P.B. SIDDHARTHA COLLEGE OF ARTS & SCIENCE

Siddhartha Nagar, Vijayawada – 520 010

Autonomous - ISO 9001 – 2015 Certified

Title of the Paper: **INDUSTRIAL ELECTRONICS** LAB

Offered to: B.SC (M.ECs,CA.M.E), ELESEP01

Course Type: Core (P)

Year of Introduction: 2020-21 Year of Revision: Percentage of Revision:

Semester : V Credits : 1

Max. Marks: 50(CCIA: 10+ SEE: 40) Practical Hrs./Week : 3

Course 6B: INDUSTRIAL ELECTRONICS

CO1: To make the students to design triggering circuits of SCR.

CO2: To introduce power electronics components from which the characteristics of SCR TRIAC, IGBT and MOSFET.

CO3: To perform experiments on various converters

CO4: To analyze the operations of converters.

C05: To analyze the series and parallel inverter.

LABS:

1. D.C Power supply and filters.
2. Transistor series regulator
3. Transistor as a shunt regulator
4. Voltage regulator using IC-7805and IC-7905.
5. Voltage doubler using diodes
6. Voltage Tripler using diodes
7. SCR VI characteristics.
8. SCR Series inverter
9. SCR parallel inverter.

LAB MANUAL ARE SUPPLIED BY DEPARTMENT.