

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

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EE-306

Key Solution

Quiz 1 Sec.: 4 I.D.: Ser#: Name:

Q.1 In a wye-connected negative-sequence system, the phase voltage V_{an} (-----) the line voltage V_{ab} by (-----) (5-points)

- a. Lags, 30° .
- b. Leads, 30° .**
- c. Lags, 150° .
- d. Leads, 150° .

Q.2 A three-phase transformer delivers 120-MW to a three-phase load, at 0.6 power factor lagging. The load is (---), and has (---) reactive power. (5-points)

- a. inductive, 200 MVAR
- b. capacitive, 200 MVAR
- c. inductive, 160 MVAR**
- d. capacitive, 160 MVAR