一、改錯題，請挑出句子中的錯字，並改正之（例如：錯勿→錯誤。每題
　　2分，計20分）
　（一）　辦公室的秘書說：「總經理正在接待另一位客戶，請您稍後。」
　（二）　百貨公司換季打折，推出優惠方案，消費者得趕緊搶購，以
　　　　　免向虞。
　（三）　這學生不擅時間管理，工讀及課業顧此思彼，兩邊都不順利。
　（四）　他到處留下的承諾往往無法履行，結果在親友間信用破產。
　（五）　《暗戀桃花源》融入台灣的歷史文化是現代劇場的精典作品。
　（六）　因為預算有限，老闆交待出差的員工一切花費務必斟酌，樽
　　　　　節使用。
　（七）　未曾親眼目睹就劇下判斷，容易導致錯誤的結論。
　（八）　因為環境過度污染，許多保育類動物濱臨滅絕。
　（九）　日本新任革新大臣外型亮麗，烽芒幾乎要蓋過了新首相。
　（十）　埃及法老王墓因為有大量財物陪葬，引發盜墓者覬覦。

二、作品與作者填空：請為（一）項的作品名稱，在（二）項中找到正確
　　的作者姓名（注意：可不必抄題，但請標明「題號」。每題 2 分，計
　　20分）
　（一）　作品名稱：
　1. 竇娥冤　　2. 紅樓夢　　3. 狂人日記　　4. 金鎖記
　5. 鶯鶯傳　　6. 駱駝祥子　7. 看海的日子　8. 鱷魚手記
　9. 警世通言　10. 浮生六記
　（二）　作者姓名：
　A.賴和　　　B.李昂　　　C.施耐庵　　D.魯迅　　　E.曹雪芹
　F.白先勇　　G.湯顯祖　　H.元稹　　　I.白居易　　J.關漢卿
　K.老舍　　　L.沈從文　　M.張愛玲　　N.黃春明　　O.蒲松齡
　P.馮夢龍　　Q.凌濛初　　R.王文興　　S.邱妙津　　T.紀大偉
　U.沈復

三、　請簡要解讀以下這一篇「散曲」，並發抒心得（三百字左右。30分）
　　想人生七十猶稀。百歲光陰，先過了三十。七十年間，十歲頑童，十
　　載尪羸。五十歲除分畫黑，剛分得一半兒白日。風雨相隨，兔走烏飛。
　　仔細沈吟，都不如快活了便宜。（元・盧摯〈折桂令〉）

四、命題作文（30分）
　　教育部近年來加強促進品德教育，多方鼓勵將品德教育融入家庭及學
　　校教育中。你覺得在資訊科技發達的社會中，品德教育有什麼樣的重
　　要性，請撰文陳述你的意見。

I. Choose the best answer. (30%)

1. Did Ms. Brown _____ the recipe book from the library?
   A. lend
   B. borrow
   C. loan
   D. took

2. Don't you get angry when someone _____ your questions?
   A. ignores
   B. concludes
   C. hesitates
   D. tends

3. Van Gogh's works were not _____ until after his death.
   A. appreciated
   B. approached
   C. applauded
   D. appeared

4. Some rice fields in Southeast Asia require _____ to grow crops.
   A. irritation
   B. reservation
   C. irrigation
   D. concentration

5. Whether we are _____ of it or not, our dream lives can have an effect on our real lives.
   A. consequent
   B. conspicuous
   C. conscience
   D. conscious

6. Eric depends on his thesis advisor for _____.
   A. adverse
   B. advise
   C. advice
   D. advisory

7. All students without _____ should submit the assignment on time.
   A. connection
   B. avocation
   C. exception
   D. resolution

8. The many cases of food poisoning in Taiwan each year _____ people.
   A. alarm
   B. allege
   C. alleviate
   D. allude

9. At our school, all students are _____ to take a minimum of four courses in the natural sciences.
   A. acquired
   B. exempted
   C. exercised
   D. required

10. In many countries, it is a _____ to wear black at funerals.
   A. prevention
   B. convention
   C. ostentation
   D. abstention

11. Brian has a lot of _____; he never quits until the job is done.
   A. consistence
   B. persistence
   C. subsistence
   D. assistance

