
Capacitor consisting of seven parallel plates. The capacitor shown in Fig. Q2.8 consist of seven parallel square metallic plates of edge length a and separations between all adjacent d ($d \ll a$). The medium is air. With C designating the capacitance of an air-filled parallel-plate capacitor of area a^2 and the plate separation d , the capacitance of the capacitor in Fig. Q2.8 equals

- (A) $C/6$.
- (B) $C/3$.
- (C) C .
- (D) $3C$.
- (E) $6C$.

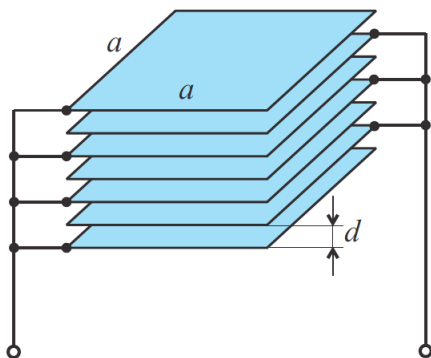


Figure Q2.8 Capacitor consisting of seven parallel metallic plates in air; for Question 2.18.

Solution: (E)

Answer: (E)