

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

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EE-306

Key Solution

Quiz 5 Sec.: 5 I.D.: Ser#: Name:

Q.1 A synchronous motor running at leading power-factor load is overexcited.

True False

Q.2 A synchronous generator, with negligible armature resistance, running at lagging power-factor load will have negative voltage regulation.

True **False**

Q.3 Non-salient synchronous machines are used in high-speed applications.

True False

Q.4 A synchronous motor can supply reactive power if the field current is reduced.

True **False**

Q.5 Two synchronous machines are to run in parallel. The first one has 6-poles and runs at a speed of 1000 rpm. If the second one has 8-poles, its speed should run at

- a. 1200 rpm.
- b. 1000 rpm.
- c. 900 rpm.
- d. 750 rpm.**