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INSTITUTE OF  
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KNOWLEDGE FROM THROUGH EDUCATION

At Posheri Post Pimplas Tal. Dist. Palghar Pin 421303 (Maharashtra)

Approved by AICTE and Affiliated to University of Mumbai

## CERTIFICATE

This is to certified that the project entitled "DEVELOPMEN OF SMART RATIONCARD AND MEAL DISTRIBUTION SYSTEM USING IOT" is a bonafide work of "SEJAL SANJEEV BHOIR, SWAPNALI EKNATH CHAUDHARI, JANMESH KISHOR DANDEKAR, ROSHAN JAGDISH DHANGAR" submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of "Bachelors of Engineering" in "Electronics And Telecommunication Engineering."

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## ABSTRACT

The present PDS (Public Distribution System) framework has disadvantages like low processing speed, imprecise quantity of goods, material theft, large waiting time in rationing shop. RFID (Radio Frequency Identification) based programmed rationing shop is novel approach out in the PDS valuable for more effective, precise and mechanized method of distribution of ration. An accurate, automated and efficient RFID based technology used for distribution of ration which is an advanced methodology in PDS. The proposed automated rationing system depends on RFID innovation that replaces regular ration card by RFID tag. Customer's database is already saved in ATMEGA 328P microcontroller which is given by Government Authority. Customer has to scan the RFID tag to RFID card reader and after effective biometric check, customer has to enter material type and also the amount of material with the help of keypad. Accurate amount of food grains is dispensed and as soon as the ration is dispensed SMS (Short Message Service) notification is sent to the customer's mobile number by using GSM module (Global System for Mobile Communication) along with it ATMEGA 328P microcontroller updates its database periodically about the availability of goods and the information regarding the transactions done in a digitized manner and it updates its database to the cloud as well by the use of IOT.

**Keywords:**

**Internet of things (IoT), Atmega328p, GSM Module, DC Motor, Wifi module, LCD Display , Keypad 4x4, Buzzer**



A handwritten signature in blue ink, appearing to read "Vivek N..."

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