



Class Test –II (Summer Term Examination)

School: School of Engineering

Program: B.Tech 1st yr

Course: Basic Electronics and Electrical Engineering

Course Code: ENG108

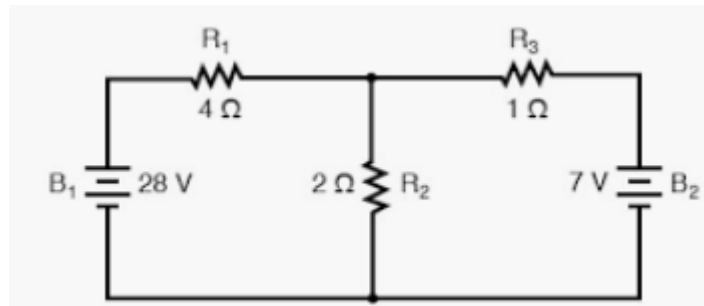
Semester: (1st)

Max Marks: 30

Duration: 1hr

Figure to the right indicate full marks for the questions

Q1. State superposition theorem? Find out the current through each branch using superposition theorem. (2+4=6)

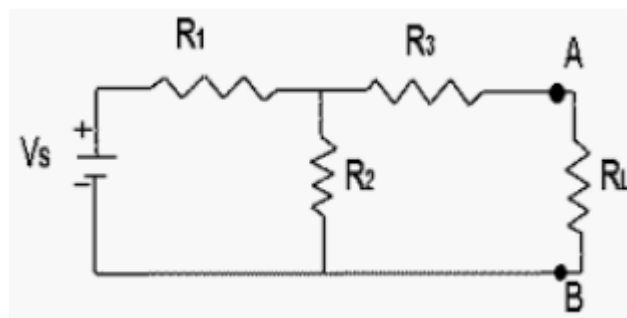


Q2. State Thevenins theorem? State the steps to solve Thevenins theorem? Draw the Thevenins equivalent circuit.

(2+3+2=7)

Q3. Find the current through load resistor, R_L . $R_1=10$ ohm, $V_s=20V$, $R_2=10$ ohm, $R_3=10$ ohm

(4)



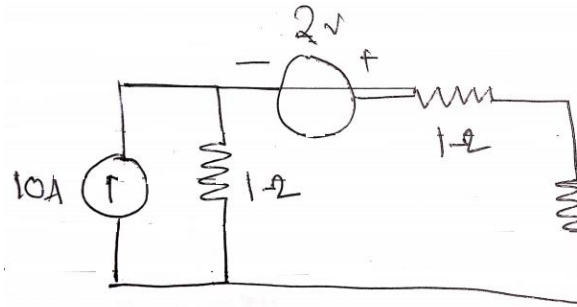
Q4. State Norton's Theorem and draw its equivalent circuit.

(3)



Q5. Find the current through the resistor using Norton's theorem

(4)



Q5. State Maximum power transfer theorem. Find the power by the R_L when varied from 0 ohm to 10 ohm and state for which value of R_L maximum power is transferred and why. $V_{th}=10V$, $R_{th}=5 \Omega$.

(6)

