

系所(組)別：國企所碩士班在職生

考試科目：企業管理

1. 試述外來投資對我國經濟利率之影響，以及我國投資環境之優缺內容。(25分)

2. 試述跨國併購的目的，以及跨國併購的風險。(25分)

3. 請說明品牌權益的意義，並舉一企業品牌為例，說明其符合「簡單且短」、「容易辨別和記憶」、「與利益結合」三原則。(25分)

4. 請說明轉換型領導和魅力型領導的意義及差異。(25分)

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2. 試述跨國併購的目的，以及跨國併購的風險。(25分)

3. 請說明企業策略可以分成哪三種層次？各層次主要的內涵是什麼？(25分)

4. 請以蘋果電腦 iPod 為例，說明其產品生命週期正處於何種階段，並說明其理由。(25分)

一、(50%) Please answer the following ten questions:

- (5%) 1. If you were performing a regression analysis with  $\alpha$  set at .05 for a sample of 36 observations,
- the degrees of freedom are 35.
  - the  $t$  value to use in testing  $H_0: \beta_1 = 0$  versus  $H_a: \beta_1 \neq 0$  would be based on 34 degrees of freedom and the appropriate column to use in the table would be headed by .025.
  - you will reject a false  $H_0$  about 5% of the time.
  - your results will be significant 95% of the time.
- (5%) 2. A  $2 \times 3$  factorial experiment was run in a completely randomized design, with three replications per treatment combination. If the  $p$ -value calculated for a test for factor interaction is less than .01, what is the appropriate conclusion?
- There is no significant interaction; the main effects  $A$  and  $B$  should now be investigated.
  - There is a significant interaction between  $A$  and  $B$ ; the main effects  $A$  and  $B$  should now be investigated.
  - There is no significant interaction; therefore, there is no effect due to either of the two factors,  $A$  or  $B$ .
  - There is a significant interaction between  $A$  and  $B$ ; the attention of the experimenter should now be focused on the individual factorial treatment means.
- (5%) 3. As a result of a concern for maintenance scheduling, the company would like to have low variability in tire wear. In light of this concern, which is the most appropriate form of the null and alternative hypothesis which they might want to investigate?
- $H_0: \sigma_A^2 = \sigma_B^2; H_a: \sigma_A^2 \neq \sigma_B^2$
  - $H_0: \sigma_A^2 \geq \sigma_B^2; H_a: \sigma_A^2 < \sigma_B^2$
  - $H_0: \sigma_A^2 < \sigma_B^2; H_a: \sigma_A^2 > \sigma_B^2$
  - $H_0: \sigma_A^2 < \sigma_B^2; H_a: \sigma_A^2 \geq \sigma_B^2$
- (5%) 4. Suppose an experimenter wants to compare the manual dexterity of workers who have and who have not been part of a special training program in order to decide whether the program is helpful. Which of the two designs described below diminishes the influence of person-to-person fluctuation in dexterity.
- Paired data design with before and after training measurements on the same persons.
  - Two independent samples design where one group is given the training program and the other is not.
- (5%) 5. Which of the following statements are true about continuous and discrete random variables?
- A variable that can assume any value corresponding to a point on a line variable would be properly classified as a continuous random variable.
  - A variable that can assume any value corresponding to a point on a line interval would be classified as a discrete random variable.
  - In general, measurements derived from such things as heights and weights of individuals form discrete data.
  - The number of children in each of 100 families is a continuous random variable.

- (5%) 6. A researcher in physical education studied whether a jogging program would reduce the resting pulse rate of men aged 40-50. Using a sample of 8 men, the results before and after completion of the program were:

Subject	1	2	3	4	5	6	7	8
Pulse rate before	74	86	80	98	85	83	74	92
Pulse rate after	70	85	82	90	82	79	71	89

Which of the following is the best interpretation of the result if the 99% confidence interval is  $(-3.222, .005)$ ?

- The jogging program will reduce the resting pulse rate.
- The jogging program will increase the resting pulse rate.
- The jogging program will not significantly influence the resting pulse rate.
- None of the above is correct.
- Cannot be determined without additional information.

- (5%) 7. Which of the following is always a true statement concerning two events,  $A$  and  $B$ ?
- If  $A$  and  $B$  are independent, they are also mutually exclusive.
  - If  $A$  and  $B$  are dependent, then they are also mutually exclusive.
  - If  $P(A|B) = P(A)$ , then  $A$  and  $B$  are independent.
  - If  $P(A|B) = P(B|A)$ , then  $A$  and  $B$  are independent.
  - If  $A$  and  $B$  are mutually exclusive, then  $A$  and  $B$  can never occur on the same performance of the experiment.

