

## IE 399 – Summer Practice I

### Report Content

**Part 1.** (10 Points) Fill out the Company Identity Card

**Part 2.** (50 Points) Write a report of maximum eight pages about the company and the production system. This report should be a self-contained report in essay format and include the following:

- Company Information (4 Points):

General Information: Ownership, Sector, Products, Production Capacity, Sales volume, Market shares and competitors, Suppliers and customers

- Organization (10 Points):

Description of the organization and the organization chart (3 Points)

Roles of Industrial Engineers in the organization (7 Points)

- Analysis of the Production System (16 Points)

Major components of the production system, (marketing, manufacturing, finance, purchasing, sales, etc.) (4 Points)

Classify the production system: Identify whether it has a continuous or discrete production; classify the product in terms of ETO, ATO, MTO, or MTS; provide a blueprint or your own sketch of the layout and show the flow of one product on the layout. (12 Points)

- Process Analysis (20 Points)

Prepare a process map for one of the major products or service OR a value stream map for the whole process. If a process map is generated, identify productive and non-productive elements and elaborate on the efficiency of the process by supporting your analysis with data. If a value stream map is generated, determine the value-added and non-value-added times and elaborate on the efficiency of the process by supporting your analysis with data.

**Part 3.** (40 Points) Analyze an “activity” that you are interested in and write a free form essay of maximum five pages that describes this activity in details. **You must provide and interpret data** to support your analysis and generate relevant performance measures. An activity can be a manufacturing or service process, an operation, information flow, a decision-making process, etc. Data collection and interpretation is a crucial component for this part, therefore students should analyze an “activity” that they can collect or obtain relevant data. Grading: 20 Points for “Quality of Analysis” and 20 Points for “Data Analysis and Interpretation”.