

考試科目	41112, 41213, 4122A, 41213 經濟學 41822, 41922, 42112, 42122	系所別	商學院 共同科	考試時間	2月18日(天) 第一節
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Multiple Choice (1 point each)

Identify the letter of the choice that best completes the statement or answers the question.

- Mike and Sandy are two woodworkers who both make tables and chairs. In one month, Mike can make 4 tables or 20 chairs, while Sandy can make 6 tables or 18 chairs. Given this, we know that
 - Mike has an absolute advantage in chairs.
 - Mike has a comparative advantage in tables.
 - Sandy has an absolute advantage in chairs.
 - Sandy has a comparative advantage in chairs.
- New oak tables are normal goods. What would happen to the equilibrium price and quantity in the market for oak tables if the price of maple tables rises and the price of wood saws increased?
 - Price will fall and the effect on quantity is ambiguous.
 - Price will rise and the effect on quantity is ambiguous.
 - Quantity will fall and the effect on price is ambiguous.
 - Quantity will rise and the effect on price is ambiguous.
- When a good is taxed, the burden of the tax
 - falls more heavily on the side of the market that is more elastic.
 - falls more heavily on the side of the market that is more inelastic.
 - falls more heavily on the side of the market that is closer to unit elastic.
 - is distributed independently of relative elasticities of supply and demand.
- An optimal tax on pollution would result in which of the following?
 - Producers will choose not to produce any pollution.
 - Producers will internalize the cost of pollution.
 - Producers will maximize production.
 - The value to consumers at market equilibrium will exceed the social cost of production.
- Which of the following is not a characteristic of pollution permits?
 - Prices are set by supply and demand.
 - Allowing firms to trade their permits reduces the total quantity of pollution beyond the initial allocation.
 - Real-world markets for pollution permits include sulfur dioxide and carbon.

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- 作答於試題上者，不予計分。
- 試題請隨卷繳交。

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- D. Firms for whom pollution reduction is very expensive are willing to pay more for permits than firms for whom pollution reduction is less expensive.
6. The marginal product of labor is equal to the
- increase in labor necessary to generate a one unit increase in output.
 - increase in output obtained from a one unit increase in labor.
 - incremental profit associated with a one unit increase in labor.
 - incremental cost associated with a one unit increase in labor.
7. When marginal revenue equals marginal cost,
- the firm must be generating economic profits.
 - the profit maximizing firm should always increase its level of production.
 - the firm must be generating economic losses.
 - losses are minimized even if the firm is not making a profit.
8. Which of the following statements is true of monopolies?
- Monopolies can charge any price they want.
 - Unlike competitive firms, monopolies are not constrained by market demand.
 - Monopolies will always increase their revenue by selling more of their goods.
 - All of the above are correct.
9. Because each oligopolist cares about its own profit rather than the collective profit of all the oligopolists together,
- society is worse off.
 - they are able to maximize their individual profits.
 - they are unable to maintain monopoly power.
 - All of the above are correct.
10. If firms in a monopolistically competitive market are earning economic profits, which of the following scenarios would best reflect the change facing incumbent firms as the market adjusts to its new equilibrium?
- a downward shift in their marginal cost curve
 - an upward shift in their marginal cost curve
 - an increase in demand
 - a decrease in demand

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11. The menu cost of inflation arises since
- people hold less currency if inflation is positive and thus they take more trips to the bank.
 - the central bank eventually has to restrict money supply and this causes an increase in the unemployment rate.
 - real wages and real money holdings lose purchasing power.
 - resources have to be devoted to marking up prices and changing vending machines and cash registers.
12. In the medium run, if government purchases are increased and nominal money supply is decreased, we can expect that
- aggregate demand and prices will increase but interest rates will not change.
 - aggregate demand, prices, and the interest rate will all decrease.
 - aggregate demand and interest rates will decrease but prices will increase.
 - the interest rate will increase while aggregate demand and prices may increase, decrease, or remain the same.
13. Assume you would like to stimulate investment but leave the level of GDP roughly the same. What policy mix would you propose?
- an income tax cut combined with monetary expansion
 - a tax cut combined with monetary restriction
 - a cut in government spending combined with monetary expansion
 - a cut in government spending combined with monetary restriction
14. Given a normal IS-LM model, which of the following is FALSE?
- Expansionary monetary policy will increase the level of investment and consumption.
 - Lower income taxes will raise the level of consumption but lower the level of investment.
 - A cut in government transfer payments will reduce consumption and interest rates.
 - An investment subsidy will increase the level of investment but not the level of consumption.
15. If we compare a closed economy to an open economy under a flexible exchange rate system, we can see that fiscal policy is always
- more effective because of positive repercussion effects.
 - more effective because the marginal propensity to import is positive.
 - less effective because part of the increase in domestic income is spent on foreign goods.

