ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid-Semester Examination
Course No. : BTM 4503
Course Title : Financial Management I

Winter Semester, A. Y. 2022-2023
Time : 1.5 hours
Full Marks : 75

Answer all 3 (three) questions. All questions carry equal marks. Marks of each question and corresponding CO and PO are written in the right margin with brackets.

1.	a)	Why should persons who pursue careers in business have a basic understanding of finance even if their jobs are in areas other than finance, such as marketing or information systems?	5	(CO1) (PO1)
	b)	What is the Sarbanes-Oxley Act, and what does it focus on?	5	(CO1) (PO1)
	c)	What is the difference between stock price maximization and profit maximization? Under what conditions might profit maximization does not lead to stock price maximization?	5	(CO1) (PO1)
	d)	What does it mean for a financial market to be considered (i) informationally efficient and (ii) economically efficient?	5	(CO1) (PO1)
	e)	Why is ROE generally much higher than ROA for banks relative to other industries?	5	(CO1) (PO1)
2.	a)	List the major types of financial institutions and briefly describe the primary function of each.	10	(CO1) (PO1)
	b)	Suppose you were comparing a discount merchandiser with a high-end merchandiser. Suppose further that both companies had identical ROEs. If you applied the DuPont equation to both firms, would you expect the three components to be the same for each company? If not, explain what balance sheet and income statement items might lead to the component differences.	5	(CO1) (PO1)
	c)	Give some examples that illustrate how (a) seasonal factors and (b) different growth rates might distort a comparative ratio analysis. How might these problems be alleviated?	5	(CO1) (PO1)
	d)	A company has $6 billion of net income, $2 billion of depreciation and amortization, $80 billion of common equity, and 1 billion shares of stock. If its stock price is $96 per share, what is its price/earnings ratio? What is its price/cash flow ratio? What is its market/book ratio? What information do these three ratios give for a company perspective?	5	(CO1) (PO2)

3. a) Gerard Jones plans to save for his 5-year doctorate degree, which starts 6 years from now. The current annual expenditure is $7,200 and it is expected to grow by 7 percent annually. Gerard will need to make the first payment 6 years from today. He identifies a savings plan that allows him to earn an interest of 8 percent annually. How much should Gerard deposit each year, starting one year from today? Assume that he plans to make 5 payments. (CO2) (PO2)

b) Sandra Archer is planning for her retirement. She is 35 years old and expects to retire in the next 40 years. She expects to live for another 25 years after her retirement. Her current annual expenditures are $54,000 and she expects them to increase at a rate of 3%, the rate of inflation, until she retires. Upon retiring, her end-of-year expenditures will be equal to her consumption expenditure at age 75. If the minimum amount that she can accumulate by age 75 is $2 million, what is the minimum expected rate of return she must earn on her investment to maintain her consumption expenditure throughout her expected life after retirement? (CO2) (PO2)

c) Wak O'Neal plans to buy a car worth $42,000 today. He is required to pay 15 percent as a down payment and the remainder is to be paid as a monthly payment over the next 12 months with the first payment due at $t = 1$. Given that the interest rate is 8% per annum compounded monthly, calculate the most likely to be the approximate monthly payment? (CO2) (PO2)

d) Haley Hopkins plans to deposit $24,000 into her retirement account at the end of every year for the next 15 years. The account will earn 12 percent every year. Assuming she does not make any withdrawals, how much money will she have at the end of 15 years after the last deposit? (CO2) (PO2)

e) Evan Hubbard estimates he needs $100,000 to travel around the world. He plans to deposit $800 every month starting one month from today to meet this goal. The interest rate is 7 percent compounded monthly. How many months will it take for Hubbard to achieve his goal? (CO2) (PO2)