



BPN2023: INDUSTRIAL ENGINEERING

REVIEW OF CHAPTER 2: SYSTEM AS THE FOCAL POINT OF INDUSTRIAL ENGINEERING

Direction:

With hand writing, answer the following questions. You are required to submit the answer no later than 10 July 2017.

Questions:

- 1. Define system.
- 2. A production is an integrated system. Identify its elements, the relationships among the elements, and the purpose of the production system.
- 3. List and explain components of system.
- 4. Elaborate the following concepts of system:
 - a. Close system
 - b. Equifinality
 - c. Entropy
 - d. Interdependence
 - e. Goals
 - f. Feedback
 - g. System boundary
- 5. Illustrate the difference between closed-loop system and open-loop system thinking.
- 6. Distinguish traditional thinking and system thinking.

- 7. Elaborate the importance of system thinking.
- 8. One of the tools/models, which was frequently used to guide the systemic thinking, is "system thinking iceberg".
 - a. Elaborate how this tool/model works.
 - b. Provide an example based on a recent event that strikes you as urgent, important or interesting (e.g., economic crisis, sexual crimes, etc.). Write the event at the top of the iceberg and work your way down through the patterns, underlying structures, and mental models.