12. Mary's favorite beverages are coffee and mineral water. Rosy, _____, drinks only milk or juice.
   A. however
   B. then
   C. too
   D. therefore

13. Mom said dinner would be served at 6:45, but we didn't start eating _____7:30.
   A. about
   B. until
   C. since
   D. less than

14. After winning the singing contest, Yu-chun skipped _____ down the street.
   A. happiest
   B. more happily
   C. happily
   D. happy

15. While trying to _____ a cat from a tree, Tony fell and broke his ankle.
   A. have rescued
   B. rescue
   C. rescuing
   D. be rescuing

II. Choose the word or phrase that is <u>incorrect</u>.   (10%)

1. The chef prepared a (A) <u>basic</u> dish with daring (B) <u>ingredients</u> that gave it an exotic (C) <u>flavor</u> none of us could have (D) <u>prediction</u>.

2. As (A) <u>with</u> other (B) <u>kind</u> of public speaking, the best way (C) <u>to become</u> a better impromptu speaker is (D) <u>to practice</u>.

3. British music (A) <u>used</u> to be (B) <u>very</u> more popular in (C) <u>the</u> United States than it (D) <u>is</u> today.

4. Mr. Lin, (A) <u>who</u> transferred to this school three years (B) <u>ago</u>, (C) <u>he</u> is (D) <u>an excellent teacher</u>.

5. The letter (A) <u>that</u> George sent (B) <u>it</u> (C) <u>from</u> Kaohsiung (D) <u>is</u> incomplete.

III. Use the words in the box to complete the paragraphs. <u>Four</u> words are extra. <u>Just use the letter. Do not write the whole words.</u> (20%)

(A) according	(B) attend	(C) conducted	(D) consecutive
(E) declare	(F) develop	(G) fever	(H) insufficient
(I) lack	(J) promote	(K) ranked	(L) released
(M) significant	(N) upgrade		

Up to 80 percent of Taiwan parents hoped the government would _____1_____ English the second official language of Taiwan, _____2_____ to findings of a survey _____3_____ yesterday.

The survey was _____4_____ by King Car Education Foundation in December 2005 on 2,059 parents around Taiwan. It had a margin of error of plus or minus 2.4 percentage points. The survey showed that 90 percent of the parents _____5_____ confidence in their English ability.

Meanwhile, more than 60 percent of Taiwan parents send their children to cram schools to learn English, with 70 percent hoping their children will _____6_____ an interest in English at the cram schools.

Officials at the foundation noted that the TOEFL scores of Taiwan students have for several _____7_____ years occupied the bottom places among Asian students, and that the TOEIC scores of the Taiwan people _____8_____ ninth from the bottom around the world, which they said shows that the English ability of the Taiwan people is still _____9_____ despite the English-learning _____10_____ in the country.

IV. Reading Comprehension (20%)

For theatergoers, no visit to Ireland would be complete without attending a performance at Dublin's Abbey Theater. Like London's Old Vic, the Abbey Theater had its beginnings in a coffee house. Many of the first performances of the group which would become known as the Abbey Players were held at the Coffee Palace on Townsend Street, Dublin. Both houses were intended as places of entertainment for the lively temperance movement of the late 19th century.

Founded in 1904 as an Irish national theater, the Abbey was to become the first state-endowed English-speaking theater in the British Commonwealth. The first London engagement of this young, unknown Irish theater troupe brought recognition that they

"expressed the idealism and poetry of the national sentiment." The theater has since become famous for the playwrights and actors who got their start on the Abbey stage. Although it is visited yearly by tourists from all over the world, the Irish have come to consider the Abbey particularly their own.

When the plays of W.B. Yeats, J.M. Synge, and Sean O'Casey were first performed there, they were not always received with quiet appreciation. At the premiere performance of Synge's *Playboy of the Western World*, which infuriated the local population because of the negative way it portrayed the Irish peasant, the police were called in to maintain order! A similar reaction occurred at the opening night performance of Sean O'Casey's *The Plough and the Stars*.

Today the Abbey Theater has a new face. A fire destroyed the original structure in 1951. Although the building which now houses the theater is new, the character of the Abbey remains unchanged. Visit the Abbey and share in a fine theatrical tradition. Who knows? You may view the offering of a new playwright whose work will some day become a classic.

Decide whether the following statements are *True (T) or False (F)*.

