



University College Sedaya International



SCHOOL OF ENGINEERING

DESIGN OF PC BASED ECG MONITORING SYSTEM

FINAL YEAR PROJECT

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ABSTRACT

A low cost implementation of PC Based ECG monitoring system using instrumentation amplifier is presented. The report initially gives a brief overview of the heart and its pumping operation. Then, the procedure goes to describe how the electric activity of the heart was acquired from the hardware to the Data Acquisition System in MATLAB software. Once the data can be acquired, then the report show the simulation of the Instrumentation Amplifier and the Low pass RC filter.

The final part will consist of several results and discussions by performing changes of body which can increases the heart-beat and making comparison of Analogue and Digital filter in the Simulink under MATLAB software. The future enhancements for the ECG monitoring system are then outlined. Thus, the overall report conclusions can be outlined.