## **Updated Topic Guide for Physical Biology Module**

Course BB101 is comparatively new as part of the undergraduate curriculum at IIT Bombay. This course being taught only since last two years. Unfortunately, there is no single text book which instructors can use to teach module II at the level of undergraduates. This is why instructor has to use following three different text books to teach the Module II

**Reference Book 1:** Physical Biology of the cell, R. Phillips, J. Kondev, J. Theriot, H. Garcia (Publisher: Garland Science)

Reference Book 2: Biological Physics, Philip Nelson (Publisher: W. H. Freeman)

**Reference Book 3:** Mechanics of Motor Proteins and the Cytoskeleton, Jonathan Howard (Publisher: Sinauer Associates Inc.)

Below I have listed where one can find topics discuss in lectures

## Lecture 3

Topics: Thermal motion, Thermal Force, Thermal energy

Chapter 4 of Reference Book 3

Topics: Relative Importance of Thermal Energy

Section 5.1.1 in Chapter 5 of Reference Book 1

Topics: Boltzmann's law

Chapter 4 of Reference Book 3

Other topics:

Lecture slides are enough