

I. Multiple Choice Questions: Choose only one correct answer to each question 60%

Part A. Vocabulary 20%

- ____ 1. Taiwan today is a _____ democracy with a highly competitive market-oriented economy.
(A) hulking (B) humpy (C) hurly-burly (D) hole-and-corner
- ____ 2. CD sales have been declining year-on-year with the introduction of CD _____ and MP3 files.
(A) burners (B) collectors (C) composers (D) lovers
- ____ 3. We're always in search of _____ in technology development.
(A) trespass (B) straightness (C) crackdown (D) breakthroughs
- ____ 4. Although youthful, vigorous and prosperous, the Taiwanese have become victims of an education system that seeks to produce _____ earners rather than original thinkers.
(A) wholesome (B) high-wage (C) weary (D) high-handed
- ____ 5. John's _____ is bothering him because he lied to his colleagues.
(A) consensus (B) conscience (C) consciousness (D) consentience
- ____ 6. Mary is very _____. She says exactly what she's thinking even if it hurts.
(A) questionable (B) befuddled (C) bashful (D) blunt
- ____ 7. This gourmet restaurant has a most _____ group of patrons, including Catholics, Moslems, Buddhists and Hindus.
(A) elated (B) elective (C) eclectic (D) elastic
- ____ 8. Investors have become more _____ after the recent stock market crash.
(A) circumspect (B) circumfluent (C) circumjacent (D) circumpolar
- ____ 9. In Chinese, there is no _____ at the end of a word to indicate the plural form.
(A) inflection (B) infliction (C) inflation (D) infraction
- ____ 10. The _____ growth in the number of users of the Internet is the most amazing phenomenon in mass communication in recent years.
(A) explorative (B) exponential (C) expiatory (D) explicable

Part B. Grammar 20%

- ____ 11. The music is becoming more diverse that young people _____ complete freedom to access and exchange information.
(A) having (B) being (C) were (D) have had
- ____ 12. Without direct access to information and resources in WHO (World Health

- Organization), Taiwan _____ to fight diseases on its own.
(A) has had (B) had being (C) has been (D) was
- _____ 13. Tina is so candid that when I'm listening to her, I feel _____ she is my trust friend.
(A) even if (B) as if (C) what if (D) that if
- _____ 14. Nowadays, the television _____ as a babysitter, with nannies particularly.
(A) was used (B) has using (C) is being used (D) is been used
- _____ 15. Susan _____ stupid all in her life.
(A) has been being (B) is been (C) has being (D) was been
- _____ 16. The agency sent us several applicants, the most qualified _____ was the first one.
(A) that (B) whose (C) in whom (D) of whom
- _____ 17. It has been suggested that each member _____ some money for the renovation of the clubhouse.
(A) contributes (B) has contributed (C) contribute (D) has been contributed
- _____ 18. It _____ by many that she had married for money.
(A) is thinking (B) thinks (C) was thought (D) thought
- _____ 19. I haven't gone to that exhibit yet, nor do I have any intention _____.
(A) x (B) to (C) in (D) of
- _____ 20. _____ every effort is being made to improve the financial condition of this company, the term of the loan will be extended.
(A) As much as (B) As well as (C) Since that (D) Inasmuch as

Part C. Cloze Test 20%

The talented Tom Hanks has played many different movie roles. Terminal is the first movie _____ 21 _____ he must speak with a European accent. He plays Viktor, a traveler _____ 22 _____ small country is destroyed by war when he takes a plane to America. Viktor cannot return home, _____ 23 _____ can he enter the U.S. Then he falls in love with a pretty flight attendant and _____ 24 _____ plan an escape!

- _____ 21. (A) in which (B) where (C) that (D) which
_____ 22. (A) that (B) whom (C) who (D) whose
_____ 23. (A) nor (B) or (C) seldom (D) even
_____ 24. (A) is (B) have (C) must (D) ought

The roommate situation is the first challenge students face. Learning to tolerate a stranger's idiosyncrasies _____ 25 _____ teach flexibility and the art _____ 26 _____ compromise. But the learning process is often painful.

___25. (A) ought (B) may (C) like (D) as

___26. (A) in (B) at (C) of (D) on

Campus officials say that communicating on the Internet or roaming the huge universe of information ___27___ the World Wide Web holds an especially powerful lure for many college students ___28___ it takes them ___29___ a vast new realm of learning and research, usually ___30___ no cost.

___27. (A) on (B) in (C) at (D) of

___28. (A) which (B) whose (C) what (D) because

___29. (A) for (B) into (C) of (D) at

___30. (A) of (B) on (C) at (D) in

II. Reading Comprehension: Choose the best one answer to each question
20%

Learning is an active, constructive process whereby the learner strategically manages the available cognitive resources to create new knowledge by extracting information from the environment and integrating it with information already stored in memory. With the rapid development of computer technology and its application in language instruction, many researchers in the past ten years have engaged in the study of this kind of active and constructive learning process in multimedia environment. Researchers have found that a multimedia learning environment provides the means to facilitate the learning process by manipulating the availability of specific information at a given moment, by controlling the duration of that availability, by varying the way information is presented, and by ensuring the ease with which it can be searched.

