KING FAHD UNIVERSITY OF PETROLEUM & MINERALS ELECTRICAL ENGINEERING DEPARTMENT

Dr. Ibrahim O. Habiballah

EE-306

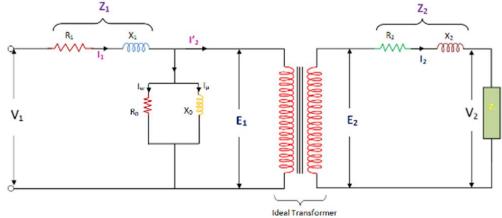
Key Solution

Quiz 3 Sec.: 6 I.D.: Ser#: Name:

Q.1 For a non-ideal transformer connected to a resistive load,

(3-points)

- a. The power factor of the primary is unity.
- b. The power factor of the primary is inductive.
- c. The power factor of the primary is capacitive.
- Q.2 The equivalent circuit of a non-ideal transformer shown below is for (3-points)



- a. the exact model referred to the primary side.
- b. the approximate model with excitation branch referred to the primary side.
- c. the approximate model without excitation branch referred to primary side.
- d. Non of the above
- Q.3 The A transformer has copper loss at full-load = 1000-W. The copper loss at 70 % of full-load is (4-points)
 - a. 300-W
 - b. 490-W
 - c. 700-W