KENYA POLYTECHNIC UNIVERSITY COLLEGE

SCHOOL : ENGINEERING SCIENCE AND TECHNOLOGY
ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT

TRADE PROJECT

PRESENTED BY : JOSPHAT KARIRU WAITHAKA

COLLEGE : 107/00688

PROJECT TITLE : DESIGN AND CONSTRUCTION OF AN AUTOMATIC TEMPERATURE REGULATOR.

COURSE OPTION : TELECOMMUNICATION ENGINEERING

COURSE CODE : Et 302107

SUPERVISOR : MR. GITIRI

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PREFACE

Climate change mostly causes by change in weather patterns, global warming causes undesirable temperature changes to unsafe values that hinder smooth working environment especially in urban centre office blocks and damage of office equipment due to overheating.
That is why office blocks are fitted with auxiliaries to maintain temperature below a safe value hence providing a conducive working environment in the office

However, constant running in the cooling system is energy wasting as there comes a time when the room/office being cooled has a temperature which is not hot enough and may say its safe. So there is need to control the cooling system to be working only when the temperature reaches an unsafe value.

Moreover, to determine the efficiency of the cooling equipment a display system housed in the same office with the cooling system may be used to determine the room temperature in a room.
To achieve this, the project designer implemented use of analog and digital circuits of analog and digital circuits to design and construct a purely automatic temperature regulator which uses analog voltages from temperature sensors and set points to switch ON and OFF the cooling system and digital circuit to display the room temperature.

The automatic temperature regulator will be simple, less expensive, and efficient and use available and reliable analog and digital equipment.