

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

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EE-306

Key Solution

Quiz 6 Sec.: 6 I.D.: Ser#: Name:

Q.1 A 2-pole 50-Hz polyphase induction motor would have a full-load speed of 3000 rpm.

True **False**

Q.2 The pushover torque in three-phase induction machines is larger than pullover torque.

True False

Q.3 A 4-pole, 50-Hz, 3-phase, induction motor has a full-load speed of 1480 rpm. At half-load, its speed would be 1500 rpm.

True **False**

Q.4 A 4-pole, 60-Hz, 3-phase, induction motor has a full-load speed of 1740 rpm. At pushover torque, its speed would be

a. 1900 rpm

b. 1750 rpm

c. 1650 rpm

d. 0 rpm

Q.5 A 6-pole, 60-Hz, 3-phase, induction motor has a full-load speed of 1180 rpm. The speed of the stator rotating magnetic field B_S with respect to the stator is

a. 1200 rpm

b. 1180 rpm

c. 20 rpm

d. 0 rpm