Internship on VLSI Design, LtSpice Assignment			
NAME:		**Machine No.:**	
Sl No.	**Assignment**	**Marks**	**Instructur Signature**
1	Diode as half wave and full wave rectifier	5	
2	Design and simulate CS amplifier using EMOSFET in voltage divider bias configuration.	5	
3	Design and simulate a source follower using EMOSFET.	5	
4	Design and simulate a 555 timer as astable multivibrator.	10	
5	Design and simulate a dual input unbalanced output differential amplifier using MOSFET.	10	
6	Design and simulate a differentiator using op-amp.	5	
7	Design and simulate an integrator using op-amp.	5	
8	Design and simulate an inverter using CMOS.	5	
9	Design and simulate a schmitt trigger using op-amp.	10	
10	Design and simulate a triangular wave generator using op-amp.	5	
11	Design and simulate a clipper using op-amp and a DC reference voltage.	5	
12	Plot the output VI characterstics of a MOSFET.	10	
13	Design and simulate a wein-bridge oscillator using op-amp.	10	
14	Design and simulate wide band pass filter using low and high pass filter	10	
15	Realize the operation of all logic gates.	5	
16	Design and simulate HA, FA, HS and FS.	5	
17	Design and simulate Binary to Grey and Grey to Binary code converter	5	
18	Design and simulate a 4:1 MUX and 1:4 DeMUX using basic logic gates	5	
19	Realize the operation of all Flipflops.	5	
20	Design and simulate SISO, SIPO, PISO, PIPO	10	
21	Design and simulate a two bit multiplier.	10	
22	Design and simulate a 4 bit counter using T flip flop which generates even count sequence.	10	
23	Design and simulate a 4 bit up down counter.	10	
24	Dseign and simulate a SIPO shift register using D flip flop.	10	
25	Design and simulate a 5-bit parallel adder.	10	
26	Design and simulate a D to A converter using Ladder network.	10	
27	Design and simulate a 4-bit Twisted ring counter.	5	
	Total	**200**	