Code	Subject Title	Cr. Hrs	Semester
PHY-412	**ADVANCED ELECTRONICS-II (LAB)**	**3**	**VII**
Year	Discipline		
4	**Physics**		

Course Outlines:

1. Design of a UJT relaxation oscillator of a variable frequency, measure frequency and amplitude of the output.
2. Design RF transistor oscillator, Convert it into a transmitter. detect the transmitted wave by a radio receiver (both for AM & FM).
3. Design an inverting and non-investing D.C. amplifier, measurement of parameters of a given IC operational amplifier.
4. Design and study the application of operational amplifier (current to voltage converter, Instrumentation amplifier, buffer, voltage clamp, integrator, differentiator, low and high pass filter, half –wave rectifier etc.).
5. Design a fixed and self bias transistor binary and triggering of binary, using IC's construct and study RS, JK (Master slave), T and D flip-flops.
6. Design and study of a half and full adder with different Boolean expression using IC's.