

Electronic Circuits II – Assignment 02

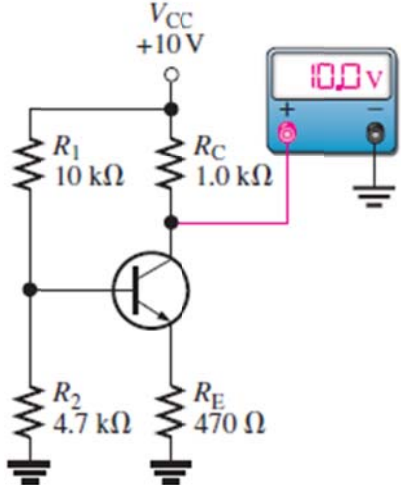
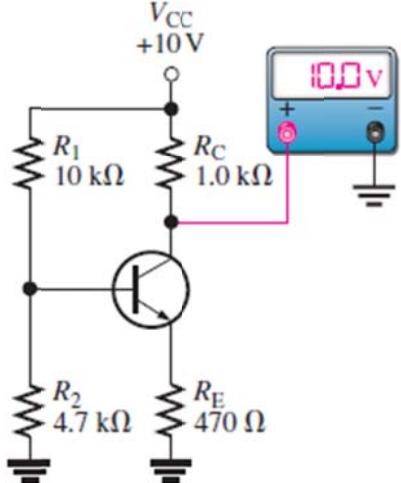
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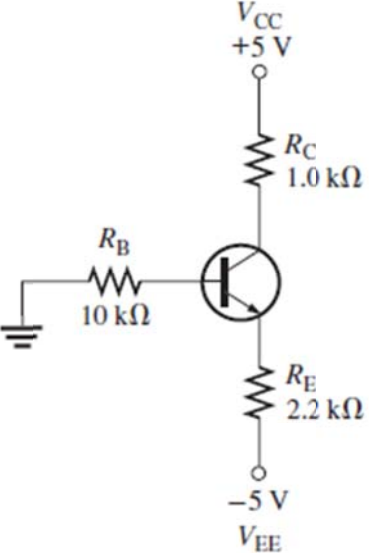
1. يتم تسليم التمرين محلولا في خلال أسبوع من تاريخ التمرين، و يتم حذف درجتين من التمرين عن كل أسبوع تأخير
2. يتم التسليم لمعيد المقرر مباشرة
3. تتم أجابه التمرين في نفس ورق الأسئلة

MCQ

#	Question	Answer
1	Emitter bias is (a) essentially independent of (b) very dependent on (c) provides a stable bias point (d) answers (a) and (c)	
2	In an emitter bias circuit, The emitter current (a) is 5.3 mA (b) is 2.7 mA (c) is 180 mA (d) cannot be determined	
3	The disadvantage of base bias is that (a) it is very complex (b) it produces low gain (c) it is too beta dependent (d) it produces high leakage current	
4	Collector-feedback bias is (a) based on the principle of positive feedback (b) based on beta multiplication (c) based on the principle of negative feedback (d) not very stable	
5	In a voltage-divider biased <i>npn</i> transistor, if the upper voltage-divider resistor (the one connected to V_{CC}) opens, (a) the transistor goes into cutoff (b) the transistor goes into saturation (c) the transistor burns out (d) the supply voltage is too high	
6	In a voltage-divider biased <i>npn</i> transistor, if the lower voltage-divider resistor (the one connected to ground) opens, (a) the transistor is not affected (b) the transistor may be driven into cutoff (c) the transistor may be driven into saturation (d) the collector current will decrease	

7	<p>In a voltage-divider biased <i>pnp</i> transistor, there is no base current, but the base voltage is approximately correct. The most likely problem(s) is</p> <p>(a) a bias resistor is open (b) the collector resistor is open (c) the base-emitter junction is open (d) the emitter resistor is open (e) answers (a) and (c) (f) answers (c) and (d)</p>	
8	<p>If R_1 in Figure is open, the base voltage is</p>  <p>(a) +10 V (b) 0 V (c) 3.13 V (d) 0.7 V</p>	
9	<p>If R_1 is open, the collector current in Figure is</p>  <p>(a) 5.17 mA (b) 10 mA (c) 4.83 mA (d) 0 mA</p>	

Problems

<p>Q1</p>	<p>To what value can R_E in Figure be reduced without the transistor going into saturation?</p> 
<p>So I 1</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>



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