



**5. Power factor is the ratio of \_\_\_\_\_ and apparent power**

- a. Reactive power
- b. Active power
- c. Load factor
- d. Maximum demand

**6. The percentage reduction in distribution losses when the power factor at the user is raised from 0.8 to 0.95 is**

- a. 29%
- b. 15.8%
- c. 71%
- d. 84%

**7. The ratio between the number of turns on the secondary to the turns on the primary of a transformer is known as**

- a. Power factor
- b. Efficiency
- c. Winding factor
- d. Turns ratio

**8. Core losses in a transformer are caused by**

- a. Hysteresis loss
- b. Eddy current loss
- c. Both a and b
- d. None of the above

**9. What are the important conditions one should consider before transformers are connected in parallel**

- a. Voltage ratio
- b. Polarity
- c. Phase sequence
- d. All of the above

**10. Which is a benefit of power factor correction for the utility supplying electricity?**

- a. Reactive component of the network and the total current in the system from the source end are reduced
- b.  $I^2R$  power losses are reduced in the system because of reduction in current
- c. Available capacity of the electricity distribution network is increased, reducing the need to install additional capacity
- d. All of the above

*Test your knowledge: Electricity*

<b>ANSWERS</b>				
1. c	2. b	3. b	4. a	5. b
6. a	7. d	8. c	9. d	10. d