

國立臺灣科技大學
九十三學年度博士班考試試題

系所組別：工業管理系乙組
科目：生產管理

總分 100 分,各大題若有計算,則必須詳列計算過程.

一,問答題及計算題：(每題十分,共六十分)

1. What are elements of a good forecast? Explain.
2. A firm's manager must decide whether to make or buy a certain item used in the production of vending machines.

Cost and volume estimates are as follows:

	Make	Buy
Annual fixed cost	1000000	None
Variable cost/unit	30	50
Annual volume (units)	100000	100000

The goal is to minimize total costs. How to decision making?

3. What is ISO 9000, and why is it important for global business to have ISO 9000 certification?
4. Briefly define or explain each of these tools:
 - a. Brainstorming.
 - b. Benchmarking.
 - c. Run charts.
5. Given this information:
 - a. Demand: 4000units per year.
 - b. Costs approximately \$ 30 to prepare an order and receive it.
 - c. Carrying cost are 40 percent of purchase price per unit on an annual basis.
 - d. Unit price \$ 0.85

Determine the optimal order quantity and total annual cost.
6. Discuss the importance of good supplier relations. What are the main factors a company takes into account when it selects a vendor?

二,解釋名詞：(每題四分,共四十分)

1. Total Productive Maintenance
2. Pull Production Control
3. Leveling Production
4. Regenerative system
5. Fixed-order-interval model
6. Available-to-promise inventory
7. Cellular Manufacturing
8. Reverse Engineering
9. Robust Design
10. Concurrent Engineering

