KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
ELECTRICAL ENGINEERING DEPARTMENT
Dr. Ibrahim O. Habiballah
EE-360

Key Solution

Quize # 1   Serial #   Name: I.D.#

Q.) The two-wattmeter method is applied to a three-phase three-wire 120 V inductive load system. With the meters connected to lines A and B, W_A = 920 W and W_B = 460 W. Circle the correct answer.

1) The total real and reactive power absorbed by the load are

    (a)   P = 1.38 KW,   Q = 460 VAR

    (b)   P = 2.39 KW,   Q = 460 VAR

    (c)   P = 1.38 KW,   Q = 796.7 VAR

    (d)   P = 2.39 KW,   Q = 796.7 VAR

2) The phase current when the load is Y-connected is

    (a) I_{ph} = 6.6 A

    (b) I_{ph} = 7.7 A

    (c) I_{ph} = 4.4 A

    (d) I_{ph} = 3.8 A