- (5%) 8. If  $A$  and  $B$  are two events with  $P(AB)$  greater than zero, then the events  $A$  and  $B$  must
- be complementary events.
  - be independent.
  - be mutually exclusive.
  - not be mutually exclusive.
  - be dependent.

- (5%) 9. One can estimate more accurately with small samples whenever
- the sample standard deviation is large.
  - the level of confidence is at least 95%.
  - the sample mean is quite close to the population mean.
  - the population from which the sample mean is drawn is normal or is quite close to normal.

- (5%) 10. Which of the following random variables are LEAST apt to be Poisson distributed?
- The number of nuts in a \$1.50 candy bar.
  - The weight of a \$1.50 candy bar.
  - The number of stalled cars per day in the company parking lot.
  - The number of people arriving per 10-minute interval at a fast food outlet.

## 二、 Use the 0.05 level of significance for the following tests.

- 15% 1. The mentalist Bob claims that he has the power to read minds and he boldly challenges anyone to prove otherwise. If Bob wins the challenge, the challenger must pay him \$100,000, and Bob agrees to disavow any mental powers if he loses the challenge. An experiment is devised whereby a neutral third party rolls a die and concentrates on the outcome for one minute; then Bob must identify the outcome while in another room. This is repeated for a total of 30 different trials, and the die results are listed in the accompanying table. Bob lost the challenge because he correctly identified only four outcomes, whereas someone making random guesses typically gets five of them correct. However, Bob charges that the experiment is unfair because the outcomes of the die are not uniform.

Die outcome	1	2	3	4	5	6
Frequency	2	8	4	3	7	6

8% (1) Test Bob's claim that there is sufficient evidence to conclude that the die is not fair, because all outcomes are not equally likely.

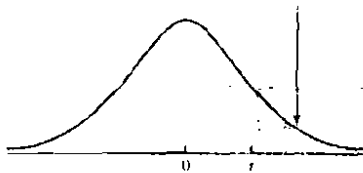
7% (2) Find the p-value in (1) and interpret its meaning.

- 10% 2. Assume that in **Table 1**, the letters A, B, C and D represent the choices on the first question of a multiple-choice quiz. Also assume that  $x$  represents men and  $y$  represents women and that the table entries are frequency counts, so 66 men chose answer A, 77 women chose answer A, 80 men chose answer B, and so on. Test the claim that men and women choose the different answers in the same proportions.

Table 1

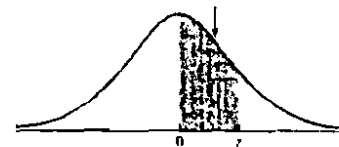
	A	B	C	D
X	66	80	82	75
Y	77	89	94	84

- 10% 3. Refer to **Table 1** in problem 2 above. Assume that Table 1 lists test scores for four people, where the  $x$ -score is from a test of memory and the  $y$ -score is from a test of reasoning. Test the claim that there is linear relationship between the  $x$ - and  $y$ -scores.
- 15% 4. Refer to **Table 1** in problem 2 above. Assume that Table 1 lists test scores for four people, where the  $x$ -score is from a pretest taken before a training session on memory improvement and the  $y$ -score is from a posttest taken after the training.
- 8% (1) Test the claim that the training session is effective in raising scores.
- 7% (2) Find the power the test if in fact the true population  $y$ -score is ten points more than the population  $x$ -score.



