

In the Name of God

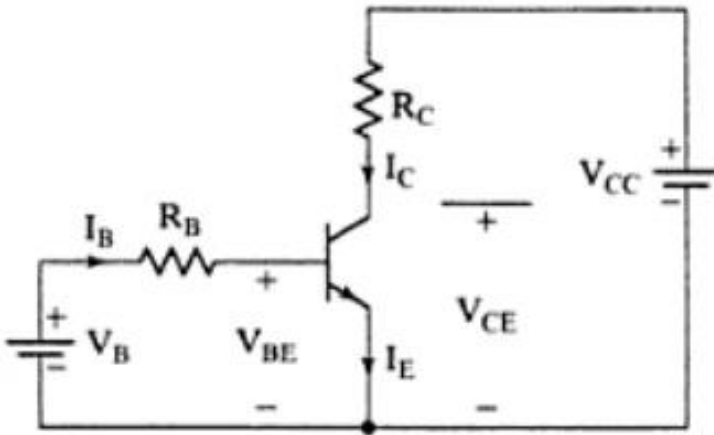
Quiz 1

Name:

Course: Power Electronics

Student Number:

The beta (β) of bipolar transistor in figure below varies from 10 to 60. The load resistance is $R_C = 5\Omega$. The dc supply voltage is $V_{CC} = 100V$ and the input voltage to the base circuit is $V_B = 8V$. If $V_{CE(sat)} = 2.5V$ and $V_{BE(sat)} = 1.75V$, find the value of R_B that will result in saturation with an overdrive 20.



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