

**KING FAHD UNIVERSITY OF PETROLEUM & MINERALS**  
**ELECTRICAL ENGINEERING DEPARTMENT**  
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**EE-306 (Sec. 3)**

**Key Solution**

Quiz # 6      Serial #                                  Name:    I.D.#

Circle the correct answer.

1) A 6-pole, 60-Hz, 3-phase, induction motor has a full-load speed of 1140 rpm. The speed of the stator rotating magnetic field  $B_s$  with respect to the rotor is (5 Marks)

a- 1200 rpm

b- 1140 rpm

**c- 60 rpm**

d- 0 rpm

2) The starting to pullout torque of a polyphase induction motor occurs when the slip is (.....) and the pushover torque of a polyphase induction generator occurs when the slip is (.....). (5 Marks)

**a.  $1.0 > s > 0.0$                    $s < 0.0$**

b.  $s = 1.0$                            $s = 0.0$

c.  $s > 1.0$                            $s < 0.0$

d.  $1.0 > s > 0.0$                    $s > 1.0$