KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

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EE-463 - 161

Key Solutions

Quiz 4 ser#: I.D.: Name:

Circle the correct answer True or False of the following:

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

$$\frac{d^2\delta}{dt^2} = \frac{w_s}{2H}(P_m - P_e)$$

2. The intersection of the output electrical power and the post-fault power-angle curve gives information about the maximum rotor angle position. True **False**

3. The rotor critical-clearing angle can be obtained by integrating the pre-fault and post-fualt power-angle equations.

True **False**

4. Transient stability study refers to the ability of the various machines in the system to regain and remain in synchronism after a normal disturbance. True **False**

5. The rotor torque-angle, following a proper cleared fault, could be critically damped, un-damped oscillated, or damped oscillated. **True** False