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- D. less effective because expansionary fiscal policy always has to be supplemented by restrictive monetary policy.
16. If the government increases expenditures on goods and services and increases taxation by the same amount, which of the following will occur?
- Aggregate demand will be unchanged.
 - Aggregate demand will increase.
 - The money supply will decrease.
 - The money supply will increase.
17. To counteract a recession, the central bank should
- sell securities on the open market and raise the discount rate.
 - sell securities on the open market and lower the discount rate.
 - buy securities on the open market and raise the discount rate.
 - buy securities on the open market and lower the discount rate.
18. If the reserve requirement is 25 percent and banks hold no excess reserves, an open market sale of \$400,000 of government securities by the central bank will
- increase the money supply by up to \$1.6 million.
 - decrease the money supply by up to \$1.6 million.
 - increase the money supply by up to \$400,000.
 - decrease the money supply by up to \$400,000.
19. If nominal gross domestic product fell while real gross domestic product rose, which of the following must be true?
- Unemployment increased.
 - The inflation rate was negative.
 - Net exports were negative.
 - The average of stock prices rose while bond prices fell.
20. The purchase of bonds by the central bank will have the greatest effect on real gross domestic product if which of the following situations exists in the economy?
- The required reserve ratio is high, and the interest rate has a large effect on investment spending.

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B. The required reserve ratio is high, and the interest rate has a small effect on investment spending.

C. The required reserve ratio is low, and the interest rate has a large effect on investment spending.

D. The required reserve ratio is low, and the marginal propensity to consume is low.

Problems and Short-essay Questions

Please answer the following questions IN SEQUENCE. All questions may be answered in either Chinese or English.

1. Consider an individual who has I dollars to allocate between good x and good y and whose preference is represented by the quasi-linear utility function $U(x, y) = \ln x + y$. Let p_x and p_y denote, respectively, the prices of good x and good y .

A. (6 points) Calculate the Marshallian demand functions for good x and good y .

B. (6 points) Suppose that $p_x = 1$, $p_y = 2$, and $I = 8$. Calculate the income elasticity of demand for each good.

C. (4 points) Now suppose the government levies a 1 dollar per unit tax on good x such that the price of good x increases to $p_x = 2$ while the price of good y and income remain unchanged at $p_y = 2$ and $I = 8$. Calculate the tax revenue and the indirect utility.

D. (4 points) Suppose instead of taxing the consumption of good x , an income tax that collects the same amount of tax revenue as in part (C) is imposed. Calculate the indirect utility.

2. In a monopolistically competitive market, a firm faces the following demand function:

$$q = \frac{P^{-\sigma}}{N},$$

where q is the quantity demanded, P is the price, $\sigma > 1$ is a constant, N is the number of producers.

The total cost of production is $f + cq$, where f and c are both positive and constants.

A. (10 points) Derive the optimal price charged by the firm.

B. (10 points) Calculate the number of producers at equilibrium.

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3. Consider an economy in which production is characterized by the neoclassical function $Y = K^{0.5}N^{0.5}$, where Y , K and N denote the output, capital stock and quantity of labor, respectively. Suppose that it has a saving rate of 0.1, a population growth rate of 0.02, and an average depreciation rate of 0.03.

A. (5 points) Write this production function in per capita form in which $y = Y/N$ and $k = K/N$, and find the steady-state value of y and k .

B. (5 points) At the steady-state value of k , is there more or less capital than at the golden-rule level?

C. (5 points) Determine what saving rate would yield the golden-rule level of capital in this model.

D. (5 points) In the context of this neoclassical growth model, can a country have *too much* saving?

4. Answer the following two questions:

A. With a consumption function $C = 100 + 0.8Y_d$ (Y_d , the disposable income, is defined as income after taxes: $Y_d = Y - T$), investment $I = 200$, government expenditure $G = 100$, transfer payment $TR = 62.5$, tax revenue $T = 0.25Y$, compute

- (4 points) the equilibrium national income;
- (4 points) the balanced budget multiplier for this economy.

B. For a country with the following macroeconomic statistics: national income=5000; disposable income=4000; government budget deficit=200; consumption=3500; and trade deficit=100, compute levels of

- (4 points) saving;
- (4 points) investment;
- (4 points) government expenditure for this country.

