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1. Transformers have the capability to convert AC to DC.

- a. True  
b. False

**A - True**

2. Transformers have the capability step up or step down DC voltage.

- a. True  
b. False

**B- False**

3. Isolation Transformers are a special type of transformer whose turns ratio is 1.

- a. True  
b. False

**A - True**

4. Eddy currents are produced when voltage is induced in the core material by changing magnetic flux in the core.

- a. True  
b. False

**A- True**

5. Transformers are rated in

- a. W  
b. VAR  
c. VA  
d. V

**C- VA**

6. If the current in the secondary is lower than in the primary, the transformer is a

- a. a step-up transformer  
b. an isolation transformer  
c. a step-down transformer  
d. not enough information to tell

**C – Step  
down**

7. What is the turns ratio ( $n$ ) of a transformer that has a primary voltage of 480V and a secondary voltage of 12,470V?

- a. 10  
b. 36  
c. 21  
d. 26

**D - 26**

8. Determine the maximum load current of a certain transformer rated at 48KVA if 1200V is the secondary voltage.

- a. 50 A  
b. 40 A  
c. 30 A  
d. 25 A

**B – 40 A**

9. Determine the minimum load resistance of a certain transformer rated at 48KVA if 1200V is the secondary voltage.

- a.  $50\Omega$
- b.  $40\Omega$
- c.  $30\Omega$
- d.  $25\Omega$

B – 40  
ohm

10. Determine the efficiency of a transformer that has a power output of 5W and a power input of 6W.

- a. 95%
- b. 90%
- c. 62.3%
- d. 83.3%

D –  
83.3%