Department of Electrical and Electronics Engineering POWER ELECTRONICS

Laboratory Manual





Gokaraju Rangaraju Institute of Engineering & Technology

POWER ELECTRONICS Laboratory Manual By

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Power Electronics Lab Record

CERTIFICATE

This is to certify that it is a Bonafide Record of practical work done in the Power Electronics Laboratory in I sem of I Year during the year.....

Name:	
Course: M.Tech	YearSemester
Branch:	

SIGNATURE OF STAFF MEMBER

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COURSE OBJECTIVES & OUTCOMES

COURSE OBJECTIVES:

- 1. To provide the students hands on experience on power electronics switches.
- 2. To program different switching patterns in power electronics systems.
- 3. To study advanced power electronic converters.
- 4. To familiarize the operation of rectifier circuits.
- 5. To study the power electronics based resonant inverters.

COURSE OUTCOMES:

- 1. Define the basics of power electronics switches and Evaluate the V-I characteristics of SCR
- 2. Relate the operating characteristics of Thyristor controlled & IGBT controlled rectifiers
- 3. Analyze the operation of 3-ph bridge rectifiers
- 4. Apply the knowledge of triggering of IGBT & MOSFET for Chopper circuit
- 5. Extend the knowledge of control technique for Cyclo-converter and relate the operating characteristics of converters for different loads.

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SI.NO:	DATE	EXPERIMENT	SIGNATURE

DATE	EXPERIMENT	SIGNATURE
	DATE	