

ABSTAK

Appliance measurement of calcium rate in (Ca) Blood base on AT89S51 mikrokontroller with matrix dot printer interface represent one of [the] appliance assisting [all] medical energy [in] laboratory in measuring calcium rate in blood a patient This appliance [is] way of its [job/activity] that is by exploiting light spectrum coming from halogen lamp. Halogen lamp have wavelength [among/between] 350-2500 nm, but here weared for spectroscopy only 350-800 just nm. Besides this appliance also exploit method of reagensia which [is] mixed in this sampel darah, kemudian will be read by censor of LDR and presented [by] [in] LCD. Result of from read of this censor will determine normal [do] not it[him] or big the so small calcium rate in blood

Previously this appliance have been developed by being based on AT89S51 mikrokontroller, but here writer try equipping [him/ it] by using Printer Dot Matrik to printing [him/ it], with a purpose to water down operator [job/activity] and give more accurate data able to be showed direct [at] patient.

Pursuant to result of analysis and examination of data to accuracy of censor hence can be concluded that percentage of previous appliance error [among/between] 1,1% until 1,3% where [at] previous appliance [of] intake of sample data for once. While [at] this appliance [of] intake of sample data of [is] five of times; rill so that its percentage [of] him 0,1% until 3,7%.

Writer try to make this appliance specially just for just adult patient, for the baby of child or - child [do] not, it is of course with assumption that normal rate [of] adult [about/around] 9,00 mg / dl until 11,00 mg / dl.

Keyword: calcium, blood, mikrokontroller, matrix dot printer