# Fundamentals of Nanoelectronics, Basic Concepts Unit 3

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## L3.10 Quiz

### **Answers**

## **3.10. Summing up ..**

- 3.10a To locate the spatial distribution of the resistance on an atomic scale we should look at the spatial profile of the
  - (a) energy dissipation
  - (b) electrostatic potential
  - (c) quasi-Fermi levels
  - (d) difference between quasi-Fermi levels
  - (e) none of the above
- 3.10b The ballistic resistance R<sub>B</sub> is associated with the channel-contact interfaces because that is
  - (a) where all the heating occurs
  - (b) where the quasi-Fermi levels show an abrupt drop
  - (c) where the difference between quasi-Fermi levels shows abrupt drop
  - (d) where the electrostatic potential shows abrupt drop
  - (e) none of the above