



# St. Michael Polytechnic College

St. Santhiyagappan Nagar  
Kalayarkoil-630 551.



**DEPT:** ECE

**YEAR/SEMESTER:** II / III

**SUB.NAME:** Electronic Devices and Circuits

*Each question carries 1(one) mark in PART-A and 12(twelve) marks in PART-B*

## **UNIT 1 - ELECTRO MAGNETISM**

### **PART - A**

1. Define magnetic flux?
2. Define intensity of magnetization?
3. Define ampturns?
4. What is meant by reluctance?
5. State len'z law?
6. State fleming right hand rule?
7. State fleming left hand rule?
8. Name the two types of induced emf?
9. What is mutually induced emf?
10. What is meant by hysteresis?
11. What is meant by hysteresis loop?
12. Define eddy current loss?
13. What is the use of fleming right hand rule?
14. What is the use of fleming left hand rule?
15. Define magnetic field?

### **PART- B**

1. Derive an expression for the lifting power of an electromagnet?(6)
2. State and explain the faradays laws of electromagnetic induction?(12)
3. Explain briefly about self induced emf and dynamically induced emf?(12)
4. Compare magnetic and electric circuits?(6)
5. Derive the force on a current carrying conductor lying in a magnetic field?(6)