

ELECTRICAL ENGINEERING DEPARTMENT

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EE-306

Key Solution

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

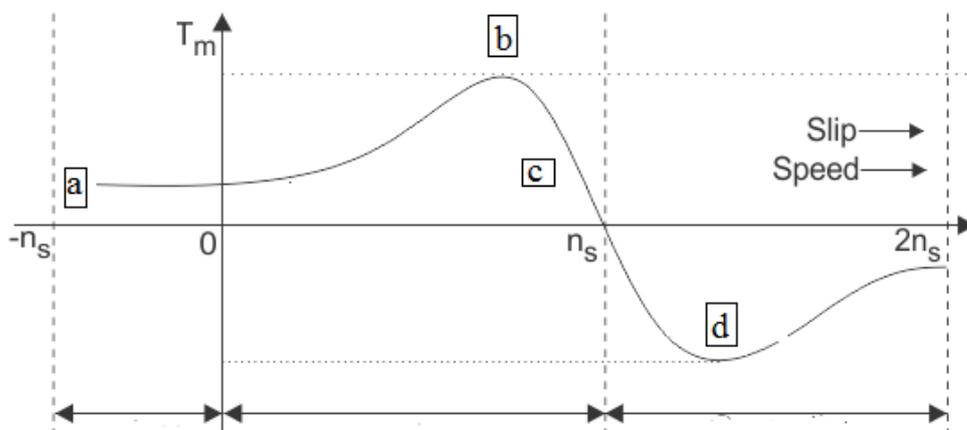
Q.1 The rotor speed of a 4-pole, 60-Hz, 3-phase induction motor at full-load is 1760 rpm. At its half-load, its speed would be (4 Marks)

- a. 1800 rpm
- b. 1780 rpm**
- c. 1740 rpm
- d. 880 rpm

Q.2 A 4-pole, 50-Hz, 3-phase, induction motor has a full-load speed of 1440 rpm. The speed of the stator rotating magnetic field B_s with respect to the rotor is (4 Marks)

- a. 1500 rpm
- b. 1440 rpm
- c. 60 rpm**
- d. 10 rpm

Q.3 In the torque-speed characteristic of a polyphase induction machine shown below, the breakdown torque is located in (tick the proper box in the figure). (2 Marks)



Answer is "b"