

UNIVERSITI KUALA LUMPUR BUSINESS SCHOOL

FINAL EXAMINATION JULY 2025 SEMESTER

COURSE CODE

: EGB30103

COURSE NAME

: FINANCIAL ECONOMICS 2

PROGRAMME NAME

: BACHELOR OF SCIENCE (HONOURS) IN

ANALYTICAL ECONOMICS

DATE

: 20 SEPTEMBER 2025

TIME

: 2.00PM - 5.00PM

DURATION

: 3 HOURS

INSTRUCTIONS TO CANDIDATES

- 1. Please CAREFULLY read the instructions given in the question paper.
- 2. This question paper has information printed on both sides of the paper.
- 3. This question paper consists of FIVE (5) questions.
- 4. Answer ALL questions.
- 5. Please write your answers in the answer booklet provided
- 6. All questions must be answered in English (any other language is not allowed).
- 7. This question paper must not be removed from the examination hall.

THERE ARE FOUR (4) PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

INSTRUCTION: Answer ALL questions.

Please use the answer booklet provided.

Question 1

- (a) Suppose that there are only two stocks in the stock market. Stock A sells for \$20 and has 100 shares outstanding. Stock B sells for \$40 and has 200 shares outstanding. Assume that there is a risk-free asset.
 - i. Determine the market portfolio in this hypothetical economy.

(5 marks)

ii. Explain what beta is and what does the beta stock A of 1.2 mean.

(5 marks)

(b) One problem with the CAPM is that it assumes lending and borrowing rates are the same. If this assumption is violated, is the CAPM useless? Justify your answer.

(10 marks)

Question 2

(a) Discuss the implication of the linear pricing rule regarding a firm's share price.

(10 marks)

(b) Elaborate the significance of the Hansen-Jagantahan bound in testing asset pricing model.

(10 marks)

Question 3

(a) A one-year futures contract on a non-dividend-paying stock is entered when the cash price for the stock is \$30 and the risk-free interest rate is 10%.

i. Determine the futures price today.

(2 marks)

ii. Six months later, the stock price rises to \$35 and the risk-free interest rate rises to 8%. Determine the futures price.

(3 marks)

(b) Suppose that the current index value for a stock index is 10,000. The expected annual dividend yield for the stock index is 3% annually. Determine the theoretical index value of a six-month futures contract on this stock index if the annual risk-free interest rate for borrowing and lending is 6%.

(5 marks)

(c) Explain why market participants prefer to use interest rate swaps instead of a package of future/forward contracts to accomplish some risk management objective.

(10 marks)

Question 4

(a) Contingency planning relates to capital structure decisions in two ways.

- i. Maintaining a reserve of liquid assets over the short run.
- ii. Maintaining reserve financing capacity over somewhat longer time periods.

Discuss the benefits and costs of each of the ways in capital structure decisions.

(10 marks)

- (b) Suppose the market price of Corporation ABC's stock is \$30 per share and that there are 40,000 shares outstanding. Suppose the company's management is considering a preemptive rights offering in connection with the issuance of 10,000 shares. Each current shareholder would receive one right for every four shares owned. The terms of the rights offering are as follows: For four rights and \$25 (the subscription price) a new share can be acquired.
 - i. Define preemptive right.

(2 marks)

ii. Calculate the value per right.

(4 marks)

iii. Often a rights offering is designed to have a relatively high value per right. Explain the firm's consideration behind it.

(4 marks)

Question 5

(a) Suppose that a project costs \$1 million for each year in the first five years. At the end of the fifth year, the firm can either abandon the project or continue to operate it. If the project is continued, the expected payoff is \$6 million as of the end of the fifth year by applying the Black-Scholes option pricing model. The value of this option to abandon or continue is \$3 million. Calculate the strategic net present value of this project if the cost of capital is 5%.

(9 marks)

(b) Differentiate between sensitivity analysis and simulation analysis.

(7 marks)

(c) Explain why the internal return method is a better method to employ in capital budgeting analysis than the net present value method when evaluating/assessing a project's attractiveness under different scenarios.

(4 marks)

END OF EXAMINATION PAPER