Feedback:

Q1. The Schrödinger equation was correctly obtained. You need to use the formula provided during the workshop. Please find the details in the model answer.

Q2. Most of the questions were solved correctly. Please check minor details as commented. In particular, please identify the intercept values etc. in the graph. It is better to draw two graphs for comparison.
Remember $f(E)$ approach 1 for $E \sim 0$, indicating that almost all the states are occupied. Due to the Pauli exclusion principle, these may not be the lowest energy state. On the other hand, $f(E)$ approach 0 for $E \sim \infty$, indicating that almost all the states are unoccupied.

Q3. Most of the questions were answered correctly. Please check minor details as commented. Please note the negative $f(E)$ have no physical meaning.