

Marmara University – Engineering Faculty
Engineering Economy Final Exam

23.06.2021

Q1 - Suppose we deposit \$50.000 into an account that pays a simple interest rate of 1% each month. Find the amount of interest earned at the end of 3 years? **(10pts)**

Q2 There is an opportunity that you will invest \$20.000 now, receive 3 yearly payments of \$1000 (every year) each, plus \$25.000 in the 3rd year. **Use 10% Interest Rate.** Is it a good investment? Please calculate the PV and NPV. **(10pts)**

Q3 Someone comes and says you “I will pay you 900 TL after 3 years or I will pay you 600 TL now”. Calculate the PV and tell which option is better. **Interest rate is 10%.** **(10pts)**

Q4 For the Spring Festival of Marmara University, you will open a stand and sell only sandwich, **for 3 days**. Everyday, you want to sell 200 sandwiches. With 1 kg Cheese you can make 50 sandwiches. 1 Kg Kaşar Cheese is 25 TL, 1 bread is 0,5 TL. Stand, chair and other equipment and material costs are 400 TL. You have to pay 100 TL Rent to Marmara University **everyday**. Also you have to pay a **total of 200 TL** to a friend who helped you at stand.

Find the total cost for this project. Find the cost per sandwich. Also find the breakeven point. (TC=TR) You can add your profit and determine the sales price of 1 sandwich. Do you think it is a good opportunity/investment? Would you do this project? Is it a realistic and feasible project? Please comment. **Hint:** Check the Serhat Hoca Çiğköfte Store Document

(50pts)

“SANDY WITCH” PROJECT

INVESTMENT COST		FIXED COST	
TOTAL		TOTAL	

Q5 Considering your 2nd Mid Term project, a BUSINESS PLAN, assume that you could not sell the products or service. What kind of changes should you make? What was the reason of failure? **Hint:** You can talk about your threats and weaknesses. Please write at least 7-10 sentences.

20pts

- GOOD LUCK -