$\alpha$ :	0.10	0.05	0.025	0.01	0.005
d.f. 1	3.078	6.314	12.706	31.821	63.657
2	1.886	2.920	4.303	6.965	9.925
3	1.638	2.353	3.182	4.541	5.841
4	1.533	2.132	2.776	3.747	4.604
5	1.476	2.015	2.571	3.365	4.032
6	1.440	1.943	2.447	3.143	3.707
7	1.415	1.895	2.365	2.998	3.499
8	1.397	1.860	2.306	2.896	3.355
9	1.383	1.833	2.262	2.821	3.250
10	1.372	1.812	2.228	2.764	3.169
11	1.363	1.796	2.201	2.718	3.106
12	1.356	1.782	2.179	2.681	3.055
13	1.350	1.771	2.160	2.650	3.012
14	1.345	1.761	2.145	2.624	2.977
15	1.341	1.753	2.131	2.602	2.947
16	1.337	1.746	2.120	2.583	2.921
17	1.333	1.740	2.110	2.567	2.898
18	1.330	1.734	2.101	2.552	2.878
19	1.328	1.729	2.093	2.539	2.861
20	1.325	1.725	2.086	2.528	2.845
21	1.323	1.721	2.080	2.518	2.831
22	1.321	1.717	2.074	2.508	2.819
23	1.319	1.714	2.069	2.500	2.807
24	1.318	1.711	2.064	2.492	2.797
25	1.316	1.708	2.060	2.485	2.787
26	1.315	1.706	2.056	2.479	2.779
27	1.314	1.703	2.052	2.473	2.771
28	1.313	1.701	2.048	2.467	2.763
29	1.311	1.699	2.045	2.462	2.756
30	1.310	1.697	2.042	2.457	2.750
31	1.309	1.696	2.040	2.451	2.744
32	1.309	1.694	2.037	2.449	2.738
33	1.308	1.692	2.035	2.445	2.733
34	1.307	1.691	2.032	2.441	2.728
35	1.306	1.690	2.030	2.438	2.724
36	1.306	1.688	2.028	2.435	2.719
37	1.305	1.687	2.026	2.431	2.715
38	1.304	1.686	2.024	2.429	2.712
39	1.304	1.685	2.023	2.426	2.708
40	1.303	1.684	2.021	2.423	2.704
41	1.303	1.683	2.020	2.421	2.701
42	1.302	1.682	2.018	2.418	2.698
43	1.302	1.681	2.017	2.416	2.695
44	1.301	1.680	2.015	2.414	2.692
45	1.301	1.679	2.014	2.412	2.690

t Table



z	.00	.01	.02	.03	.04	.05	.06
0.0	.0000	.0040	.0080	.0120	.0160	.0199	.0239
0.1	.0398	.0438	.0478	.0517	.0557	.0596	.0636
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406
0.4	.1554	.1591	.1628	.1664	.1700	.1736	.1772
0.5	.1915	.1950	.1985	.2019	.2054	.2088	.2123
0.6	.2257	.2291	.2324	.2357	.2389	.2422	.2454
0.7	.2580	.2611	.2647	.2673	.2704	.2734	.2764
0.8	.2881	.2910	.2939	.2967	.2995	.3023	.3051
0.9	.3159	.3186	.3212	.3238	.3264	.3289	.3315
1.0	.3411	.3438	.3461	.3485	.3508	.3531	.3554
1.1	.3641	.3665	.3686	.3708	.3729	.3749	.3770
1.2	.3849	.3869	.3888	.3907	.3925	.3944	.3962
1.3	.4032	.4049	.4066	.4082	.4099	.4115	.4131
1.4	.4192	.4207	.4222	.4236	.4251	.4265	.4279
1.5	.4332	.4345	.4357	.4370	.4382	.4394	.4406
1.6	.4452	.4463	.4474	.4484	.4495	.4505	.4515
1.7	.4554	.4564	.4573	.4582	.4591	.4599	.4608
1.8	.4641	.4649	.4656	.4664	.4671	.4678	.4686
1.9	.4713	.4719	.4726	.4732	.4738	.4744	.4750
2.0	.4772	.4778	.4783	.4788	.4793	.4798	.4803
2.1	.4821	.4826	.4830	.4834	.4838	.4842	.4846
2.2	.4861	.4864	.4868	.4871	.4875	.4878	.4881
2.3	.4893	.4896	.4898	.4901	.4904	.4906	.4909
2.4	.4918	.4919	.4922	.4925	.4927	.4929	.4931
2.5	.4938	.4940	.4941	.4943	.4945	.4946	.4948
2.6	.4951	.4953	.4956	.4957	.4959	.4960	.4961
2.7	.4965	.4966	.4967	.4968	.4969	.4970	.4971
2.8	.4974	.4975	.4976	.4977	.4977	.4978	.4979
2.9	.4981	.4982	.4982	.4983	.4984	.4984	.4985
3.0	.4987	.4987	.4987	.4988	.4988	.4989	.4989

Z Table





一、【25分】

- (1) 華岡公司於97年10月1日開始致力於發展一項新的生產技術，並於12月1日證明該技術符合發展階段資本化之所有條件。若於97年10月1日至11月30日共支出\$500,000，12月1日至12月31日共支出\$200,000。97年12月31日該生產技術之可回收金額(包含該技術可供使用前為完成該技術所需之未來現金流出數)估計為\$120,000。

