

## Title of the Practice

### Industrial Visit to understand Statistics

#### **Goal: -**

1. Make the students understand the actual procedures in Statistics with respect to an industry
2. Teaching the students to apply statistical techniques like Statistical Quality Control, Linear Programming Problems – formulation and solution
3. Show the students how statistical tools can be useful in maintaining process and product quality
4. Teach the students to apply the techniques in similar situations elsewhere by identifying them first

#### **The Context: -**

- The students were taken to Chitale Bandhu Mithaiwale's manufacturing plant at Ranje village near Khed-Shivapur
- The said plant manufactures mostly the famous *Bakarwadi*, a typical delicacy that is loved by all
- Students were told to observe the entire end-to-end process, right from storing of raw material to storage of finished goods
- Students prepared questions related to process techniques, product quality and the measures taken by the company to maintain the same

#### **The Practice: -**

The students learn

- The process of raw material management – FIFO / LIFO.
- To identify the assignable causes and random causes.
- The concept of acceptable sampling.
- To collect on the spot random data and plot the control charts for the same by finding acceptable control limits.
- To identify which control charts are more useful and why.
- To the Linear Programming problems formulation for minimization of cost and maximization of profit.
- To understand transportation costs and supply chain network and solve the transportation problems by using various Transportation Cost methods like North-West Corner Method, Least Cost Method and Vogel's Approximation Method.
- Additionally, business communication skills are honed.

#### **Evidence of success: -**

Students are interested and curious about the actual manufacturing process and are extremely surprised to see that a serious subject like Statistics has real life applications. It also helps them and leads them to look up to applications of Statistics

to grab good career opportunities. Taking Statistics to learning grounds has helped them permanently remember certain concepts for life.

**Resources required: -**

- Guided tour of a manufacturing unit

**Problems encountered: -**

- Students are less aware of the applications of Statistics in an industrial setup.
- The situations are less analysed and interpreted for associating it to the theoretical aspects of Statistics.
- Not enough time to collect data on the site where sometimes permissions become a problem.

**Note (if any): Continuous guidance to the students during the period is essential and more industries need to open their doors to provide the glimpses of the real world scenarios to the students to observe, absorb and learn the applications of Statistics which otherwise is a very dry and drab subject within the confines of a classroom and theoretical framework.**