備註

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1. (20%) An insurance salesman visits up to three clients each day, hoping to sell a new policy. He stops for the day once he makes a sales. Each client independently decides whether to buy a policy; 10% of clients purchase the policy.
- (1) Create a probability model for the number of clients the salesman visits each day. (6%)
 - (2) Find the expected number of clients. (4%)
 - (3) If the salesman spends about 2.5 hours with each client, then how many hours should he expect to be busy each day? (3%)
 - (4) If the salesman earns TWD10,000 per policy sold, how much can he expect to make per day? (7%)
2. (30%) Hoping to lure more shoppers downtown, a city builds a new public parking garage in the central business district. The city plans to pay for the structure through parking fees. During a two-month period (44 weekdays), daily fees collected averaged TWD25,000 with a standard deviation of TWD7,000.
- (1) Write a 90% confidence interval for the mean daily income this parking garage will generate. (8%)
 - (2) The consultant who advised the city on this project predicted that parking revenue would average TWD26,500 per day. Do you think the consultant was correct on the basis of part (1)? Why or why not? (4%)
 - (3) Give a 90% confidence interval for the total revenue earned during five weekdays. (3%)
 - (4) Someone suggests that the city should use the data to create a 95% confidence interval instead of the 90% interval first created. Would this interval be better for the city planners? Why? (4%)
 - (5) How would city planners achieve an interval estimate that would better serve their planning need? (3%)
 - (6) How many days' worth of data must planners collect to have 95% confidence of estimating the true mean to within TWD700? (8%)
3. (20%) A survey reports that when going shopping, 181 of 756 men and 275 of 809 women go for bargains. Answer the following questions at the 0.05 level of significance.
- (1) Is the proportion of men who shop for bargains less than the proportion of women who shop for bargains? (10%)
 - (2) Apply the χ^2 test to examine whether there exists any relationship between gender and shopping for bargains. (10%)
4. (30%) A company operates in the US, Europe, South American and the Pacific Rim. Management is comparing the costs incurred in its health benefits program by employees across these four regions. It fits a multiple regression of the amount spent for sample of 25 workers on three dummy variables that represents

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US, Europe, and the Pacific Rim. The following tables summarizes the estimation results.

Source of Variation	Sum of square	Degrees of freedom	Mean squares	F
Regression	(a)	(c)	19357383	(g)
Error	(b)	(d)	(f)	
Total	72241280	(e)		

Term	Estimate	Standard error	t statistic
Intercept	1795.05	76.84	23.36
US	1238.10	108.66	11.39
Europe	717.84	108.66	6.61
Pacific Rim	-785.58	108.66	-7.23

- (1) Fill in all the empty cells (a)-(g) in Table A. (7%)
- (2) Please interpret the meanings of the estimated regression coefficients in Table B. (8%)
- (3) Compute the values of R^2 and standard error for the regression model. (5%)
- (4) This analysis was done in US dollars. Please write down both Tables A and B when the same analysis is done in euros (1 euro = 1.08 USD). (10%)

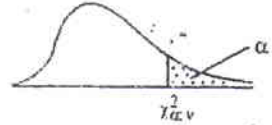
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Table of the standard normal distribution

Z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5319	0.5359
0.1	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753
0.2	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141
0.3	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517
0.4	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879
0.5	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224
0.6	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7517	0.7549
0.7	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.7823	0.7852
0.8	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8106	0.8133
0.9	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8365	0.8389
1.0	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8599	0.8621
1.1	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8810	0.8830
1.2	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015
1.3	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9031	0.9147	0.9162	0.9177
1.4	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319
1.5	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9429	0.9441
1.6	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9535	0.9545
1.7	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9625	0.9633
1.8	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9699	0.9706
1.9	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9761	0.9767
2.0	0.9772	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817
2.1	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9854	0.9857
2.2	0.9861	0.9864	0.9868	0.9871	0.9875	0.9878	0.9881	0.9884	0.9887	0.9890
2.3	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9913	0.9916
2.4	0.9918	0.9920	0.9922	0.9924	0.9927	0.9929	0.9931	0.9932	0.9934	0.9936
2.5	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952
2.6	0.9953	0.9955	0.9956	0.9957	0.9958	0.9960	0.9961	0.9962	0.9963	0.9964
2.7	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974
2.8	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981
2.9	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986

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Table of the Chi-square Distribution



