

## Assignment No.-1

- (1) Define & Explain the following terms with suitable examples.
  - (a) Active & Passive elements.
  - (b) Circuit & Network
  - (c) Linear & Non-linear elements
  - (d) Unilateral & Bi-lateral elements
- (2) Explain electrical elements  $R$ ,  $L$  &  $C$  as linear elements.
- (3) Write short notes on :
  - (a) Kirchhoff's voltage law (KVL)
  - (b) Kirchhoff's current law (KCL)
  - (c) Source transformation
  - (d) Star-Delta transformation
- (4) State & Explain the following Network Theorems :
  - (a) Superposition theorem
  - (b) Thevenin's theorem
  - (c) Norton's theorem
  - (d) Maximum Power transfer theorem