

Graduate School of Commerce Doctoral Program April Entrance Examination 2020 Question Sheets

【Organizational Management】

Answer all the following questions.

Question 1: Answer all the following questions about “leadership crises” that startups often face.

1. What do the “leadership crises” mean?
2. How can startups overcome such crises?
3. What crises do startups typically face after overcoming the “leadership crises”?

Question 2: Answer all the following questions about organizational culture.

1. Present two reasons why it is difficult for firms to change and transform organizational culture.
2. Specify two situations in which it is less difficult for firms to change and transform organizational culture. Explain why it is less difficult to do so in such situations.

【Strategic Management】

Answer all the following questions.

- (1) What is the most common methodology to evaluate the performance effects of mergers and acquisitions? Briefly describe this methodology.
- (2) What is the consensus of these M&A value creation studies?
- (3) Describe and discuss three reasons why managers of bidding firms continue to engage in M&A strategies despite the results of these studies.

【Marketing】

Answer all the following questions.

- (1) State the definition of customer satisfaction and explain the importance of maintaining customer satisfaction in marketing.
- (2) Explain the advantages and disadvantages of conducting online marketing for BtoC companies.

【Consumer Behavior】

Answer all the following questions.

- (1) Explain how and why mood influences consumer behavior.
- (2) Explain the Theory of Reasoned Action and its marketing implications.

【International Trade】

Answer the following two questions.

- (1) There are two countries, home and foreign, and one production factor, labor (L). Explain the Ricardian model of trade using the following input coefficients that represent the labor required to produce one unit of each good. Asterisk indicates a foreign coefficient. You may add assumptions if necessary.

Input coefficients	Good 1 (X_1)	Good 2 (X_2)
Home	a_1	a_2
Foreign	a_1^*	a_2^*

- (2) There are two countries, home and foreign, and two production factors, capital (K) and labor (L). Explain the Heckscher-Ohlin trade model, using the following input coefficients that represent factors required to produce one unit of each good respectively. The coefficients are fixed and the same in both countries. You may add assumptions if necessary.

Input coefficients	Good 1 (X ₁)	Good 2 (X ₂)
Capital (K)	a_{K1}	a_{K2}
Labor (L)	a_{L1}	a_{L2}

【Corporate Finance】

Answer all the following questions.

- (1) Explain the term *market risk*.
- (2) What information does a share repurchase convey to investors?
- (3) Briefly explain how changes in the debt-equity ratio change the firm's equity beta.
- (4) What is the relative tax advantage of debt when corporate and personal taxes are considered?

【Asset Pricing】

Answer all the following questions.

- (1) Assume that an individual has von Neumann-Morgenstern utility $u(\cdot)$ of wealth. Suppose all expected utility maximizing individuals prefer X over Y, i.e., $E[u(X)] \geq E[u(Y)]$, where X and Y are two risky outcomes. What is an equivalent condition for distribution functions of X and of Y that brings such preference for all increasing and concave utility u ? Do NOT show derivation, but show the condition in a formula not involving u .
- (2) The Black-Scholes price for a European call option is given by $C_{BS} = S N(x) - K N(y) e^{-rT}$, where $N(\cdot)$ is the distribution function of the standard normal distribution, S is the current stock price, K is the exercise price of the option, T is the time to maturity, r is the riskless rate of return, and x and y are determined by those and other variables. Suppose a call price C_A at an actual market is higher than C_{BS} . How do you obtain riskless money with a portfolio consisting of the stock and the riskless bond?
- (3) Hansen and Jagannathan (1991) show a bound, called as HJ-bound, for stochastic discount factors \mathbf{m} , that prices a given set of asset excess returns R^e . Explain (a) what is the HJ-bound, and (b) its

relation to the Equity premium puzzle. The puzzle suggests that either people are VERY risk averse, or the stock returns were just good luck that won't continue anymore. You may use the postwar mean of value-weighted NYSE market over T-bill rate is about 8% with a standard deviation of about 16%, and the market Sharpe ratio $E(R^e) / \sigma(R^e)$ is about 0.5, as a numerical illustration.

Management Accounting I

Answer both of the two questions regarding cost of capital.

- A) Discuss the concept of cost of capital used in two valuation models: the discounted cash flow model and the residual income model. In addition, explain the difference of the cost of capital used in the two models.
- B) Recently, managements in Japanese firms are being asked to care more about their firms' cost of capital. Evaluate and discuss this trend.

Management Accounting II

W Corporation manufactures and sells industrial grinders. The following table presents financial information pertaining to quality to September from April in this year.

	April	May	June	July	August	September
Sales	64,000	59,700	68,000	70,000	73,000	71,000
Line inspection	80	100	150	200	180	200
Scrap	560	530	500	480	450	460
Quality training	300	300	200	200	200	190
Design engineering	600	620	600	620	580	600
Product testing	120	140	150	150	160	170
Warranty repair	220	240	250	250	270	270
Cost of returned goods	100	80	130	120	170	180
Rework costs	90	80	100	80	70	60

Answer all the following questions.

1. Classify the cost items in the table into prevention, appraisal, internal failure, or external failure categories.
2. Calculate the ratio of each cost of quality (COQ) category to sales to September from April.
3. Distinguish between internal failure costs and external failure costs.
4. Comment on the trends and problems in COQ to September from April.

(Grading Use Only)



Examinee's Number	
Name	
Subject Name	

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April 2020 Entrance Examination
Answer Sheet

* Be sure not to write the Examinee's Number and Name in other than the appropriate space.

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