Government Girls' Polytechnic, Bilaspur

Name of the Lab: **Electronics Lab**

Practical: **Electronics Devices & Circuit Lab**

Class :**3rd Semester (ET&T) , 3rd Semester (IT)**
FOR ET&T
Teachers Assessment:10   End Semester Examination: 50
FOR IT
Teachers Assessment:30   End Semester Examination: 70

List of Experiments

1. Plot the V-I characteristics of:
   (i) Silicon Diode (ii) Germanium Diode.
2. Verify the action of diode as a:
   (i) Positive Clipper (ii) Negative Clipper.
3. Verify the action of diode as a:
   (i) Positive Clamper (ii) Negative Clamper.
4. Verify the V-I characteristics of a Zener diode.
5. Set up the circuit and verify the waveforms of:
   (i) Half Wave rectifier (ii) Full Wave (Centre tapped) rectifier
   (iii) Bridge rectifier.
6. Observe the output waveform of a rectifier circuit with:
   (i) Capacitive filter (ii) Inductive filter.
7. Obtain the input and output transistor characteristics for CB configuration.
8. Obtain the input & output transistor characteristics for CE configuration.
9. Obtain the input & output transistor characteristics for CC configuration.
10. Verify the operation of BJT & FET as a switch.
11. Verify the V-I characteristics of an UJT.
12. Observe the characteristics of a:
    (i) Current series feedback amplifier.
    (ii) Voltage series feedback amplifier.
13. Verify the action of UJT as a relaxation oscillator.
14. Setup an RC phase shift oscillator and analyse its operation.
15. Setup the circuit and observe the action of bistable multivibrator & obtain the Output waveform.
16. Setup the circuit and observe the action of monostable multivibrator & obtain the Output waveform.
17. Setup the circuit and observe the action of astable multivibrators & obtain the output waveform.