AKRG COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved By A.I.C.T.E., New Delhi and Affiliated to JNTUK, KAKINADA)

NALLAJERLA, W.G.Dt., (A.P)-534112

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

IV B.Tech – I Semester **Regulation – R13**

VLSI LABORATORY

The students are required to design the schematic diagrams using CMOS logic and to draw the layout diagrams to perform the following experiments using CMOS 130nm Technology with necessary EDA tools (Mentor Graphics/Tanner).

LIST OF EXPERIMENTS:

1. Design and implementation of an inverter
2. Design and implementation of universal gates
3. Design and implementation of full adder
4. Design and implementation of full subtractor
5. Design and implementation of RS-latch
6. Design and implementation of D-latch
7. Design and implementation asynchronous counter
8. Design and Implementation of static RAM cell
9. Design and Implementation of differential amplifier
10. Design and Implementation of ring oscillator