$\alpha =$	0.995	0.99	0.98	0.975	0.95	0.90	0.80	0.20	0.10	0.05	0.025	0.02	0.01	0.005	0.001	$=\alpha$
$v = 1$	0.0000703	0.000157	0.00028	0.000482	0.00093	0.0158	0.0642	1.642	2.706	3.841	5.024	5.412	6.635	7.879	10.827	$v = 1$
2	0.0100	0.0201	0.0404	0.0506	0.103	0.211	0.446	3.219	4.605	5.991	7.378	7.824	9.210	10.597	13.815	2
3	0.0717	0.115	0.185	0.216	0.352	0.584	1.005	4.642	6.251	7.815	9.348	9.837	11.345	12.838	16.268	3
4	0.207	0.297	0.429	0.484	0.711	1.064	1.649	5.989	7.779	9.488	11.143	11.668	13.277	14.860	18.465	4
5	0.412	0.554	0.752	0.831	1.145	1.610	2.343	7.289	9.236	11.070	12.832	13.388	15.086	16.750	20.517	5
6	0.676	0.872	1.134	1.237	1.635	2.204	3.070	8.558	10.645	12.592	14.449	15.033	16.812	18.548	22.457	6
7	0.989	1.239	1.564	1.690	2.167	2.833	3.822	9.803	12.017	14.067	16.013	16.622	18.475	20.278	24.322	7
8	1.344	1.646	2.032	2.180	2.733	3.490	4.594	11.030	13.362	15.507	17.535	18.168	20.090	21.955	26.125	8
9	1.735	2.088	2.532	2.700	3.325	4.168	5.380	12.242	14.684	16.919	19.023	19.679	21.666	23.589	27.877	9
10	2.156	2.558	3.059	3.247	3.940	4.865	6.179	13.442	15.987	18.307	20.483	21.161	23.209	25.188	29.588	10
11	2.603	3.053	3.609	3.816	4.575	5.578	6.989	14.631	17.275	19.675	21.920	22.618	24.725	26.757	31.264	11
12	3.074	3.571	4.178	4.404	5.226	6.304	7.807	15.812	18.549	21.026	23.337	24.054	26.217	28.300	32.909	12
13	3.565	4.107	4.765	5.009	5.892	7.042	8.634	16.985	19.812	22.362	24.736	25.472	27.688	29.819	34.528	13
14	4.075	4.660	5.368	5.629	6.571	7.790	9.467	18.151	21.064	23.685	26.119	26.873	29.141	31.319	36.123	14
15	4.601	5.229	5.985	6.262	7.261	8.547	10.307	19.311	22.307	24.996	27.488	28.259	30.578	32.801	37.697	15
16	5.142	5.812	6.614	6.908	7.962	9.312	11.152	20.465	23.542	26.296	28.845	29.633	32.000	34.267	39.252	16
17	5.697	6.408	7.255	7.564	8.672	10.085	12.002	21.615	24.769	27.587	30.191	30.995	33.409	35.718	40.790	17
18	6.265	7.015	7.906	8.231	9.390	10.865	12.857	22.760	25.989	28.869	31.526	32.346	34.805	37.156	42.312	18
19	6.844	7.633	8.567	8.907	10.117	11.651	13.716	23.900	27.204	30.144	32.852	33.687	36.191	38.582	43.820	19
20	7.434	8.260	9.237	9.591	10.851	12.443	14.578	25.038	28.412	31.410	34.170	35.020	37.566	39.997	45.315	20
21	8.034	8.897	9.915	10.283	11.591	13.240	15.445	26.171	29.615	32.671	35.479	36.343	38.932	41.401	46.797	21
22	8.643	9.542	10.600	10.982	12.338	14.041	16.314	27.301	30.813	33.924	36.781	37.659	40.289	42.796	48.268	22
23	9.260	10.196	11.293	11.688	13.091	14.848	17.187	28.429	32.007	35.172	38.076	38.968	41.638	44.181	49.728	23
24	9.886	10.856	11.992	12.401	13.848	15.659	18.062	29.553	33.196	36.415	39.364	40.270	42.980	45.558	51.179	24
25	10.520	11.524	12.697	13.120	14.611	16.473	18.940	30.675	34.382	37.652	40.646	41.566	44.314	46.928	52.620	25
26	11.160	12.198	13.409	13.844	15.379	17.292	19.820	31.795	35.563	38.885	41.923	42.856	45.642	48.290	54.052	26
27	11.808	12.879	14.125	14.573	16.151	18.114	20.703	32.912	36.741	40.113	43.194	44.140	46.963	49.645	55.476	27
28	12.461	13.565	14.847	15.308	16.928	18.939	21.588	34.027	37.916	41.337	44.461	45.419	48.278	50.993	56.893	28
29	13.121	14.256	15.574	16.047	17.708	19.768	22.475	35.139	39.087	42.557	45.722	46.693	49.588	52.336	58.302	29
30	13.787	14.953	16.306	16.791	18.493	20.599	23.364	36.250	40.256	43.773	46.979	47.962	50.892	53.672	59.703	30
40	20.706	22.164	23.838	24.433	26.509	29.051	32.345	47.269	51.805	55.759	59.342	60.436	63.691	66.766	73.402	40
50	27.991	29.707	31.664	32.357	34.764	37.689	41.449	58.164	63.167	67.505	71.420	72.613	76.154	79.490	86.661	50
60	35.535	37.485	39.699	40.482	43.188	46.459	50.641	68.972	74.397	79.082	83.298	84.580	88.379	91.952	99.607	60
70	43.275	45.442	47.893	48.758	51.739	55.329	59.898	79.715	85.527	90.531	95.023	96.388	100.425	104.215	112.317	70
80	51.171	53.539	56.213	57.153	60.391	64.278	69.207	90.405	96.578	101.880	106.629	108.069	112.329	116.321	124.839	80
90	59.196	61.754	64.634	65.646	69.126	73.291	78.558	101.054	107.565	113.145	118.136	119.648	124.116	128.299	137.208	90
100	67.327	70.065	73.142	74.222	77.929	82.358	87.945	111.667	118.498	124.342	129.561	131.142	135.807	140.170	149.449	100

