 **RATION SHOP AUTOMATION **

**SYSTEM**

**A PROJECT REPORT**

***Submitted by***

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**BONAFIDE CERTIFICATE**

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**ABSTRACT**

Ration Automation System is used to reduce the burden of manual work which is carried out during the functioning and operation of Fair Price Shop (FPS).From the time these Fair Price shops were brought into implementation and till now the functioning and operation are done manually, so there are lot of drawbacks which comes into the picture some of these include long queues of people waiting, manual billing etc. This is something that is time consuming so a good solution to this would be to automate this system. The features of this system includes the replacement of conventional Ration card by a Smart card which uses a RFID tag for authentication of valid card holders, System which reduces the man work needed to weigh and provide subsidies to the customers. As soon as the stocks arrive to the Fair Price Shops the details of the items are updated to the family head of the card holders, this reduces the burden of people enquiring about the items from Ration shops. The purchase details of subsidies for each month are updated in a website which can be viewed by the customers for reference. If the user is a valid user, the next process takes place and the input can be given in the interface. As soon as the input is given, the products are obtained from the automated ration shop and the amount is taken from the bank account of the particular person. The proposed system is connected to the database via GSM module. This automation system incorporates a lot of additional components for its effective function such as PLC module, PIC microcontroller and GSM module.

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**LIST OF ABBREVIATION**

**S NO. ABBREVIATION DEFINITION**

1 PDS Pubic Distribution Service

2 SCU Signal Control Unit

3 DTE Data Terminal Equipment

4 DCE Data Circuit Equipment

5 EIA Electronic Industries Alliance

6 WORA Write Once Run Anywhere

7 UID Unique Identification

8 RFID Radio Frequency Identification

9 PIC Program Interrupt Controller

10 PLC Programmable Logic Control

11 SMS Short Message Service

12 GSM Global System for Mobile Communication

13 IDE Integrated Development Environment

14 JVM Java Virtual Machine

15 AC Alternating Current

16 DC Direct Current

17 LCD Liquid Crystal Display

18 PC Personal Computer

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