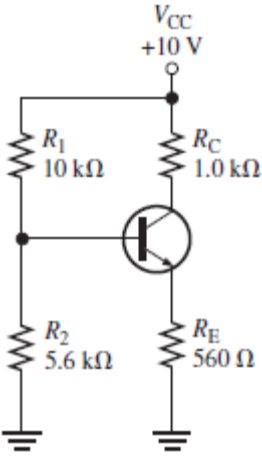


# Electronic Circuits II - Assignment 01

1	DC bias establishes the dc operating point for an amplifier.	T
2	Q-point is the quadratic point in a bias circuit.	F
3	The dc load line intersects the horizontal axis of a transistor characteristic curve at $V_{CE} = V_{CC}$ .	T
4	The dc load line intersects the vertical axis of a transistor characteristic curve at $I_C = 0$ .	F

MCQ

#	Question	
1	<p>If the value of <math>R_1</math> in Figure is increased, the emitter current will</p>  <p>(a) increase (b) decrease (c) not change</p>	b



2	<p>If <math>R_E</math> in Figure is decreased, the collector current will</p> <p>(a) increase (b) decrease (c) not change</p>	a
3	<p>Ideally, a dc load line is a straight line drawn on the collector characteristic curves between</p> <p>(a) the Q-point and cutoff      (b) the Q-point and saturation (c) <math>V_{CE(cutoff)}</math> and <math>I_{C(sat)}</math>      (d) <math>I_B = 0</math> and <math>I_B = I_C/\beta_{DC}</math></p>	c
4	<p>The input resistance at the base of a biased transistor depends mainly on</p> <p>(a) <math>\beta_{DC}</math>      (b) <math>R_B</math>      (c) <math>R_E</math>      (d) <math>\beta_{DC}</math> and <math>R_E</math></p>	d
5	<p>In a certain voltage-divider biased <i>npn</i> transistor, <math>V_B</math> is 2.95 V. The dc emitter voltage is approximately</p> <p>(a) 2.25 V      (b) 2.95 V      (c) 3.65 V      (d) 0.7 V</p>	a