Quize # 2   Sec. 1 – 2 – 3   Serial #   Name: I.D.#

Circle the correct answer.

1) A 12 kVA, 4800/240 V, transformer has an equivalent impedance referred to the primary side as $Z_{eqp} = 120 + j300\,\Omega$. If the secondary side of the transformer supplies a resistive load at rated current, the primary current will be   (4 Marks)
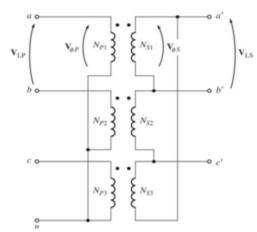
a- 50 A.

b- $2.5\sqrt{3}$ A.

c- 2.5 A.

d- $2.5/\sqrt{3}$ A.

2) The ratings of the 3-phase transformer shown below are 69 kV (on primary) / 4.16 kV (on secondary), 1000 kVA.   (3 Marks)

The rated phase voltage on the primary side is (…..) kV, and the rated phase voltage on the secondary side is (…..) kV

a-   69   ;   2.4

b-   69   ;   4.16

c-   39.84   ;   2.4

d-   39.84 ;   4.16

3) A 10 kVA, 480/120 V transformer is connected as a step-down autotransformer feeding a load at 480 V. The amount of kVA transferred by conduction is   (3 Marks)

a-   4

b-   5

c-   10

d-   40