**ELECTRONIC PROTECTION FOR EXAM PAPER**

**AIM:**

The main aim of this project is to protect and control the question paper leakage system.

**PURPOSE:**

The idea for the proposed system which involves the electronic protection is derived from modern day applications like Electronic lockers in bank, Home security systems, Office security systems and other security enhanced electronic systems.

**block diagram:**

**MICRO CONTROLLER**

**(8051)**

**POWER SUPPLY**

**RFID READER**

**GSM MODEM**

**RTC**

**L293D**

**DOOR MOTOR**

**LCD DISPLAY**

**Description:**

The proposed hardware design for the system is, the heart of the system is 8051 Along with it many components are used such as RFID, GSM, keys, DC motor and motor drivers, etc are used.

**GSM:**

GSM (Global System for Mobile communications) is the technology that underpins most of the world's mobile phone networks. The GSM platform is a hugely successful wireless technology and an unprecedented story of global achievement and cooperation. GSM has become the world's fastest growing communications technology of all time and the leading global mobile standard, spanning 218 countries. GSM is an open, digital cellular technology used for transmitting mobile voice and data services. GSM operates in the 900MHz and 1.8GHz bands GSM supports data transfer speeds of up to 9.6 kbps, allowing the transmission of basic data services such as SMS.

**REAL TIME CLOCK (RTC**):

AT89C51 includes a low power real-time clock (rtc) with independent power and 32 kHz clock input. it measures the passage of time to maintain a calendar and clock. The main feature of RTC is ultra low power design to support battery powered systems. It provides seconds, minutes, hours, day of month, month, year, day of week, and day of year.

**RFID:**

The SMB130 is a 28 pin DIP module that includes all necessary components for a 13.56 MHz RFID, aside from a PCB antenna. The module communicates over UART or I2C with simple protocols. It also has 2 general purpose inputs and 2 general purpose outputs for switches, relays, etc.

**DC MOTOR & MOTOR DRIVER:**

The l293 and l293d are quadruple high-current half-h drivers. the l293 is designed to provide bidirectional drive currents of up to 1a at voltages from 4.5 v to 36 v. the l293d is designed to provide bidirectional drive currents of up to 6 00-ma at voltages from 4.5 v to 36 v. both devices are designed to drive inductive loads such as relays, solenoids, dc and bipolar stepping motors, as well as other high-current/high- voltage loads in positive-supply applications.

**SOFTWARES:**

* Embedded C
* Keil IDE
* Express PCB

**HARDWARES:**

* Micro Controller(8051)
* Power Supply
* GSM module
* LCD
* DC MOTOR
* RFID MODULE
* MAX 232
* RTC
* L293D.

**RESULT:**

A cost effective system is proposed here which uses RFID, GSM and Real Time Synchronized clock. Examination section of university can deliver the question papers to the examination centers by password protected electronic security system. All these question papers will have next level security using RFID.

**APPLICATIONS:**

* This project is implemented to detect and prevent the leakage of question papers in various university and civil service exams.
* It can be modified to protect some secret and confidential information papers related to our country.