

Certificate Course in Bio Physics

Syllabus

Sr. No	Topics	Duration (Hours)
Theory Sessions		
1)	Cell structure: types of cell (Prokaryotic and Eukaryotic cell)	2
2)	Thermodynamics for Cell structure	1
3)	Study of Microscope and its parts	2
4)	Nanotechnology for Bio Physics	2
5)	Electrical properties of neurons	2
6)	Group discussions	3
Practical Sessions		
1)	Laser, spectrometer, Diffusion, Surface tension	3
2)	Demonstration Experiments	3
3)	Study of bacterial cell structure and motility	4
4)	Preparation of nanoparticles and determining its antibacterial properties	2
Visits to Research Institutes		
1)	Bio Physics Laboratory , Kalina	6

Total Hours= 30 Hours

Credit = 01

2 Lectures per week

References:

- 1] P.N. Roy: R N Roy - A text book Bio Physics (Revised Edition, 2009) (New Central Book Agency ltd)
- 2] EG: Evylen Guha: Basic Thermodynamics- (Narosa Publication)
- 3] BV: B. Viswanathan- Nano materials, Narosa Publication House, Fourth Reprint- 2013.
- 4] EK: Principal Neural Science – Eric Kandel et al 3rd Edition McGraw Hill Education
- 5] HP: Hans and Puri -, Mechanics –, 2nd Ed. Tata McGraw Hill.