

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

1. (30 分) 請申論決策的方法，及其相關的重點。
2. (10 分) 試述墨菲定律 (Murphy's Law) 的意義及其在管理上的啟示。
3. (10 分) 試述鯰魚效應 (Catfish Effect) 在今日資本主義社會的管理意義。

4. What are the main differences between Industry 3.0 and Industry 4.0 in terms of their origins, concepts, and goals? Please provide one concrete example about how the industry actually practices the idea of Industry 4.0 in their fields. (14%)

5. A school cafeteria requires different numbers of full-time workers on different days of the week. The number of full-time workers required on each day is provided in the following table. Based on the spirit of the latest Labor Standards Act, unions and the cafeteria owner reach a consensus that every full-time worker must work five consecutive days and then receives two days off. The cafeteria owner wants to meet its daily requirements using only full-time workers. Please formulate this as a linear programming problem that can be used to minimize the number of full-time workers who must be hired. (You don't need to actually solve it here!) (13%)

Table. Requirements for school cafeteria

Day	Number of full-time workers required
Monday	17
Tuesday	15
Wednesday	13
Thursday	18
Friday	16
Saturday	12
Sunday	14

6. Compare the differences between standard time, cycle time, and takt time in terms of assembly production lines. (8%)

7. Explain the following glossaries (15%)

- 1) Muda
- 2) ERP
- 3) Mura
- 4) EOQ
- 5) Ergonomics