備

註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。

考試科目	管理學 4211B、4212B	系所別	企業管理研究所 (MBA 學位學程) 甲組、乙組	考試時間	2 月 18 日(六)第三節
<p>一、以下問題與領導 (leadership) 有關。</p> <p>(1) 請定義 (leadership) ; (5%)</p> <p>(2) 請定義影響力 (power) ; (5%)</p> <p>(3) 請從影響力的觀點，論述轉型領導 (transformational leadership) 與權威式領導 (authoritarian leadership) 之所以會有效的原因。(15%)</p> <p>二、以下問題與「組織控制」有關。</p> <p>(1) 請定義組織控制，並說明其重要性。(7%)</p> <p>(2) 請定義 Feedforward, Concurrent, 與 Feedback Controls。並且舉例說明之。(18%)</p>					
備註	一、作答於試題上者，不予計分。 二、試題請隨卷繳交。				

考試科目	管理學 4211B、4212B	系所別	企業管理研究所 (MBA 學位學程) 甲組、乙組	考試時間	2月18日(六)第三節
<p>三、台灣的代工業往往面臨低毛利的經營困境：假設A公司過去10年皆為國外筆記型電腦品牌代工，但是近兩年來營收及利潤皆持續下滑。</p> <p>1. A公司以代工起家，請說明A公司追尋企業成長時有哪些策略？並請舉例說明之。(10%)</p> <p>2. 試分析A公司若從代工轉而發展自有品牌的利弊得失，包括採行此方案時的考量因素(前提條件)及後續因應作法為何？(15%)</p> <p>四、以智慧型手機為例，現今消費者的購買行為已深受社群媒體(social media)的影響。</p> <p>1. 請任舉一項管理理論或分析架構，利用它來說明社群媒體對企業在銷售智慧型手機上的影響，以及企業可以採取的因應策略為何？(15%)</p> <p>2. 現今消費者在購買手機前常先搜尋網路上的產品評論，也常在購買後上網分享使用心得，針對社群媒體上可能產生的負面評論，請問您認為企業如何能事先管理風險？若負評已發生，又該如何進行品牌修復？(10%)</p>					
備註	<p>一、作答於試題上者，不予計分。</p> <p>二、試題請隨卷繳交。</p>				

考試科目	41112, 41212, 4122A, 41713 經濟學	系所別	商學院	考試時間	2月18日(天)第一節
	41822, 41922, 42112, 42122		共同科		

Multiple Choice (1 point each)

Identify the letter of the choice that best completes the statement or answers the question.