___31. What is the main idea of the passage?

(A) Multimedia learning environment organizes the information for learners.

(B) Multimedia learning environment differs from computer technology.

(C) Multimedia learning environment provides the availability in the learning process.

(D) Multimedia learning environment controls the duration of learning.

___32. Which one of the followings can identify the topic?

(A) Researchers have pointed out the rapid development of learning.

(B) Multimedia environment facilitates the learning process.

(C) The learner extracts information and stores in memory.

(D) Learning is an active and constructive process.

Complimenting is a kind of speech act belonging to the category of expressives.

Complimenting is a positive politeness strategy aiming to praise the addressees for a past or present action. In other words, compliments are prime examples of speech acts that notice and attend to the hearer's interests, wants, and needs. A frequent denotation is Holmes's (1988:446) definition: "A compliment is a polite speech act which explicitly or implicitly attributes credit to someone other than the speaker. Usually, the person addresses for something good which is positively valued by the speaker and hearer." She defines a compliment as a speech act that is accomplished either explicitly or implicitly to express admiration or approval for some good of the addressee. In such a situation, explicit compliments are those whose meaning is understood literally, as in a direct speech act. Similarly, implicit compliments account for indirect speech acts whose meaning can be inferred among participants.

- ____ 33. Which one of the followings expresses the topic of this passage?
- (A) The various categories of expressives
 - (B) The direct and indirect speech acts
 - (C) The positive politeness strategy of the speakers
 - (D) The definition and classification of compliments
- ____ 34. Which one of the followings is not correct?
- (A) Compliments notice the hearer's interests and needs.
 - (B) A compliment expresses admiration for something good of the addressee.
 - (C) A compliment is a polite speech which is valued by the speaker.
 - (D) Implicit compliments are those whose meaning is understood literally.

Traditionally, sculpture as a genre has not been as powerful of a creative phenomenon in Pacific-rim cultures like China, Japan or Korea. But it has thrived in cultures of the Aegean, like the Cycladic islands and later the mainland of Greece centering on Athens where stone sculpture reached its apogee early, attaining ease and fluidity in the round, as well as becoming a palpable conveyor of motion and emotions. To this day, Europeans walking the streets, let alone going into cathedrals or museums, are profoundly familiar with images of solid forms moving in space.

- ____ 35. The passage is about ____.
- (A) Aegean
 - (B) space
 - (C) sculpture
 - (D) genre

After I had been living in Singapore for 18 months, my return to the U.K. was depressing when it came to fish dinners. Having enjoyed my sojourn in Southeast Asia and discovered Asian wet-market culture with the wonderful selection of live seafood and fresh fish including blue-fin tuna, wild sea bass, and coral grouper, going home was a shock. Of course, in the U.K. we have superb cold-water fish such as

halibut, cod, and haddock, but when you buy seafood you'll find yourself gazing in disbelief at the prices and at the sorry-looking half-frozen display of defrosting specimens that an Asian chef would reject immediately.

- ____ 36. Which one of the followings is not listed in the passage?
(A) geographic region (B) restaurants (C) delicious dishes
(D) markets
- ____ 37. What might be a good title for this passage?
(A) Prices of Fish (B) Defrosting Specimens (C) Southeast Asia
(D) Wet-market Culture

If you are a frequent patron of fast-food restaurant in Taipei, you may have discovered that most stores have added some new dishes to their menus. For the first time since it set up shops in Taiwan 19 years ago, KFC has introduced a pork burger. McDonald has also added a pork burger to its offerings, and Japanese-owned Mos Burger has started to serve a shrimp burger and seafood meals.

All of the changes were adopted to make up for declining sales of chicken and beef following the spread of avian influenza across 10 countries in Asia since mad cow disease discovered on December 23, 2003 in Washington State in the United States. Although the bird flu has appeared in Taiwan located as the weaker strain this year, the government's Council of Agriculture reports that at least affected 371,000 chickens and ducks had been put to death in the end of February. With regard to the mad cow disease, the government stipulated that any beef containers packaged after December 24, 2003 would not be allowed to enter Taiwan.

- ____ 38. Which one of the followings is not correct?
(A) The avian flu and mad cow disease have caused consumers to promote seafood.
(B) The bird flu has appeared in Taiwan located as the weaker strain.
(C) The government stipulated a ban on beef imports.
(D) Fast-food restaurants set up in Taiwan nineteen years ago.
- ____ 39. The main idea of this passage is that _____.
(A) fast-food restaurants have added new dishes for consumers.
(B) the spread of avian influenza comes across ten countries in Asia.
(C) the owners of the fast-food restaurants acknowledge the great impact on the diseases.
(D) mad cow disease has been discovered in Washington State in the United States.
- ____ 40. It can be inferred from this passage that _____.
(A) fast-food restaurant owners welcome beef imports from mad-cow-

disease-free countries.

