

**4. The principle that a quantum orbital cannot be occupied by more than two electrons was given by:**

- (a) Pauli
- (b) Millikan
- (c) Hund
- (d) None of these

4. **Answer :** (a) Pauli

**Explanation:** The Pauli Exclusion Principle states that, in an atom or molecule, no two electrons can have the same four electronic quantum numbers. As an orbital can contain a maximum of only two electrons, the two electrons must have opposing spins.