INTERNATIONAL ISLAMIC UNIVERSITY CHITTAGONG
Department of Business Administration
**MBA 3rd Semester**
Mid-Term Examination, Autumn-2019
Managerial Finance (FIN-5301)

Full Marks: 30 | Answer any Three of the following questions serially. | Time: 2:0 hours

1. a. What do you mean by managerial finance? Briefly discuss its functions. 4
   b. For what reasons is profit maximization inconsistent with wealth maximization? 2
   c. Define the term agency problems in a corporation? Describe how agency problems may be solved in a firm? 4
2. a. What are the limitations of using ratio analysis? 2
   b. Robert Arias recently inherited a stock portfolio from his uncle. Wishing to learn more about the companies in which he is now invested; Robert performs a ratio analysis on each one and decides to compare them to each other. Some of his ratios are listed below. 5

| Ratio | Island Electric Utility | Burger Heaven | Fink Software | Roland Motors |
|---|---|---|---|---|
| Current ratio | 1.10 | 1.3 | 6.8 | 4.5 |
| Quick ratio | 0.90 | 0.82 | 5.2 | 3.7 |
| Debt ratio | 0.68 | 0.46 | 0.0 | 0.35 |
| Net profit margin | 6.2% | 14.3% | 28.5% | 8.4% |
| DSO | 25 days | 13 days | 37 days | 40 days |

Assuming that his uncle was a wise investor who assembled the portfolio with care, Robert finds the wide differences in these ratios confusing. Help him out.

**a.** What problems might Robert encounter in comparing these companies to one another on the basis of their ratios?

**b.** Why might the current and quick ratios for the electric utility and the fast-food stock be so much lower than the same ratios for the other companies?

**c.** Why might it be all right for the electric utility to carry a large amount of debt, but not the software company?

**d.** Why wouldn't investors invest all of their money in software companies instead of in less profitable companies? (Focus on risk and return.)

   c. Define the term financial statement along with its type. Briefly discuss various techniques of analyzing financial statement of a corporation. 3

3. a. What is the difference between nominal annual rate and effective annual rate? 2

   b. Suppose you want to save money to pay for a down payment on an apartment in 5 years' time. One year from now, you will invest your $30,000 year end bonus for the down payment. If you can invest at 15% per year, how much will you receive on your cash in 5 years? If you need $210,000 for the down payment, and you would like to top-up the remaining amount by investing a lump sum today, what is the amount you should invest? 4

c. You put $10,000 in an account earning 5%. After 3 years, you make another deposit into the same account. Four years later (that is, 7 years after your original $10,000 deposit), the account balance is $20,000. What was the amount of the deposit at the end of year 3? **4**

**4. a.** You have been asked for your advice in selecting a portfolio of assets and have been given the following data: **6**

| Expected Return | | | |
|---|---|---|---|
| **Year** | **Asset A** | **Asset B** | **Asset C** |
| **2016** | 12% | 16% | 12% |
| **2017** | 14 | 14 | 14 |
| **2018** | 16 | 12 | 16 |

You have been told that you can create two portfolios-one consisting of assets A and B and the other consisting of assets A and C- by investing equal proportion (50%) in each of the two components assets.

i. What is the expected return for each asset over the 3-year period?
ii. What is the standard deviation for each asset's return?
iii. What is the expected return for each of the two portfolios?
iv. How would you characterize the correlations of returns of the two assets making up each of the two portfolios indentified in part iii?
v. What is the standard deviation for each portfolio?
vi. Which portfolio do you recommend? Why?

**b.** Currently under consideration is an investment with a beta, b, of 1.5. At this time, the risk free rate of return, $R_f$, is 7%, and the return on the market portfolio of assets, $r_m$ is 10%. You believe that this investment will earn an annual rate of return of 11%. **4**

i. If thc return on the market portfolio were to increase by 10%, what would you expect to happen to the investment's return? What if the market return were to decline by 10%?
ii. Use the CAPM to find the required return on this investment.
iii. On the basis of your calculation in part ii, would you recommend this investment? Why or Why not?
iv. Assume that as a result of investors becoming less risk averse, the market return drops by 1% to 9%. What effect would this change have on your responses in part ii and iii.