CONCEPTUAL PROBLEMS, Chapter 26
Phys 2401, Dr. Huang

Fill in a T/F answer for each statement below:

1. [ ] A 10 \( \mu F \) capacitor can store 10 \( \mu C \) of charge for each volt of potential difference between the two conducting plates.

2. [ ] Capacitors are devices that store electric charges.

3. [ ] The capacitance of a parallel-plate capacitor is proportional to the area of its plates and inversely proportional to the plate separation.

4. [ ] The equivalent capacitance of a parallel combination of capacitors is always greater than any of the individual capacitance.

5. [ ] The equivalent capacitance of a series combination of capacitors is always less than any individual capacitance in the combination.

6. [ ] The energy density in an electric field is proportional to the cubic of the magnitude of the electric field at a given point.

7. [ ] The capacitance of a capacitor increases, when the region between the plates is filled with a dielectric material.