

38 Which statement about the energy bands in an ideal intrinsic semiconductor is correct?

- A** The conduction band lies just below the valence band.
- B** The number of electrons in the conduction band equals the number of holes in the valence band.
- C** There is an energy gap of 5 eV to 10 eV between the valence and conduction bands.
- D** There is a small overlap between the valence and conduction bands.