

## Assignment 12

**Q. Ideate the potential ideas and design the prototypes for industry based problem.**



1. Elucidate the circumstances that lead to problems
2. Define the source of the issue.
3. Build knowledge about the causes of problems and how to solve them.
4. Collect trustable and effective information
5. To efficiently solve problems, use specific methods.
6. Establish consistent work processes to ensure problems.

A prototype is a simple experimental model of a proposed solution used to test or validate ideas, design assumptions and other aspects of its conceptualisation quickly and cheaply, so that the designer/s involved can make appropriate refinements or possible changes in direction.

- To build the way the end-user can connect with and experience a product, industrial product design blends innovative design, technology, engineering, and business studies.

- Prototyping is often a key phase in the creative process for industrial designers to better understand the functionality.
- The prototype design is more concerned with issues such as manufacturability, manufacturing efficiency, material feasibility, and quality assurance, amongst many others.
- They can help with everything from the initial concept prototype and visual demonstration models to complicated design functional prototypes and complex machined components.
- Prototyping for industrial design increases teamwork and design usability testing, all of which are well worth the extra time and effort.

#### Prototypes:

- ❑ Improving equipment performance/efficiency; in order to keep up with new trends, we must continue to upgrade our process equipment as well.
- ❑ Many companies have their own effluent treatment plants for proper waste treatment, and this is a common issue in the chemical industry.
- ❑ Purity of raw materials: All chemical industries need pure raw materials, and this is one of the most pressing issues today. If you can produce purer raw materials, you can significantly reduce the production costs.
- ❑ By-products are created by almost every industry; what you have to do is concentrate on creating a demand for your by-product; otherwise, it would be nothing more than tonnes of waste.
- ❑ Government should have to raise funds.
- ❑ Industiration should be promoted.
- ❑ Investors have to also focus on rural parts of the country.