

**ASSIGNMENT : 3**

1. Discuss the algorithm of load flow solution using newton-raphson method for all type of buses.
2. State the assumption made for load flow studies and applications of load flow studies.
3. Derive static load flow equations. Hence explain classification of buses.
4. Explain how G-S method can be applied for solution of static load flow equation with both PQ and PV buses are present n the system. Also explain how the algorithm is affected when Q limit is exceeded at a PV bus
5. Explain the classification of buses. What is the significance of slack bus? Why slack bus related quantity does not enter into Jacobean matrix.
6. Compare NR method with GS method of load flow study.