

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (10 points) Answer EITHER Part A OR Part B.

A) Suppose a friend wants to borrow money. He says he will pay you \$100 in one year and \$300 two years from now. If you want a 7% return, what is the most you will loan him? Set up the equation which will give you the answer, but **do not do the calculation**. Explain why you put those numbers in those positions.

B) Suppose you borrow \$500 from a friend. You agree to pay her \$250 in one year. She wants a 4% return. How much will you have to pay her two years from now? Set up the equation which will give you the answer, but **do not do the calculation**. Explain why you put those numbers in those positions.

2) (12 points) Answer EITHER Part A OR Part B.

A) Is it true that the marginal of some variable goes through the maximum of the average of that same variable? For example, does marginal profit curve go through the maximum of the average profit curve? Explain your logic.

B) Suppose the total cost function is given by  $TC = 40 + 5Q - 3Q^2 + 4Q^3$ . Find the formula for the ATC and the MC functions. Show all work and BRIEFLY explain what you did.

3) (16 points) Answer EITHER Part A OR Part B.

A) What is meant by *TQM*? Why must it yield quick returns?

B) What is meant by *benchmarking*? What is the biggest problem associated with it? Explain your logic.

4) (16 points) Answer EITHER Part A OR Part B.

A) What is a *learning organization*? Why must it be tailored to your organization?

B) What is meant by *broadbanding*? What are the advantages to doing that?

5) (20 points) Answer EITHER Part A OR Part B.

A) Draw an increase in the price of wood on the supply and demand for desks. Explain why the curve(s) moved as drawn. What happens to the price charged and the quantity sold?

B) Draw an increase in the price of space heaters on the supply and demand for room air conditioners. Explain why the curve(s) moved as drawn. What happens to the price charged and the quantity sold?

6) (26 points) Copy the following table into your test booklet. Fill it in. Show the calculations. If there are no calculations, then explain how you got the number. I will not read what is written on this sheet.

Q	TC	ATC	MC
0			
2	30		
4		11	
	66	11	
7			18
	126		21