## **Department of Physics**

### **About the Department**

The department of Physics, LBS Govt. College was established in the year 1986. In addition to imparting knowledge of Physics, the department aims to provide a conducive environment for overall development of the students. For this the department has all the necessary facilities such as digital teaching system, fully equipped laboratory, separate dark room for conducting experiments requiring dark conditions etc.

### **Faculty Profile**

Dr. Radha Raman Gautam, Assistant Professor, M.Sc., PhD, NET.

Teaching experience 3 years, Specialization: Particle Physics

## **Teaching Learning**

The students of the department are encouraged to actively participate in various teaching learning activities. In addition to the regular teaching as per the university syllabus, information sharing and confidence building activities such as Quiz competitions, Power Point Presentations, etc. are regularly conducted in the department for the all around development of the students. Regular class tests are also conducted to check the academic development of the students.

### **Student Progression**

A number of students have pursued higher studies at Himachal Pradesh University, IISER Mohali, Shoolini University, and other universities after completing their studies in this institution.

# **Facilities**

The department of physics has latest state of the art Digital Teaching System with overhead projector and smart board which is utilized for daily teaching and learning activities. The department has all the necessary apparatus for conducting Physics experiments mentioned in the University syllabus. A separate dark room is available in the Physics Department for experiments requiring dark conditions.



Partial list of the apparatus available in the Physics Laboratory:

- 1. Helium Neon LASER setup
- 2. Optical Spectroscopes
- 3. Optical Bench
- 4. Cathode Ray Oscilloscopes
- 5. Bar Pendulum
- 6. Kater's Pendulum
- 7. Torsion Pendulum
- 8. Fly Wheel setup
- 9. Determination of Planck's constant using LEDs apparatus
- 10. Digital Multimeter (FLUKE)
- 11. De Sauty Bridge
- 12. Flashing and Quenching of Neon gas apparatus
- 13. PNP, NPN Characteristics apparatus
- 14. Zener diode Characteristics apparatus
- 15. PN-junction diode characteristics apparatus
- 16. Melde's electrical vibrator
- 17. Determination of e/m by Helical Method apparatus
- 18. LCR Resonance apparatus
- 19. Newton's rings setup
- 20. Solar Cell Characteristics apparatus
- 21. Determination of Stefan's constant apparatus
- 22. Variation of Induced EMF (Magnetic Induction apparatus)
- 23. Verification of Norton's Theorem apparatus
- 24. Verification of Thevenin's Theorem apparatus

