Fundamentals of Nanoelectronics, Basic Concepts Unit 4

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L4.10 Quiz

Answers

4.10. Summing up ..

4.10a We have seen that energy from a battery can be dissipated as heat into the surroundings, but the process cannot be reversed because heat energy is distributed among many degrees of freedom. All such thermodynamic processes proceed in a direction that leads to an overall

(a) increase in entropy

(b) decrease in entropy

(c) increase in energy

(d) decrease in energy

(e) none of the above

4.10b We were able to obtain all the results in this course in relatively simple terms because

(a) we ignored entropy driven processes

(b) we considered only entropy driven processes

(c) we separated the entropy-driven processes clearly from the rest

(d) we ignored dissipation

(e) none of the above