In the name of God

Department of Physics
Shahid Beheshti University

ADVANCED STATISTICAL MECHANICS I

Exercise Set 4

(Due Date: 1402/08/24)

1. Suppose that we have a system with 3-level energy. Based on Boltzmann statistics and canonical ensemble, compute the $\langle E \rangle$. What happens for $\beta \to 0$ and $\beta \to \infty$.

2. Solve exercise of chapter 2 (R. K. Pathria): Q1, Q5, Q9

Good luck, Movahed

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