

# INTERNATIONAL ISLAMIC UNIVERSITY CHITTAGONG

## Department of Business Administration

MBA 3rd Semester

Mid-Term Examination, Summer, 2022

Course Code: FIN-5301; Course Title: Managerial Finance

Time: 2:0 hours

Full Marks: 30

[Answer all the following questions. All questions are of equal marks. All parts of the same question must be answered serially]

1. a. Make a distinction between Finance and Managerial finance. Describe the functions of a financial manager. 3
- b. Describe the goal of the firm with reference to the key variables that managers must consider for ensuring the goal of the firm. 4
- c. Characterize agency relationship, agency problem and agency cost. What are the approaches to minimize agency problems? 3
  
2. a. Why ratio analysis is needed? What are the cautions about using ratio analysis? 2.5
- b. How DuPont system of analysis performs a complete ratio analysis? 2.5
- c. Hanif Enterprises began 2019 with a retained earnings balance of \$1,250,000. During 2019, the firm earned \$558,000 after taxes. From this point, preferred stockholders were paid \$118,000 in dividends. At year end 2019, the firm's retained earnings totaled \$1,534,000. The firm had 110,000 shares of common stock outstanding during 2019. 5
  - i. Prepare a statement of retained earnings for the year ended December 31, 2019, for Hanif Enterprises
  - ii. Calculate the firm's 2019 EPS
  - iii. Calculate the firm's 2019 DPS
  
3. a. Janson wishes to accumulate \$20000 by the end of 4 years by making equal, annual, end-of year deposits over the next 4 years. If Janson can earn 10% on her investments, how much must she deposit at the end of each year to meet this goal? 3
- b. Suppose you want to save money to pay for a down payment on an apartment in 10 years' time. One year from now, you will invest your \$500,000 year-end bonus for the down payment. If you can invest at 15% per year, how much will you receive on your cash in 10 years? If you need \$50,00,000 for the down payment, and you would like to make-up the remaining amount by investing a lump sum today, what is the amount you should invest? 3.5
- c. You put \$10,000 in an account earning 8%. After 3 years, you make another deposit into the same account. Therefore, 6 years after your original deposit, the account balance is \$30,000. What was the amount of the deposit at the end of year 3? 3.5
  
4. a. What is beta coefficient? Interpret some selected beta coefficients. 2
- b. Currently under consideration is an investment with a beta of 1.2. At this time, the risk free rate of return is 5%, and the return on the market portfolio of assets is 10%. You believe that this investment will earn an annual rate of return of 12%. 3
  - i. If the return on the market portfolio were to increase by 5%, what would you expect to happen to the investment's return? What if the market return were to decline by 3%?
  - ii. Use the CAPM to find the required return on this investment. Would you recommend this investment? Why or Why not?

- c. You are considering an investment portfolio containing two stocks, L and M. Stock L will represent 45% of the dollar value of the portfolio, and stock M will account for the other 55%. The expected returns over the next 5 years, 2014–2018, for each of these stocks are shown in the following table.

Year	Expected return stock L	Expected return stock M
2014	16%	20%
2015	17	21
2016	18	19
2017	20	17
2018	21	15

- i. Calculate the expected value of portfolio returns over the 5-year period.
- ii. Calculate the standard deviation of expected portfolio returns, over the 5-year period.
- iii. How would you characterize the correlation of returns of the two stocks L and M?