- (B) fast-food restaurants have to revise their menus or sources of supply.
- (C) the wave of international epidemics has triggered considerable anxiety among government workers.
- (D) the sales of chicken and beef have been changed to well-cooked rice.

III. Writing an Essay 20%

Topic: Art is engendered in the genuine creativity and inspiring originality. Some say that genius is liberated only when the artist remains deaf to outside noises, deeply fascinated by, and more than satisfied with, the ever-expanding horizons within. What are your viewpoints and expectations about genius?

本科目得使用電子計算機

壹、生物統計概念題，每題 12 分，計 60 分。

- 一、在進行兩組獨立樣本平均數差異比較($\bar{X}_1 - \bar{X}_2$)的 t 檢定時，當此兩組樣本所屬群體的變異數相等($\delta_1^2 = \delta_2^2$)不成立時，t 檢定的計算公式為何？
- 二、若顯著水準 α 定為 .05 時，試以標準常態 Z 分佈圖標示雙尾檢定(two-tailed test)與單尾檢定(one-tailed test)之 Z 的臨界值(critical value)各為多少？
- 三、某研究者欲探討兩變項之間的相關(correlation)，若此兩變項皆為類別名義(nominal)性質，試問應以何統計分析測定相關？又若此兩變項皆為類別次序(ordinal)性質，應以何統計分析測定相關？
- 四、兩組獨立樣本平均數差異比較的 t 檢定，若欲比較的依變項分佈呈嚴重之偏態分佈(skewed distribution)，且 t 檢定結果 P 值 $> .05$ 情形。試問對此不顯著差異之結果，你如何解讀？
- 五、某研究者欲從醫學中心過敏免疫風濕內科所收集 100 名痛風患者之年齡，以及日常飲食中普林攝取量(mg/100gm- food)，以線性複迴歸分析(multiple linear regression)預測患者血中尿酸濃度(mg/dl)，而得出此複迴歸分析方程式為 $\hat{Y} = 6.7 + .032 X_1 + .079 X_2$ ，且 $R^2 = .12$ 。其中 \hat{Y} 為所要預測的血中尿酸濃度， X_1 為患者之年齡， X_2 為飲食中普林攝取量。試問此研究者可透過何統計分析以進一步查證此方程式確為最佳預測的複迴歸分析模式(即此方程式 fit 此資料相當不錯)。

(背面有試題)

貳、生物統計應用題，每題 20 分，計 40 分。

- 一、以隨機分派方式將被心臟內科主治醫師診斷確定為高血壓病人 60 位分為 A、B 兩組各接受 A、B 兩種降血壓藥物的治療。試根據以下臨床治療所得數據，以合適之統計分析評估此兩種藥物降壓療效之優劣。

$$\bar{X}_A = 150.3 \text{ mmHg} \quad S_A = 16.2 \text{ mmHg} \quad n_A = 30$$

$$\bar{X}_B = 145.3 \text{ mmHg} \quad S_B = 7.1 \text{ mmHg} \quad n_B = 30$$

$$(F_{.95, 29, 29} = 1.85; \quad t_{.975, df=58} = 2.0)$$

- 二、一般外科對於乳癌早期篩檢通常有超音波(echo)與攝影(mammagraphy)兩種。今有 200 位 40 至 60 歲間年齡的婦女，第一階段先接受超音波檢查，以確定陽性與陰性之比例，之後再接受第二階段攝影檢查，同樣確定陽性與陰性的比例。試根據下列 2x2 列聯表(contingency table)所示，以合適之統計分析檢定前後兩階段不同篩檢結果，陽性比例是否有顯著性改變。 $(\chi^2_{.95, df=1} = 3.83)$

超音波檢查

		超音波檢查	
		陽性 (+)	陰性 (-)
攝影檢查	陽性 (+)	10	10
	陰性 (-)	30	150

解釋名詞(每題 5%)

1. OSF
2. DMFS
3. CPI
4. pathfinder survey
5. cluster sampling
6. Kappa 統計法
7. confidence interval
8. standardized mortality ratio
9. prevalence rate
10. time-span study
11. seramal calculus
12. plaque indices

簡答題(每題 5%)

1. 口腔癌 TNM 分期制度中 $T_3N_1M_0$ 代表的意義是什麼?
2. 與齲齒相關的飲食因素是什麼?
3. 何謂口腔衛生教育?
4. 如何使用氟化物預防齲齒?
5. 牙菌斑引起齲齒的原因是什麼?
6. 肝炎病毒目前已發現有 A、B、C、D、E 五種，其感染途徑是什麼?
7. 如何預防牙周病?
8. 如何預防口腔癌?