

**VIVEKANAND EDUCATION SOCIETY'S INSTITUTE OF  
TECHNOLOGY**

**Department of Humanities and Applied Sciences**

**Basic Electrical Engineering**

**Faculty In-Charge: Namrata V. Bonde**

**Lab In-Charge: Namrata V. Bonde**

**Subject: Basic Electrical Engineering**

**Year/ Sem/ Div: F.E./SEM-I/D2A, D2C,D5A**

**Academic Year: 2020-2021**

**Course Objectives:**

1. To provide knowledge on fundamentals of DC circuits and single phase & three phase AC circuits and its applications.
2. To inculcate knowledge on the basic operation and performance of single phase transformer.
3. To provide knowledge on fundamentals of DC and AC machines.

**Course Outcomes:**

1. To apply various network theorem to determine circuit response/behavior.
2. To evaluate and analyze single phase circuit.
3. To evaluate and analyze three phase AC circuit
4. To understand the constructional features and operation of single phase transformer.
5. To illustrate the working principle of three phase machine.
6. To illustrate the working principle of single phase machine.

**Rubrics used for Evaluation:**

1. Attendance for performing the practical
2. Performance/observations by the student during the experiments
3. Presentation in the write up
4. Punctuality getting the work assessed
5. Viva/understanding the experiments

## INDEX

Sl. No.	Name of the experiment	DOP	DOS	Co Mapping	Grade	Signature
1	To study & verify Superposition Theorem			CO1		
2	To study & verify Thevenin's Theorem.			CO1		
3	To Study Series Resonance Circuit			CO2		
4	To Study Parallel Resonance Circuit			CO2		
5	To determine efficiency of single phase Transformer by direct loading method Machines			CO4		
6	To perform OC and SC Test on single phase Transformer			CO4		
7	To Study relationship between line and phase current and voltage in a 3-phase Star & Delta Connected system.			CO3		
8	Study of DC machine			CO6		
9	Assignment No. 1			CO1		
10	Assignment No. 2			CO1 and CO4		

**(Namrata V. Bonde )**  
**Signature of Lab In charge**

