

## POWER PLANT INSTRUMENTATION

Code : EI 801(a)

**Credits : 4**

### **Module I**

Concepts of power plants of different types: Setups, energy conversions and measurement requirements, examples of Thermal, Hydal, and Nuclear plants

Thermal power plant and system instrumentation

### **Module II**

Boiler: control, monitoring and test instruments

Instrumentation for :

- (i) Turbines
- (ii) Condensers
- (iii) Generators
- (iv) Coal handling
- (v) Water treatment
- (vi) Feed water, combustion air and flue gases

### **Module III**

Instrumentation for safety interlocks - protective gears, emergency measures, Alarm systems and Analysis etc.

Pollution measurement, monitoring and control

### **Module IV**

Data handling-processing, logging, acquisition, accounting, display and storage

Instrumentation for Generator and Busbar coupling

Introduction to power plant modeling/simulation