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THE KENYA POLYTECHNIC UNIVERSITY

COLLEGE

DEPARTMENT OF ELECTRICAL AND ELECTRONIC

ENGINEERING

PROJECT TITLE: PROPORTIONAL, INTEGRAL, DERIVATIVE (P.I.D)

FAN CONTROL SYSTEM.

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INDEX NO: 401001079

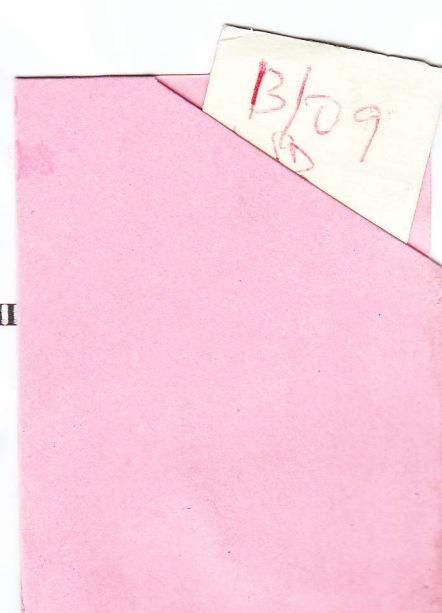
**COURSE OPTION: HIGHER DIPLOMA IN ELECTRICAL
ENGINEERING (POWER AND ELECTRONIC)**

COURSE CODE: 2083/207

SUPERVISOR: MR OJENGE

PRESENTED TO: KENYA NATIONAL EXAMI

EXAM SERIES: NOVEMBER 2009



PREFACE

The objective is to design, construct and test a PID fan control system. This project report is a requirement by KENYA NATIONAL EXAMINATIONS COUNCIL as part of the HIGHER DIPLOMA course undertaken by the author.

Every process has one or more controlled or dynamic variables. The controlled variable is a variable we wish to keep constant, in this case temperature. A manipulated variable is variable we change to regulate the process. In this case a fan.

Each process control has a disturbance; disturbances tend to change the controlled variable. The function of the process control system is to regulate the value of the controlled variable when disturbance changes it. Ambient temperature could be considered a disturbance. The controller is that part of a process control system that decides how much adjustment the system needs and implements the result of that system.

Chapter one contain problem statement, aims, specifications, block diagram and its explanation in brief.

Chapter two contains block by block analysis including mathematical formula.

Chapter three involves determination of practical components values and overall integration of the project blocks.

Chapter four has the complete circuit diagram and its description, construction, project cost, testing ,conclusion and recommendation