

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
ELECTRICAL ENGINEERING DEPARTMENT
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EE 360

Quiz#5

Serial #:

Name:

I.D.#

Circle the correct answer.

1) Two synchronous generators are to run in parallel. The first one has four-poles and runs at a speed of 1500 rpm. If the second one has six-poles, the speed at which it should run is

- a. 1800 rpm.
- b. 1200 rpm.
- c. **1000 rpm.**
- d. 900 rpm.

(2 Marks)

2) The voltage regulation of a synchronous generator having 0.8 leading power factor load, no-load induced EMF of 2400 V, and rated terminal voltage of 3000 V is:

- a. - 25 %
- b. + 25 %
- c. **- 20 %**
- d. + 20 %

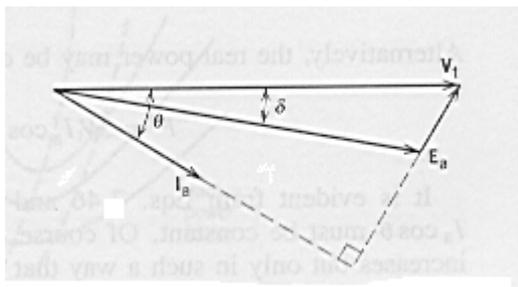
(2 Marks)

3) The pullout torque of a synchronous motor is

- a. the applied torque.
- b. the induced torque.
- c. **the maximum torque.**
- d. the rated torque.

(2 Marks)

4) The phasor diagram shown below is for



- a. an over-excited synchronous motor.
- b. an over-excited synchronous generator.
- c. **an under-excited synchronous motor.**
- d. an under-excited synchronous generator.

(2 Marks)

5) The V-curves of a synchronous motor shows relation between

- a. excitation current and back EMF.
- b. armature current and supply voltage.
- c. **excitation current and armature current.**
- d. load current and terminal voltage.

(2 Marks)