試作：相關日期應有之分錄。

【15分】

- (2) 陽明山公司採年數合計法提列其於X1年初所購入機器設備的折舊，若設備殘值為成本的十分之二，且知公司X3年提列折舊\$160,000，X5年提列折舊\$120,000。

試作：請求算機器設備預估使用年限與機器設備的成本？

【10分】

二、【15分】

Brown Company deposits all receipts and makes all payments by check. The following information is available from the cash records:

MARCH 31 BANK RECONCILIATION

Balance per bank	\$26,746
Add: Deposits in transit	2,100
Deduct: Outstanding checks	<u>(3,800)</u>
Balance per books	<u>\$25,046</u>

Month of April Results

	<u>Per Bank</u>	<u>Per Books</u>
Balance April 30	\$27,995	\$28,855
April deposits	10,784	13,889
April checks	11,600	10,080
April note collected (not included in April deposits)	3,000	-0-
April bank service charge	35	-0-
April NSF check of a customer returned by the bank (recorded by bank as a charge)	900	-0-

**Instructions**

- (a) Calculate the amount of the April 30:

1. Deposits in transit 【5分】
2. Outstanding checks 【5分】

- (b) What is the April 30 adjusted cash balance? Show all work. 【5分】

三、【10分】

Lott Co. prepares monthly income statements. Inventory is counted only at year end; thus, month-end inventories must be estimated. All sales are made on account. The rate of mark-up on cost is 20%. The following information relates to the month of May.

Accounts receivable, May 1	\$21,000
Accounts receivable, May 31	27,000
Collections of accounts during May	90,000
Inventory, May 1	45,000
Purchases during May	58,000

**Instructions**

Calculate the estimated cost of the inventory on May 31.

四、文明公司 95 年及 96 年底的長期負債及股東權益如下：

	<u>96 年底</u>	<u>95 年底</u>
6 % 應付公司債	\$ 500,000	\$ 500,000
6 % 非參加特別股，每股面值\$100	600,000	500,000
普通股，每股面值\$25	1,200,000	1,000,000
資本公積	100,000	10,000
未分配盈餘（保留盈餘）	300,000	100,000

96 年初增資發行累積特別股及普通股，95 年的稅後純益為\$90,000，96 年為\$120,000，兩年的所得稅率均為 40%。

試作：依據以上資料，分別計算兩年之下列數據，並比較兩年度之優劣：

- (1) 股東權益獲利率（百分比）。
- (2) 普通股股東權益獲利率。
- (3) 可供支付利息的純益相當於公司債利息的倍數。
- (4) 純益相當於特別股利的倍數。
- (5) 普通股每股盈餘。 (20 分)

五、盛利公司需要\$500,000 的資金來擴充現有廠房。資金籌措的方案有二：

甲案：募集十年期，8%公司債（每半年付息一次）。

乙案：發行面額\$10 的普通股 20,000 股，預計每股可售得\$25。

普通股過去 5 年的各項平均數字如下：流通在外 30,000 股，每年每股可以賺到稅後盈餘\$2.60，每股配息\$1。

試作：假設公司債可按 98 發售，根據上述資料，應按何案籌措資金較佳？理由何在？（設所得稅率為 25%） (15 分)

六、明德公司 96 年及 95 年的部分財務資料如下：

	<u>96 年底</u>	<u>95 年底</u>
應收帳款	\$ 27,200	\$ 10,200
存 貨	32,000	40,000
預付費用	2,500	1,700
應付帳款	31,000	26,000
應計費用	1,200	1,500
銷貨收入淨額	320,000	
銷貨成本	185,000	
營業費用（包括折舊費用\$10,000）	89,000	

試作：根據上述資料，計算下列各項：

- (1) 當年度自顧客收取現金的金額。
- (2) 當年度支付商品價款的金額。
- (3) 當年度支付營業費用的金額。 (15 分)

