

## **AC MACHINES LAB-II**

**3/4 EEE**

**V-Semester**

**Code: 14EEL502**

### **LIST OF EXPERIMENTS:**

- 1. Regulation of alternator by synchronous impedance method**
- 2. Regulation of alternator by ZPF method**
- 3. Regulation of alternator by MMF method**
- 4. Synchronization of alternator with infinite bus bar-current Locus diagram**
- 5. V and inverted V curves of synchronous motor**
- 6. Synchronous motor performance with constant excitation**
- 7. Separation of losses in single – phase transformer**
- 8. Measurement of  $X_d$  and  $X_q$  of a three phase alternator**
- 9. Load test on Universal motor**
- 10. Measurement of  $X_d''$  and  $X_q''$  of a three phase alternator**
- 11. Power factor correction using synchronous motor**
- 12. Sumpner's test on 3- $\phi$  transformer**
- 13. Reactive power control by using 3- $\phi$  tap changing transformer**
- 14. Characteristics of phase shifting transformer**
- 15. Load test on 3- $\phi$  alternator**

**Note: Minimum 10 Experiments should be conducted**

**Bapatla Engineering College: Bapatla**

**(AUTONOMOUS)**

**Department of Electrical & Electronics Engineering**