ABSTRACT

Incubator bacteri 2 Chamber is a laboratory equipment that used to incubate the sample (especially for bacteri) or adjust the temperature according to the original place of bacteri so that the bacteri can multiply in it, while the ambient temperature of bacteri is diverg, some of them survive in hot temperature and cold temperature.

In this final exam the author tries to develop a device that is expected to give a good contribute in the world of healt science and technology. The device that will be made are incubator bacteri 2 chamber, for incubate bacteri that can survive in cold temperatures are 10° C, 15° C, 20° C and 25° C and hot temperature are 32° C, 35° C, 37° C, 55° C, $60\circ$ C and 70° C. In the process of making this device the authors designed by IC microcontroller ATMega 8535 as the main controller, which controlls timer and temperature on the display LCD.

Acording to the analysis of the results it can be concluded that the device is be able to run well and the calculation of data measurement on the output of LM35 for temperature 10° C, 15° C, 20° C, and 25° C obtained the average of % Error= 2.8675%. The calculation data on the display LCD compared to thermometer for temperature 10° C, 15° C, 20° C and 25° C obtained the average of % Error =0.5675%.

Key Word: incubator bacteri, temperature, lm35