

**REPORT OF ACTIVITIES
OF
DEPARTMENT
OF
PHYSICS
(2016-17) & (2017-18)**

Govt. P.G. College for Women, Gandhi Nagar Jammu
Department of Physics

**List of Activities organized or to be organized by in the academic
year 2016-2017 and 2017-2018**

1. Quiz competition on the 4th Oct., 2016.
2. Quiz competition on the 10th Nov., 2016.
3. Seminar on 22nd Feb., 2018.
4. Expert lecture by Professor Dr. Ashok Kumar Ganguly on 28th -Feb., 2017.
5. Educational trip to nearby power project on 8th March-2017.
6. Cleanliness drive on 21st Sep., 2017.
7. Industrial visit conducted on 2nd Nov., 2017
8. Expert lecture by Professor Dr. S.K. Sharma from University of Jammu on 3rd Nov., 2017.
9. Dissertation/ Projects by Semester-IV, 2018 Students.
10. Industrial visit to be conducted in the first week of November 2018.
11. Educational trip to nearby power project in the last week of November 2018.
12. Seminars of students related to their practical work in first week of November 2018.
13. Guest Lecture by Professors of Jammu/ Central University in middle of November.

The details of the activities conducted are given below:

Activities

1. A quiz competition was organized by the Physics Department for B.Sc-I students on 4th of Oct, 2016 in the Physics department. Three teams Viz; Team A, Team B, Team C and Team D participated in the competition. The Team-A comprising of Surbhi Chalotra and Diksha Dutta and Team-C comprising of Tanmeet Kour and Kritika Mahajan jointly stood first.
2. A quiz competition was organized by the Physics department for B.Sc students on 10th of Nov, 2016 in the Lab-A of the Physics department. Five teams participated in the competition. The Team-D stood first, whereas Teams A, B, C and E stood second in the competition.
3. An outreach lecture was delivered by Dr. Ashok Kumar Ganguly, who is the founding director of Institute of Nano-Science and Technology in Mohali and is also a Professor of Chemistry at IIT Delhi on 28 Feb., 2017. He is a recipient of National award of Nano- Science and Technology by DST. Besides this, he is a fellow of Royal Society of London, Indian Academy of Sciences and National Academy of Sciences. He gave very interesting lecture on the topic *“Nano science materials and technology and application of nano material in day to day life”*

Furthermore, he generated interest among the students to achieve their goal with full enthusiasm and courage. During the course of lecture, students also asked questions related to application of the nano material in day-to-day life.



4. On 22nd of Feb. 2017 The Department of Physics organized a seminar for students of B.Sc Semester II, IV and VI on the topic “*Microwave Communication Devices: Merits and Demerits*”.



5. On 8th of March, 2017, 142 students of B.Sc. Semester II-IV and VI and all faculty members of Physics Department visited Salal Hydro Electric Power Station (Jyotipuram Distt. Reasi). The visit to the project site was very thrilling and educationally informative. The power station officials and engineers explained to our students functioning of various panels installed in the power house. Also, they explained that there are in all six turbines. Each turbine generates 110 MW of electric power. On the day of visit, only two turbines were working. They also explained the annual repair system of the power house particularly turbines. Also, the annual de-silting mechanism of water reservoir was explained by the officials.



6. Recognizing the vital role of colleges in spreading cleanness awareness and implementation, Department of Physics of Govt. P.G. College for women has organized a cleanliness drive on 21-09-2017.

During the cleanliness drive various activities were performed

1. Lecture delivered by faculty members about the necessity of cleanliness.
2. Poster presentations.
3. A rally is organized in the college in which both student and teachers participated.



7. An Industrial visit of students of BSC semester was organized for physics students of Govt. P.G. College for women Gandhi nagar jammu on 02-11-2017 to Bari Brahmana Industrial centre. Students visited Neptune plaster Industry and Shree Ganesh Containers. The aim of the visit was to provide on spot knowledge to the students about the production of various items.



8. An extension lecture was organized by the department of physics on 3rd of November, 2017 on the topic “Semiconductor devices and the basics of digital electronics.”The aim of this lecture was to acquaint the students with the knowledge of semiconductor devices and the basics of digital electronics. On that occasion Dr. Susheel Sharma from the Department of Electronics, University of Jammu was the resource person.



DISSERTATION/PROJECTS

The students of semester-IV (2018) submitted project files on various topics of non conventional sources of energy. The topics were:

- a) Nuclear Energy
- b) Wind Energy
- c) Geo-Thermal Energy
- d) Solar Energy
- e) Hydro Electricity
- f) Peizo Electricity
- g) Electromagnetic Energy

The Students also fabricated working models on conservation of energy/ non conventional sources of energy.





Automatic Light Control System

