

**KING FAHD UNIVERSITY OF PETROLEUM & MINERALS**  
**ELECTRICAL ENGINEERING DEPARTMENT**  
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**EE-463**

**Key Solution**

Quiz # 5    Sec. 1    Serial #    Name:    I.D.#

Circle the correct answer True or False of the following:

1. The equation below is the power-angle equation    True    **False**

$$\frac{2H}{\omega_{Re}} \frac{d^2 \delta}{dt^2} = P_m - P_e = P_a$$

2. The intersection of the input mechanical power and the pre-fault power-angle curve gives information about the critical clearing rotor angle position    True    **False**
3. The critical-clearing time can be obtained by integrating the swing equation.    True    **False**
4. The equal-area criterion can be for two machines or one machine and an infinit bus in order to find out whether the system is stable or not.    True    **False**
5. The rotor torque-angle, following a cleared disturbance, could be un-damped oscillated, damped oscillated, or run out of stability.    **True**  
False