IB Managerial Economics – Session 5. Costs and managerial decisions

1. Types of costs in an enterprise:

a) There are two main approach to costs: ……………………… & …………………………

b) From the economic perspective costs are divided into :

- …………………………… - …………………………… - ……………………………

c) From the accounting perspective costs are divided regarded criteria into:

- time -> ……………………. & ……………………………….
- relation to the production -> ……………………….. & ………………………………
- business activity -> ………………… & …………………… & …………………...

d) What means the term: economic cost?

Economic cost = …………………………… + ……………………………………………

2. a) What is the distinction between economic costs and accounting costs? b) Which are important for calculating the economic profits of the firm? c) How are sunk costs treated in managerial decision making? Why?

3. **A company** has fixed cost of 45 euro and short run variable costs presented in a table:

Production (no. pieces/day)	SAVC	SAFC	SATC	STC	SMC
1	17	…………..	…………..	…………..	…………..
2	15	…………..	…………..	…………..	…………..
3	14	…………..	…………..	…………..	…………..
4	15	…………..	…………..	…………..	…………..
5	19	…………..	…………..	…………..	…………..
6	24	…………..	…………..	…………..	…………..

a) find the costs for each production level

b) plot the SAVC, SATC and SMC curves, check if the SMC curve passes through the tops (minima) of the other two curves

b) if the company would increase production from 5 to 6 units a week, the associated SMC would be high, explain why this is so focusing on the evolution of marginal productivity of work

4. The company produces 250 items of good X at the cost of 4000. Separately it produces good Y in the number of 400 units, which requires a total expenditure of 6,500. If the production of X and Y is held together (the same means of production are used), the total costs would be 7,500.

What the scale advantages might this company achieve by changing the organization of production?

5. The company has determined the volume of production it intends to produce. After checking how the utilities and marginal costs will be shaped, the company investigates the current relations of the relevant average values in the short and long run. The average costs are as follows:

Costs	**Euro**
LAC	12
SAFC	6
SAVC	11
SATC	17

In the table below, mark the appropriate production decisions in the short and long term at each of the specified product price levels

	Short-term decisions			**Long-term decisions**		
Price (Euro)	Production with the profit	Production despite the loss	Suspend production	Production with the profit	Production despite the loss	Close the business
18	☐	☐	☐	☐	☐	☐
5	☐	☐	☐	☐	☐	☐
7	☐	☐	☐	☐	☐	☐
13	☐	☐	☐	☐	☐	☐
11,50	☐	☐	☐	☐	☐	☐

6. The GS Publishing Company is publishing a new managerial economics text for which it has estimated the following total fixed and average variable costs:

Total fixed costs:	
Copy editing	$ 10,000
Typesetting	70,000
Selling and promotion	20,000
Total fixed costs	$100,000
Average variable costs:	
Printing and binding	$ 6
Administrative costs	*2*
Sales commissions	1
Bookstore discounts	7
Author's royalties	4
Average variable costs	$20
Project selling price	$30

(a) Determine the breakeven output and total sales revenues and draw the cost-volume-profit chart,

(b) Determine the output that would generate a total profit of $60,000 and the total sales revenues at that output level;

(c) Suppose that with a technological breakthrough in printing, the publisher was able to lower its *TFC* to $40,000. What would be its breakeven output? the output that would lead to a total profit of $60,000?

(d) Suppose that total fixed costs remained at $100,000 but average variable costs declined to $10. What would be the publishers breakeven output? the output that would lead to a total profit of $60,000?

(e) If the publisher's total fixed costs remained at $100,000 and its average variable costs at $20 but the publisher charged a price of $40, what would be the breakeven output? the output at which the publisher earns a profit of $60,000?