- Mike and Sandy are two woodworkers who both make tables and chairs. In one month, Mike can make 4 tables or 20 chairs, while Sandy can make 6 tables or 18 chairs. Given this, we know that
 - Mike has an absolute advantage in chairs.
 - Mike has a comparative advantage in tables.
 - Sandy has an absolute advantage in chairs.
 - Sandy has a comparative advantage in chairs.
- New oak tables are normal goods. What would happen to the equilibrium price and quantity in the market for oak tables if the price of maple tables rises and the price of wood saws increased?
 - Price will fall and the effect on quantity is ambiguous.
 - Price will rise and the effect on quantity is ambiguous.
 - Quantity will fall and the effect on price is ambiguous.
 - Quantity will rise and the effect on price is ambiguous.
- When a good is taxed, the burden of the tax
 - falls more heavily on the side of the market that is more elastic.
 - falls more heavily on the side of the market that is more inelastic.
 - falls more heavily on the side of the market that is closer to unit elastic.
 - is distributed independently of relative elasticities of supply and demand.
- An optimal tax on pollution would result in which of the following?
 - Producers will choose not to produce any pollution.
 - Producers will internalize the cost of pollution.
 - Producers will maximize production.
 - The value to consumers at market equilibrium will exceed the social cost of production.
- Which of the following is not a characteristic of pollution permits?
 - Prices are set by supply and demand.
 - Allowing firms to trade their permits reduces the total quantity of pollution beyond the initial allocation.
 - Real-world markets for pollution permits include sulfur dioxide and carbon.

備註

- 作答於試題上者，不予計分。
- 試題請隨卷繳交。

考試科目	經濟學	系所別	商學院 共同科	考試時間	2月18日(天) 第一節
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- D. Firms for whom pollution reduction is very expensive are willing to pay more for permits than firms for whom pollution reduction is less expensive.
6. The marginal product of labor is equal to the
- increase in labor necessary to generate a one unit increase in output.
 - increase in output obtained from a one unit increase in labor.
 - incremental profit associated with a one unit increase in labor.
 - incremental cost associated with a one unit increase in labor.
7. When marginal revenue equals marginal cost,
- the firm must be generating economic profits.
 - the profit maximizing firm should always increase its level of production.
 - the firm must be generating economic losses.
 - losses are minimized even if the firm is not making a profit.
8. Which of the following statements is true of monopolies?
- Monopolies can charge any price they want.
 - Unlike competitive firms, monopolies are not constrained by market demand.
 - Monopolies will always increase their revenue by selling more of their goods.
 - All of the above are correct.
9. Because each oligopolist cares about its own profit rather than the collective profit of all the oligopolists together,
- society is worse off.
 - they are able to maximize their individual profits.
 - they are unable to maintain monopoly power.
 - All of the above are correct.
10. If firms in a monopolistically competitive market are earning economic profits, which of the following scenarios would best reflect the change facing incumbent firms as the market adjusts to its new equilibrium?
- a downward shift in their marginal cost curve
 - an upward shift in their marginal cost curve
 - an increase in demand
 - a decrease in demand

備註

- 作答於試題上者，不予計分。
- 試題請隨卷繳交。

考試科目	經濟學	系所別	商學院 期科	考試時間	2月18日(天) 第一節
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11. The menu cost of inflation arises since
- people hold less currency if inflation is positive and thus they take more trips to the bank.
 - the central bank eventually has to restrict money supply and this causes an increase in the unemployment rate.
 - real wages and real money holdings lose purchasing power.
 - resources have to be devoted to marking up prices and changing vending machines and cash registers.
12. In the medium run, if government purchases are increased and nominal money supply is decreased, we can expect that
- aggregate demand and prices will increase but interest rates will not change.
 - aggregate demand, prices, and the interest rate will all decrease.
 - aggregate demand and interest rates will decrease but prices will increase.
 - the interest rate will increase while aggregate demand and prices may increase, decrease, or remain the same.
13. Assume you would like to stimulate investment but leave the level of GDP roughly the same. What policy mix would you propose?
- an income tax cut combined with monetary expansion
 - a tax cut combined with monetary restriction
 - a cut in government spending combined with monetary expansion
 - a cut in government spending combined with monetary restriction
14. Given a normal IS-LM model, which of the following is FALSE?
- Expansionary monetary policy will increase the level of investment and consumption.
 - Lower income taxes will raise the level of consumption but lower the level of investment.
 - A cut in government transfer payments will reduce consumption and interest rates.
 - An investment subsidy will increase the level of investment but not the level of consumption.
15. If we compare a closed economy to an open economy under a flexible exchange rate system, we can see that fiscal policy is always
- more effective because of positive repercussion effects.
 - more effective because the marginal propensity to import is positive.
 - less effective because part of the increase in domestic income is spent on foreign goods.