## 試題

1. 何謂「效用無差別曲線」(或「無異曲線」)，及其特性行(10%)？試以此說明「消費者均衡」及「消費者剩餘」(10%)。
2. 試說明「市場型態」的種類，並說明其應具備的要件(10%)；及在廠商追求「利潤最大化、損失最小化」假設下，說明「廠商均衡」的要件為何(10%)？並比較說明「完全競爭」與「獨占」市場廠商均衡的異同(10%)。
3. 已知消費函數為  $C = 100 + 0.8Y$ ；投資函數為  $I = 50 + 0.1Y$ ；又假設充分就業所得為 2000，試求：
  - (1) 均衡所得為多少？ (10 分)
  - (2) 緊縮缺口為多少？ (10 分)
  - (3) 若增加自發儲蓄 10，則本模式是否存在節儉矛盾 (paradox of thrift)？ (10 分)
4. 有關現階段(2007 年)台灣所面臨的國際經貿情勢，試回答下列各子題：
  - (1) 闡明國際間鼎足而立的三大經貿版塊。(6 分)
  - (2) 說明台灣惟二加入的國際經貿組織。(4 分)
  - (3) 指出台灣對外最大出口市場及對外最大投資地區。(4 分)
  - (4) 簡述自 1996 年以來，政府對中國大陸擬定之經貿政策的三階段演變。(6 分)

鄰居政策，她的作法是要求員工自願捐獻，大約是薪資的百分之一，這些捐款加上公司名義的捐款，都獻給一個稱為聯合基金會的組織，環宇公司向來都是這個組織的最大捐助者。

雖然這個捐獻政策並非強制性，但是公司中任何部門若其成員百分之百都參與，則此部門主管將受到表揚。

由於公司在此政策上執行得相當成功，而被認為是該地區裏捐獻的前驅，公司的上層也認為公司形象提高了許多。另外在好鄰居政策中也包括雇員對紅十字會的捐血，以及樂意參加陪審團徵召的工作。

公司中有一 E D P 部門，向來是參與最熱烈的部門，在上兩年此部門都受到表揚，但此部門中却有一個雇員不願捐款。此人名為陳致全。他是一個相當出色的初級程式設計師，出身一家著名的工技學院，現還利用晚上攻讀碩士學位。陳致全一向特立獨行，但是與同事相處未曾有過齟齬。其上司詹天宏曾說：陳致全有獨立見解，對影響他的事務較為固執己見，且較敢說話，但却不盛氣凌人。其實陳致全並不反對所有的捐獻，如喜慶喪病的送禮向不吝嗇，同時也捐款給其基督教團體。陳致全家住本區，家境富裕，與父母同住。陳致全在今年的基督教安息日休假一天，但公司卻扣了他這一天的薪水。

徐克達在陳致全拒絕捐款後曾召見他，他直言不諱的告訴這位部門協調長 (department coordinator)，他不願被迫捐款，同時抱怨公司扣除他一天的薪水。

### 、問題

1. 如果你是個案中的徐克達先生，你也瞭解公司的“好鄰居政策”，陳致全剛說完他拒絕的話之後，你將說什麼？為什麼？(10分)
2. 照你看來遊說員工捐款慈善事業，有何主要利益和不利？(10分)
3. 你認為公司若不施加任何壓力，可能會有百分之百的捐款嗎？(10分)
4. 如果你是徐克達先生，你是否會將陳致全的抱怨反應給他的上司？(10分)
5. 從個案看來，非直屬上司對其下屬，像管理階層的代表徐克達先生對陳致全，能產生何種的激勵？(10分)

## 二.

基於互補、雙贏的效果，預計 2006 年手機事業部可以達到轉虧為盈並成為全球第四大手機品牌的目標，2005 年 6 月，明基電通收購德國 Siemens 手機事業部門，並在德國慕尼黑成立全球手機事業總部。

由於明基與 Siemens 皆重視人才、製造與研發能力，且在通路、行銷、智慧財產權方面都有互補性，因此，明基可以發揮製造與供應鏈整合能力的優勢，搭配 Siemens 手機部門的技術與市場能力，形成互補性的綜效。雖然在合併之後，明基的 ODM 代工訂單毛利面臨挑戰，但是由於 Siemens 在拉丁美洲、俄羅斯、巴西及歐洲的市場規模，且 Siemens 提供的無線通訊核心專利技術，將使明基取得 Siemens 在 3G、GSM、GPRS 領域的專利核心技術，從交換機系統到手機終端的解決方案能力。

雖然預估前景一片大好，但經過了一年又三個月，2006 年 9 月，明基決定切斷與德國手機事業部的關係，當初藉由合併德國 Siemens 手機事業部門，躍上世界舞台的夢想，在雙方整合進度不如預期，過去三季虧損約 250 億元的沉重負擔下，明基決定向德國政府申請無力清償保護，交出德國子公司經營權，但保留 BenQ Siemens 的品牌及銷售權。

【問題 1】：請分析為何明基經審慎的考慮之後，在購併 Siemens 手機事業部門上仍舊失敗。(30%)

【問題 2】：針對手機事業，請分析明基接下來該如何因應。(20%)