VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELGAUM-590002

A PROJECT REPORT ON

"DESIGN AND DEVELOPMENT OF LOW-COST ECG SYSTEM USING MICROCONTROLLER AND MATLAB"

(KSCST SPONSORED)
PROJECT REFERENCE NUMBER: 37S0710

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ABSTRACT

In today's fast moving world , Chronic Heart problems have become common among all age group. Cardiac arrest , for example is one such problem where in it needs immediate attention from the doctors, but often it happens that cardiac arrest may come to the person where in it may take more time for him to reach the hospital, under such circumstances, our low cost ECG which is handy can be helpful. A Person who undergoes any heart related strokes can record his ECG immediately and upon reaching the hospital it can be shown to the doctor that helps him in diagnosing the patient efficiently.

The Electrocardiogram is an equipment that helps us in getting the information related to human heart. It is used to study different heart conditions. This project illustrates the design and implementation of a low-cost ECG system using microcontroller and MATLAB. The main objective of this project is to implement an ECG system that helps in storing the heart related information and pulse rate counter and to simulate ECG signal using MATLAB.