備

註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。

考試科目	經濟學	系所別	商學院 英科	考試時間	2月18日(六)第一節
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D. less effective because expansionary fiscal policy always has to be supplemented by restrictive monetary policy.

16. If the government increases expenditures on goods and services and increases taxation by the same amount, which of the following will occur?

- A. Aggregate demand will be unchanged.
- B. Aggregate demand will increase.
- C. The money supply will decrease.
- D. The money supply will increase.

17. To counteract a recession, the central bank should

- A. sell securities on the open market and raise the discount rate.
- B. sell securities on the open market and lower the discount rate.
- C. buy securities on the open market and raise the discount rate.
- D. buy securities on the open market and lower the discount rate.

18. If the reserve requirement is 25 percent and banks hold no excess reserves, an open market sale of \$400,000 of government securities by the central bank will

- A. increase the money supply by up to \$1.6 million.
- B. decrease the money supply by up to \$1.6 million.
- C. increase the money supply by up to \$400,000.
- D. decrease the money supply by up to \$400,000.

19. If nominal gross domestic product fell while real gross domestic product rose, which of the following must be true?

- A. Unemployment increased.
- B. The inflation rate was negative.
- C. Net exports were negative.
- D. The average of stock prices rose while bond prices fell.

20. The purchase of bonds by the central bank will have the greatest effect on real gross domestic product if which of the following situations exists in the economy?

- A. The required reserve ratio is high, and the interest rate has a large effect on investment spending.

備註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。

考試科目	經濟學	系所別	商學院	考試時間	2月18日(六)第一節
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B. The required reserve ratio is high, and the interest rate has a small effect on investment spending.

C. The required reserve ratio is low, and the interest rate has a large effect on investment spending.

D. The required reserve ratio is low, and the marginal propensity to consume is low.

Problems and Short-essay Questions

Please answer the following questions IN SEQUENCE. All questions may be answered in either Chinese or English.

1. Consider an individual who has I dollars to allocate between good x and good y and whose preference is represented by the quasi-linear utility function $U(x, y) = \ln x + y$. Let p_x and p_y denote, respectively, the prices of good x and good y .

A. (6 points) Calculate the Marshallian demand functions for good x and good y .

B. (6 points) Suppose that $p_x = 1$, $p_y = 2$, and $I = 8$. Calculate the income elasticity of demand for each good.

C. (4 points) Now suppose the government levies a 1 dollar per unit tax on good x such that the price of good x increases to $p_x = 2$ while the price of good y and income remain unchanged at $p_y = 2$ and $I = 8$. Calculate the tax revenue and the indirect utility.

D. (4 points) Suppose instead of taxing the consumption of good x , an income tax that collects the same amount of tax revenue as in part (C) is imposed. Calculate the indirect utility.

2. In a monopolistically competitive market, a firm faces the following demand function:

$$q = \frac{P^{-\sigma}}{N},$$

where q is the quantity demanded, P is the price, $\sigma > 1$ is a constant, N is the number of producers. The total cost of production is $f + cq$, where f and c are both positive and constants.

A. (10 points) Derive the optimal price charged by the firm.

B. (10 points) Calculate the number of producers at equilibrium.

備

註

一、作答於試題上者，不予計分。
二、試題請隨卷繳交。

考試科目	經濟學	系所別	商學院 期	考試時間	二月十八日(天) 第一節
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3. Consider an economy in which production is characterized by the neoclassical function $Y = K^{0.5}N^{0.5}$, where Y , K and N denote the output, capital stock and quantity of labor, respectively. Suppose that it has a saving rate of 0.1, a population growth rate of 0.02, and an average depreciation rate of 0.03.

A. (5 points) Write this production function in per capita form in which $y = Y/N$ and $k = K/N$, and find the steady-state value of y and k .

B. (5 points) At the steady-state value of k , is there more or less capital than at the golden-rule level?

C. (5 points) Determine what saving rate would yield the golden-rule level of capital in this model.

D. (5 points) In the context of this neoclassical growth model, can a country have *too much* saving?

4. Answer the following two questions:

A. With a consumption function $C = 100 + 0.8Y_d$ (Y_d , the disposable income, is defined as income after taxes: $Y_d = Y - T$), investment $I = 200$, government expenditure $G = 100$, transfer payment $TR = 62.5$, tax revenue $T = 0.25Y$, compute

- (4 points) the equilibrium national income;
- (4 points) the balanced budget multiplier for this economy.

