be made visible to its recipient by applying some treatment to the page, such as heat or a chemical substance. Washington highly encouraged the use of invisible ink because it not only made "communications less exposed to detection, but relieved the fears of such persons as may be entrusted in its conveyance."

Letters were also often secreted away in the hidden compartments of otherwise ordinary objects like the hollowed out quills of feather pens, buttons, or hollowed out small, silver balls.

The significant content of secret messages could also be protected by using mask letters. In order to read a mask letter, the recipient of the letter had to have a shaped template to place over the full letter that was identical to the one used by the letter's author. When the mask was placed over a letter, the real contents of it would appear inside the "mask."

Mail delivery at the time was precarious, and letters were easily intercepted. Both the Americans and the British set up Black Chamber Operations, groups that would intercept mail, read it, make a copy if necessary, and then reseal it before sending it to its original destination. There were a number of Black Chamber operations during the American Revolutionary War.

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 14 頁 *請在【電腦卡】作答

41. Were all messages encrypted in the time of the American Revolution?
- A. Yes, Washington required the American army to encrypt all correspondences.
 - B. Yes, Black Chamber Operations would encode and decode all of them.
 - C. No, they could be written in unencoded but invisible way, in masks, or hidden in objects.
 - D. No, the technology had not been invented at the time and it would take too long to encrypt messages manually without a computer.
 - E. No, only the significant content part of the message was encrypted.
42. In a cipher, if letters represent and replace other letters according to a codebook, why couldn't the enemy just steal the codebook and decode the intercepted message?
- A. Because decoding required knowing the pages and letters referenced by the key.
 - B. Because a shaped template to place over the full letter is also required.
 - C. Because the actual message is written between the lines.
 - D. Because the paper still needs to be treated by heat or chemical to be decoded.
 - E. Because the letters were hidden in compartments of ordinary objects.
43. What the meaning of "letter" in the sentence "Spies would write their invisible messages between the lines of another letter"?
- A. A written, typed, or printed communication sent by mail or messenger.
 - B. A symbol of an alphabet.
 - C. The precise terms of a statement or requirement.
 - D. A style of typeface.
 - E. A person who lets someone do something.

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 15 頁 *請在【電腦卡】作答

44. The word "letter" has been used in different meanings. What is its meaning in the sentence "In a cipher, letters⁽ⁱ⁾ represent and replace other letters⁽ⁱⁱ⁾ so that the correspondence would appear nonsensical"?
- A. Both (i) and (ii) mean written communication.
 - B. Both (i) and (ii) mean symbols.
 - C. (i) means written communication, and (ii) means symbols.
 - D. (i) means symbols, and (ii) means written communication.
 - E. None of the above.
45. Does the word "letter" mean two different things in "... the recipient of the letter⁽ⁱⁱⁱ⁾ had to have a shaped template to place over the full letter^(iv) to read the intended message"?
- A. Both (iii) and (iv) mean written communication.
 - B. Both (iii) and (iv) mean symbols.
 - C. (iii) means written communication, and (iv) means symbol.
 - D. (iii) means symbol and (iv) means written communication.
 - E. None of the above.
46. Which of the following is a correct description of how a mask letter works?
- A. The real message is invisible to the interceptor because it is masked.
 - B. The mask encodes letters with numbers and symbols.
 - C. The mask contains a hidden compartment to conceal the actual message.
 - D. The mask allows many copies of the letters to be produced by spraying ink.
 - E. The mask is placed over the letter to reveal only the actual message.

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 16 頁 *請在【電腦卡】作答

47. According to Washington, how does invisible ink relieve fears of whom and why?
- A. By providing a second extra cipher, the invisible ink would relieve Culper Spy Ring's fear of the enemy's ability to decode the sender's message.
 - B. By making a copy of the visible part of the message, the invisible ink would relieve the Black Chamber Operations' fear of the enemy's ability to make a copy of the intercepted message.
 - C. By using ferrous sulfate and water, the invisible ink would relieve the recipient's fear of running out of chemical or heat needed to treat the letter.
 - D. By disguising the real message as blanks, the invisible ink would relieve the messenger's fear of the enemy's ability to detect and decode the intercepted message.
 - E. By using tannic acid, the invisible ink would relieve the James Jay's fear of losing trust in the messengers because only he knew the formula to reveal the hidden message.
48. What does the word "precarious" mean in "Mail delivery was precarious?"
- A. Highly reliable and efficient.
 - B. Dangerously and easily captured.
 - C. Slow and expensive.
 - D. At the forefront of technology.
 - E. Patriotic and brave.

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：資訊系統與應用研究所

考試科目（代碼）：英文 (2402)

共 17 頁，第 17 頁 *請在【電腦卡】作答

49. Which of the following is done by the Black Chambers Operations?
- A. Define a codebook.
 - B. Destroy the intercepted mail.
 - C. Encrypt the intercepted mail before resealing and sending it.
 - D. Treat the intercepted mail by heat or chemical to reveal the invisible text.
 - E. Read intercepted mail.
50. How could ordinary objects like feather pens, buttons, or silver balls be used by spies at the time of the American Revolution?
- A. They would be chemically treated to carry invisible messages.
 - B. They would contain the cipher key in their hidden chamber so the recipient would know how to decode the message.
 - C. They would be used as the mask to reveal the significant part of the message.
 - D. They would be used to hide letters in their hollowed out hidden compartments.
 - E. They were used as another form of cipher by imprinting symbols that otherwise would not be understood by the enemy.