1. Dublin's Abbey Theater had its beginnings in a coffee house.
2. The Old Vic was another popular theater in Dublin.
3. The first performances of the Abbey Players were held at the Coffee Palace on Townsend Street, Dublin.
4. The Abbey was founded in 1804 as an Irish national theater.
5. The Abbey was the second state-endowed English-speaking theater in the British Commonwealth.
6. The theater has become famous for the playwrights and actors who got their start there.
7. The plays of Yeats, Synge, and O'Casey were always received with quiet appreciation.
8. At its final performance, Synge's *Playboy of the Western World* infuriated the local population.
9. A fire destroyed the original structure of the theater in 1951.
10. Since the fire, the theater's character has never been the same.

V. Essay. Some people prefer to eat out in a restaurant. Others prefer to prepare food and eat at home. Which do you prefer? Write an essay of about 200 words to discuss your preference. **(20%)**

PART I.　Fill in the blank (9 points each. No partial credits)

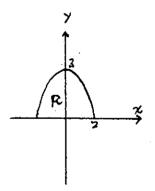1. $\lim\limits_{n \to \infty}(\dfrac{1}{n+1}+\dfrac{1}{n+2}+...+\dfrac{1}{2n}) = $ _____.

2. If $f(x)$ is a function satisfying $f'(x) = \dfrac{\sin x}{x}$, $f(\dfrac{\pi}{2}) = a$, $f(\dfrac{7\pi}{3}) = b$,

　　then $\displaystyle\int_{\pi/2}^{7\pi/3} f(x)\,dx = $ _____. (express your answer in terms of a and b).

3. If $\displaystyle\int_{1}^{\infty}(\dfrac{x}{ax^2+1} - \dfrac{2}{3x})dx$ is a convergent improper integral, then $a = $ _____.

　　and the value of the improper integral is _____.

4. The interval of convergence of the power series $\sum \dfrac{4^n}{n+1}(x-2)^n$ is _____.

5. The line integral $\displaystyle\int_{C} F \cdot dr = $ _____, where $F = \dfrac{-yj + xi}{4x^2+y^2}$,

　　and C is the unit circle traced counterclockwise.

6. $\displaystyle\iint_{R}\sin(9x^2 + 4y^2)dA = $ _____, where R is part of the ellipse in the right figure.

7. $\lim\limits_{n \to \infty}\dfrac{1}{n}(1 + \sqrt[2]{2} + \sqrt[3]{3} + ... + \sqrt[n]{n}) = $ _____.

8. The area of the region that is inside both curves: the cardioid $r = 1+\cos\theta$ and the
　　circle $r = 1$ is _____.

PART II. Show your work to get full credits. (14 points each)

1.　(a) Show that $\displaystyle\int_{0}^{\infty} xe^{-nx}dx = \dfrac{1}{n^2}$, $n = 1, 2, 3....$

　　(b) Use above result to show that $\displaystyle\int_{0}^{\infty}\dfrac{x}{e^x - 1}dx = \sum_{n=1}^{\infty}\dfrac{1}{n^2}$

2. Let $y = h(t) = \dfrac{1}{1 + 9e^{-0.08t}}$ then y satisfies the differential equation $y' = f(y)$.
　　(a) Find the function $f(y)$.
　　(b) The function $y = h(t)$ has a unique inflection point in $(0, \infty)$, find this point.

1. Problems with short answer (30%)
    a. (10%) List the steps in the fetch-execute cycle.
    b. (5%) What is a secondary storage device, and why are such devices important?
    c. (10%) Name the components of a von Neumann machine.
    d. (5%) What does it mean to say that a processor is 2.8 GHz?

2. (10%) Rewrite the following code segment as an equivalent segment that uses a for statement.

```
product = 1;
next = 1;
while (next <= m) {
        product = product * next;
        next = next + 1;
}
```

3. (10%) What is the output of this code segment?

```
for   (k = 5;   k > 0;   k = k - 1) {
    for    (i = 1; i <= 5 - k;   i = i + 1)
        printf(".");
    for   (j = 1;   j <= 2 * k - 1;   j = j + 1)
        printf("V");
    printf("\n");
}
```

4. (50%) Design and write a C program which computes the highest common factor between two numbers A and B. Besides, provide the flowchart of this program.