B. For a country with the following macroeconomic statistics: national income=5000; disposable income=4000; government budget deficit=200; consumption=3500; and trade deficit=100, compute levels of

- (4 points) saving;
- (4 points) investment;
- (4 points) government expenditure for this country.

備

註

- 作答於試題上者，不予計分。
- 試題請隨卷繳交。

考試科目	微積分 4212A	系所別	企管所 MBA學位 學程乙組	考試時間	2月18日(六)第三節
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問題一 (共 20 分)

某股票的週收盤價為

$$f(t) = 45 + t \cdot \sin \frac{\pi}{6} t, \quad 0 \leq t \leq 15,$$

其 $f(t)$ 為每股在第 t 週的收盤價。試求該股票在這 15 週內的平均週收盤價為何?

問題二 (共 20 分)

工廠 A 預測其未來 5 年新產品所帶來的銷售額為 $R(t) = 120000 - 200t$ 元/年 ($t = 1, 2, 3, 4, 5$)。假設年利率水準為 8%，求此工廠未來五年銷售額的現值為何?

問題三 (共 20 分)

某店家販售一電器產品 C，其售價為 \$3,500 元，若其提供消費者可由購買日的次月起分三個月付款來分期付款購買此商品，而每次付 \$1,200 元，求此項分期付款的條件，其隱含的年利率為何? [藉由牛頓法來求得此利率]

問題四 (共 40 分)

某藥廠提供維他命保健食品給零售商 B。依照過往的經驗，此零售商每個月很穩定的銷售 10,000 罐 (意即一年穩定銷售 120,000 罐)。當零售商 B 每次向藥廠採購下單時，他須考量每次採購的固定成本 \$100 塊 (此包含貨運與接收成本等等...)，而採購的變動成本則會依其採購的數量有所改變。其資料如下

採購數量	單位成本
0-5,000	\$3.0
第 5,001-10,000	\$2.96
超過 10,000	\$2.92

例如若零售商 B 採購 7,000 罐，則有 5,000 罐需付出 \$3 塊，而另外的 2000 罐享有 \$2.96 塊錢的優惠價格。零售商 B 同時會有存貨的壓力，若一罐維他命放置於零售商端一年皆未銷售出去，則其採購成本的 20% 為其存貨成本 (此存貨成本是以年計)。在評估 (1) 採購固定成本 (2) 採購變動成本與 (3) 存貨成本後，試問零售商 B 每次採購的最適量為何?

備

註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。

考試科目	管理學 4211B、4212B	系所別	企業管理研究所 (MBA 學位學程) 甲組、乙組	考試時間	2 月 18 日(六)第三節
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一、以下問題與領導 (leadership) 有關。

(1) 請定義 (leadership); (5%)

(2) 請定義影響力 (power); (5%)

(3) 請從影響力的觀點，論述轉型領導 (transformational leadership) 與權威式領導 (authoritarian leadership) 之所以會有效的原因。(15%)

二、以下問題與「組織控制」有關。

(1) 請定義組織控制，並說明其重要性。(7%)

(2) 請定義 Feedforward, Concurrent, 與 Feedback Controls。並且舉例說明之。(18%)

備註

一、作答於試題上者，不予計分。
二、試題請隨卷繳交。

考試科目	管理學 421B、4212B	系所別	企業管理研究所 (MBA 學位學程) 甲組、乙組	考試時間	2月18日(六)第三節
<p>三、台灣的代工業往往面臨低毛利的經營困境：假設A公司過去10年皆為國外筆記型電腦品牌代工，但是近兩年來營收及利潤皆持續下滑。</p> <ol style="list-style-type: none"> 1. A公司以代工起家，請說明A公司追尋企業成長時有哪些策略？並請舉例說明之。(10%) 2. 試分析A公司若從代工轉而發展自有品牌的利弊得失，包括採行此方案時的考量因素(前提條件)及後續因應作法為何？(15%) <p>四、以智慧型手機為例，現今消費者的購買行為已深受社群媒體(social media)的影響。</p> <ol style="list-style-type: none"> 1. 請任舉一項管理理論或分析架構，利用它來說明社群媒體對企業在銷售智慧型手機上的影響，以及企業可以採取的因應策略為何？(15%) 2. 現今消費者在購買手機前常先搜尋網路上的產品評論，也常在購買後上網分享使用心得，針對社群媒體上可能產生的負面評論，請問您認為企業如何能事先管理風險？若負評已發生，又該如何進行品牌修復？(10%) 					
備註	<ol style="list-style-type: none"> 一、作答於試題上者，不予計分。 二、試題請隨卷繳交。 				