

# Electronic Circuits II – Assignment 05

#	Student ID	Student Name	Grade (10)
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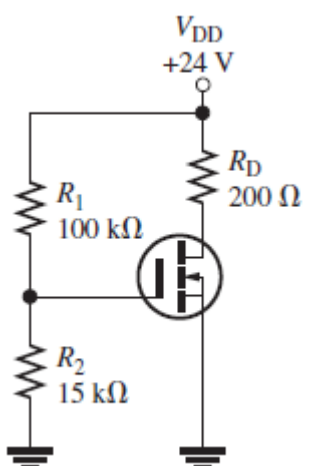
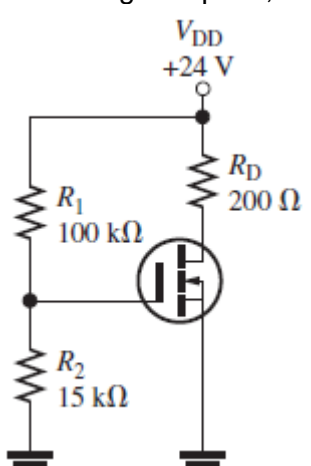
Delivery Date	
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<p>١. يتم تسليم التمرين محلولا في خلال أسبوع من تاريخ التمرين، و يتم حذف درجتين من التمرين عن كل أسبوع تأخير ٢. يتم التسليم لمعيد المقرر مباشرة ٣. تتم أجابه التمرين في نفس ورق الأسئلة</p>
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True or False

1	The parameters $gm$ and $yfs$ are the same.	
2	The D-MOSFET can be operated in two modes.	
3	An E-MOSFET operates in the depletion mode.	

MCQ

#	Question	
1	<p>If <math>V_{GS}</math> in Figure is increased, <math>I_D</math> will</p>  <p>(a) increase (b) decrease (c) not change</p>	
2	<p>If <math>R_2</math> in Figure opens, <math>V_{GS}</math> will</p>  <p>(a) increase (b) decrease (c) not change</p>	



3	A MOSFET differs from a JFET mainly because (a) of the power rating (b) the MOSFET has two gates (c) the JFET has a pn junction (d) MOSFETs do not have a physical channel	
4	A D-MOSFET operates in (a) the depletion mode only (b) the enhancement mode only (c) the ohmic region only (d) both the depletion and enhancement modes	
5	An $n$ -channel D-MOSFET with a positive $V_{GS}$ is operating in (a) the depletion mode (b) the enhancement mode (c) cutoff (d) saturation	
6	All MOS devices are subject to damage from (a) excessive heat (b) electrostatic discharge (c) excessive voltage (d) all of these	
7	A certain D-MOSFET is biased at $V_{GS} = 0$ V. Its datasheet specifies $I_{DSS} = 20$ mA and The value of the drain current (a) is 0 A (b) cannot be determined (c) is 20 mA	















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