Government Girls' Polytechnic, Bilaspur

Name of the Lab:**Electrical & Electronic Measurement Lab**

Practical: **Network Analysis Lab**

Class :**3rd Semester (ET&T)**

Teachers Assessment: 10 End Semester Examination: 50

List of Experiments

1. Apply the Kirchoff's law for finding current in a complex electrical circuit.
2. Apply the Thevenin's theorem for finding current in a complex electrical circuit.
3. Verify the Norton's theorem.
4. Verify following theorems:
    a. Super position theorem.
    b. Maximum power transfer theorem for circuits.
5. Observe the wave shape of an integrating circuit on the CRO.
6. Observe the wave shape of a differentiating circuit.
7. Use the filter circuit in musical light system.
8. Develop a circuit for simple project based on network analysis.
9. Measurement of capacitance of a condenser without using R-L-C bridge.
10. Study the function of the following filters:
    a. Low pass filter.
    b. High pass filter.
    c. Band pass filter.
11. Find different electrical parameter in R-L, R-C, R-L-C, series circuits and draw the phasor diagram, also:
    a. Determine current and P.F. in each case.
    b. Determine and observe the resonance condition.
12. Find different electrical parameter in R-C & R-L-C parallel circuit and draw the phasor diagram, also:
    a. Find power and P.F. of the circuit.
    b. Observe parallel resonance condition.