

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

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EE-463 - 131

Key Solutions

Quiz 5 ser#: I.D.: Name:

Circle the correct answer True or False of the following:

1. The equation below is the swing equation True **False**

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

2. The intersection of the input mechanical power and the pre-fault power-angle curve gives information about the initial rotor angle position. **True** False

3. The rotor critical-clearing angle can be obtained by equatingintegrating the power-angle equation.

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 sudden large disturbance. **True** False

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