



MOTHER TERESA
INSTITUTE OF SCIENCE & TECHNOLOGY
Permanently Affiliated to JNTUH, Hyderabad
Recognition under Section 2(f) & 12 (B) of the UGC Act, 1956
AN ISO 9001:2008 CERTIFIED INSTITUTION
SANKETIKA NAGAR, SATHUPALLY - 507303, KHAMMAM Dist., TELANGANA



IC & HDL LAB



IC & HDL LABARATORY

S.NO	Lab/Major Equipments
1	CRO's 20MHz Dual Trace Oscilloscope
2	CRO's 20MHz Dual Trace Oscilloscope
3	CRO's 30MHz Dual Trace Oscilloscope
4	Function Generators
5	2 MHzFunction Generators
6	Regulated Power Supply
7	Regulated Power Supply
8	Digital Multimeters
9	Active filter by using OPAMP
10	Study of Function Genarator using IC 741 Op-Amp
11	Monostable Multivibrator using IC555 timer
12	Astable Multivibrator using IC555 timer
13	IC 565-PLL Applications
14	Voltage Regulator Trainer using IC 723
15	Voltage Regulator Trainer using IC 723
16	Three Terminal Voltage Regulators-7805,7809,7912
17	FPGA kits
18	Core 2 Duo Processor G31-Intel Chip set Mother board,2GB DDR2 RAM,ATX Cabinet,80GB HDD,17'' LCD Monitor
19	Dual core 2.2 GHz computer with 15.6 LED Monitor,2 GB, RAM
20	GHDL SOFTWARE(Open source)
21	Bread Boards
22	5K VAK servo controlar voltaje stabilizer

Part-I: Linear IC Experiments :

1. Op-amp Applications-Adder, Subtractor, Comparator
2. Integrator and Differentiator using IC741 Op-Amp.
3. Active Filter Applications-LPF,HPF(First Order)
4. IC 741 waveform Generators- Sine, Square wave and Triangular waves
5. IC 555 Mono Stable and Astable Multivibrator Circuits
6. Schmitt Trigger Circuits-using IC741
7. IC 565 – PLL applications 8. Voltage regulator IC 723, three terminal voltage regulators- 7805, 7809, 7912.

Part-II HDL Simulation Programmes :

1. HDL Code to Realize the all logic gates
2. Design of 2 to 4 Decoder
3. Design of 8-to-3 encoder(without and with priority)
4. Design of 8-to-1 multiplexer and 1-to-8 demultiplexer
5. Design of 4 bit binary to gray code converter
6. Design of 4 bit comparator
7. Design of Full adder using 3 modeling Styles
8. Design of Flip-Flops: SR,D,JK,T