



COMSATS University Islamabad (Abbottabad Campus)
Department of Computer Science
Assignment – IV (Theory)

Class: BCS-3C

Maximum Marks: 2.5

Instructor: Dr. M. Fahad

Subject: Modern Physics (PHY-229)

Assignment Date: Dec. 04, 2018

Due Date: Dec. 14, 2018 (in class)

Q # 01: Define and explain the following topics (at least 3 pages on each topic). Explain with figures where necessary.

1. Black Body Radiation / Thermal Radiation
2. Angular Momentum
3. Atomic and Nuclear Magnetism
4. Stern-Gerlach Experiment (and why this experiment was performed?)
5. Zeeman Effect (what does Zeeman effect explain?)

Q # 02: Define the followings (one page)

1. Barrier Tunneling
2. Electron Free and Bound State
3. Potential Well

Hint:- Recommended text book could be of great help. Do search/study other relevant books in library and online. You may search authentic websites (not Wikipedia type!!).