## SUBJECT NO-IE49002, SUBJECT NAME- INSTRUMENTATION SYSTEM DESIGN LTP- 0-0-3,CRD- 2

## SYLLABUS :-

Signal conditioning circuits: Design of bridge circuits and amplifiers for strain gage and RTD; Cold junction compensation for thermocouple, Linearisation of Thermistor characteristics, Signal conditioning for Piezoelectric sensors. Design of obstruction type flow meter, diaphragm type differential pressure transmitter and square root extractor. Design of control valve- flow-lift characteristics and sizing. Design of Relay Ladder Diagram for a Sequential Control System. Design of a Microprocessor based Instrumentation System, Design of 4-20 mA transmitter, interfacing circuits and data acquisition system.