

Guru Nanak College, Sri Muktsar Sahib

Activities Report Performa

Session: 2022-23

Name of the Department: Physics

Sponsored by DBT, New Delhi (Under Star College Scheme)

- 1. Name of the Activity Organized:** Extension Lecture on Fundamentals of Physics
- 2. Date and Venue of the Activity:** 30 January 2023, Seminar Hall, Guru Nanak College, Sri Muktsar Sahib
- 3. Name of the Resource Person, Designation and Address:** Dr. Mamta Rani, Asst. Prof. Physics, D.A.V. University Jalandhar and Dr. Rama Gupta, Asst. Prof. Physics, D.A.V. University Jalandhar
- 4. Objective:** To acquaint the students with fundamentals of Physics.

To train students in fundamentals of Lasers.

To train students in fundamentals of Quantum Mechanics.

- 5. Number and Details of the Participants/ Beneficiaries:** Total 126 students participated in Extension Lecture. Following classes participated: B.Sc. I (N.M.), B.Sc. II (N.M.), B.Sc. III (N.M.) and M.Sc. II (Physics).

6. Feedback by Students:

Students were satisfied with the Extension lecture.

7. Video/You-tube Link: Nil

- 8. Outcome of the Activity:** Extension Lecture on Fundamentals of Physics helped the students to understand fundamentals.

Learning outcomes:

LASERS: Einstein Coefficients, Stimulated and Spontaneous emission, Population inversion, Three level laser, four level laser, Ruby laser, He Ne laser, Semiconductor Laser and Broadening of spectral lines.

Quantum Mechanics: Physics of Atomic spectroscopy, Bohr Theory of Hydrogen atom, orbital and spin magnetic moment, Stern Gerlach experiment fundamentals, fine structure of Hydrogen, Zeeman effect and Paschen back effect.

9. Attach Geo Tagged Photographs:





10. Members of the Organizing Committee: Dr. Anita Rani, Dr. Prabhjeet Kaur, Ms. Rajveer Kaur, Ms. Gaganjot Kaur and Ms. Sandeep Kaur

11. Name of the Department Coordinator: Dr. Anita Rani

Dr. Anita Rani
DBT Program Coordinator

Dr. Tejinder Kaur Dhaliwal
Principal