

## Unit 3 Engineering as Social Experimentation

### Meaning

\* frequently involved in research

\* testing of new product

Each & Every stage of product development

experiments are conducted

### Engineering Experiment vs Standard Experiment

#### Similarities.

\* Design Calculations.

\* Exact properties of raw materials.

\* Constants of materials processing.

\* Nature of working of final product

#### Contrasts

\* Experimental Control

\* Informed Consent

\* Conclusive Remarks.

## Engineers As Responsible Experimenters

- \* Considered as technical enablers.
- \* Shared with mgr., the public & others.
- \* Monitoring project, identifying risks, providing customers & clients desired info.

## General features

- \* Protect the safety of human
- \* Awareness about the nature of project
- \* Decided to involve
- \* Accountable for the project's result

## Code of Ethics

- \* Propagated by various professional societies.
- \* Guidelines for specific group
- \* To know how to conduct.
- \* To resolve various ethical issues.
- \* Convey the
  - rights
  - duties &

## Positive Roles of Codes of Ethic

### i) Inspiration.

- Exercise their obligations effectively

- Apply moral obligations.

### ii) Guidance

- For achieving the obligations.

- Code to the unique situations.

### iii) Support.

Positive & potential support to engineers

### iv) Education & mutual understanding

Concerning the moral responsibilities of

engineers.

### v) Promoting Business Interests

through restraint of trade.