DAM GATE CONTROL SYSTEM

ABSTRACT

The project is aimed to design a “DAM GATE CONTROL SYSTEM” through which we can automate the dam gates, without human intervention.

The project is designed in such a way that the micro controller 8051 is interfaced to three water level sensors which are placed at 3 levels of water in the reservoir. The status of the sensors will be continuously monitored by the micro controller, if the sensor at level 3 is sensed in the water the corresponding signal will be passed to the controller and it will take the intelligent decision of rotating the motor which is interfaced to the controller and is connected to the gate, so that the gate will be opened. Likewise, for the levels 1 & 2 the gate will be closed as per the code logic. Here a16x2 LCD is provided to display the status of the gate whether it is opened or closed.

This project uses regulated 5V, 500mA power supply. Unregulated 12V DC is used for geared motor. 7805 three terminal voltage regulator is used for voltage regulation. Full wave bridge rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.
APPLICATIONS:
- Dam gates
- Reservoirs
- Irrigation control

BLOCK DIAGRAM:

POWER SUPPLY BLOCKDIAGRAM: