



ANURAG GROUP OF INSTITUTIONS

Autonomous

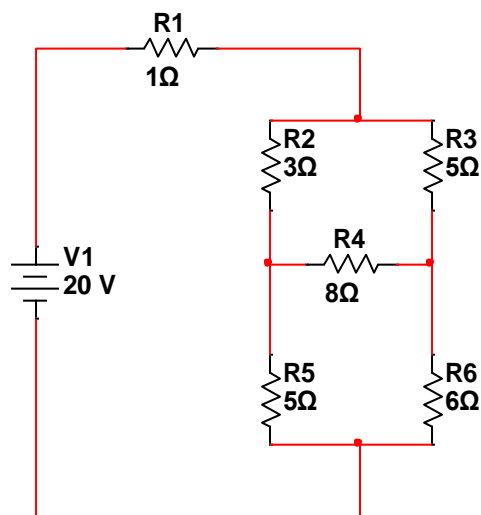
School of Engineering

II-B.Tech -I- Semester (2018-19)

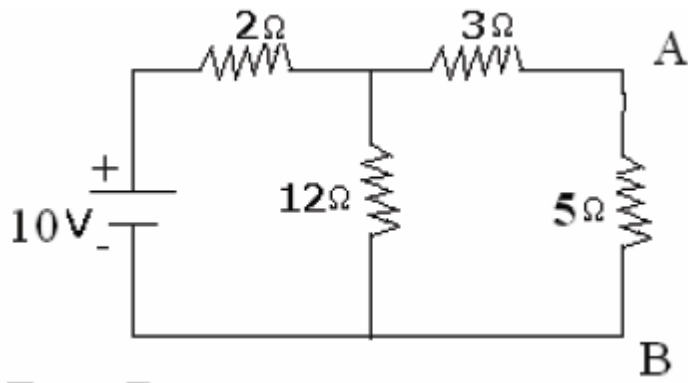
ASSIGNMENT-1

Subject: Electrical and Electronics Engineering
(Only MECH)

1. In the circuit shown in the fig, find the effective resistance and total current using star-delta transformations.



2. Find a) Current flowing through the 3Ω resistor
b) Voltage across 5Ω resistor
c) Power delivered by the source for the circuit shown below.



3. a) Define ohm's law and write the limitations of ohm's law
b) Explain Kirchhoff's laws.
4. Derive the star to delta and delta to star transformations?
5. Explain the principle and operation of DC Generator.
6. Derive the EMF equation of DC Generator