



B. P. Poddar Institute of Management & Technology
Department of Electronics & Communication Engineering
Academic Year: 2018-19 Semester: Odd
Laboratory Name: Fermi Laboratory Room No.: B501
2 ECE 1st semester
Course Name: Solid State Devices Laboratory (EC-392)
List of Experiments to be Conducted



Sl. No.	Topic	Name of Experiment	CO	PO	PSO
1	BJT	Study input characteristics of BJT in common-emitter configuration.	1, 2	1-5,8-10,12	1, 2
2	BJT	Study of output characteristics of BJT in common-emitter configuration for different base currents and hence determine hybrid parameters.	1, 2	1-5,8-10,12	1, 2
3	BJT	Study of output characteristics of BJT in common-emitter configuration and find performance parameters (Voltage Gain, Current Gain, Input Impedance, Output Impedance).	1, 2	1-5,8-10,12	1, 2
4	BJT Amplifier	Study the variation of small-signal voltage gain with frequency of a common-emitter RC coupled amplifier.	3, 4	1-5,8-10,12	1, 2
5	JFET	Study of drain characteristics and transfer characteristics of a JFET and hence determine the FET parameters (drain resistance, transconductance & amplification factor).	1, 2	1-5,8-10,12	1, 2
6	JFET Amplifier	Study the variation of small-signal voltage gain with frequency of a JFET.	3, 4	1-5,8-10,12	1, 2
7	Varactor diode	Study of C-V characteristics of a Varactor diode by appropriate software.	1, 5	1-5,8-10,12	1, 2
8	MOS	Study of C-V characteristics of a MOS structure by appropriate software.	1, 5	1-5,8-10,12	1, 2
9	MOSFET	Study of drain characteristics and transfer characteristics of a MOSFET and hence determine the FET parameters (drain resistance, transconductance & amplification factor).	1, 2	1-5,8-10,12	1, 2
10	Additional Experiment	To design and study the variation of small-signal voltage gain with frequency of a common emitter RC-coupled amplifier.	6	1-5,8-10,12	1, 2