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*Energy densities in half-filled capacitor.* The space between the electrodes of a capacitor is half filled with a dielectric of relative permittivity  $\varepsilon_r = 2$  and half filled with air. The electric field in the entire space is uniform ( $\mathbf{E} = \text{const}$ ). Compare the electric energy density in the dielectric, that in the air

- (A) larger.
- (B) smaller.
- (C) the same.
- (D) zero.
- (E) need more information.

*Solution:* (B)

*Answer:* (B)