

Required experimental setups for Physics Lab. (Session- 2024-25)

1. Determine unknown resistance using Carey Foster's bridge.
2. Determination of high resistance by method of leakage.
3. Verification of Child's law.
4. Calibration of energy meter using ammeter and voltmeter.
5. Time constant using charging discharging of capacitor.
6. Earth Inductor: Horizontal component of earth's magnetic field.
7. Resolving power of telescope.
8. To study the characteristics of a rectifier circuit.
9. To study the characteristics of interstage audio transformer.
10. To study the characteristics of an unregulated power supply.
11. To study the characteristics of R-C network.
12. Wavelength of light using bi-prism.
13. Wavelength of light by Newton's rings method.
14. Refractive index using Brewster's law.
15. To determine the wavelength and separation between D1 and D2 line with the help of Michelson Interferometer.
16. To determine the diameter of a thin wire by interference in a wedge shape air film.
17. To determine the wavelength of sodium light by interference due to three/ four slits.
18. Verification of Richardson-Dushman equation and evaluation of work function of cathode material.
19. To draw the characteristics and to determine the parameters of a field effect transistor (FET).
20. Characteristics of MOSFET.
21. Study and Verification of AND gate using TTL IC 7408 .
22. Study and Verification of OR gate using TTL IC 7432.
23. Study and Verification of NAND gate and use as Universal gate using TTL IC 7400 .
24. Study and Verification of NOR gate and use as Universal gate using TTL IC 7402.
25. Study and Verification of NOT gate using TTL IC 7404.
26. Study and Verification of Ex-OR gate using TTL IC 7486.
27. Characteristics of MOSFAT.
28. Characteristics of p-n-p transistor in common-emitter configuration.
29. Value of Stefan's constant

30. Time constant using charging discharging of capacitor.
31. To determine the wavelength of sodium light by grating.
32. Digital Multimeter
33. Electronic weighing machine.
34. Vernier callipers.
35. Screw gauge.
36. Stop watch.
37. Morse key.
38. Taping key.
39. Commutator.
40. Rheostat.
41. Prism.
42. Grating Elements.
43. Polarimeter tube.
44. Microameter.
45. Power Supply Battery.
46. BNC cable for CRO and Function Generator.
47. Digital Function Generator.
48. Breadboard.
49. Hookup wired.
50. Electronic component kit.