

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

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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 integrating 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 solution of the swing equation gives an expression for the rotor angle δ as a function of active-power which is known as the swing curve of the machine.

True False