

# GARGI COLLEGE UNIVERSITY OF DELHI



**DEPARTMENT OF PHYSICS**  
**2022**

*Year of Establishment* : 1967 with First premedical batch



**B.Sc. General in 1980**



**B.Sc. Hons. in October 1993**

**Courses  
Offered**

-> Phy.  
Hons.  
-> B.Sc.  
Physical  
Science  
-> GE

1993  
Annual



2010  
Semester



2013  
Fyup



2016  
CBCS



2019  
CBCS  
(LOCF)



**NOW  
READY  
FOR NEP**

1. Highly Motivated Teachers

2. Constant Upgradation

3. Learning new Teaching Techniques

4. Engaged in research

5. Working in curriculum development

6. Comprehensive development of students

7. Inculcate scientific temperament in students




8. Adaptability in challenging environment like COVID

9. Feedback and addressal of students problems

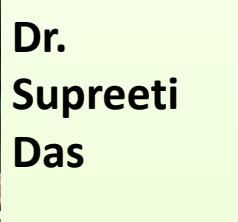
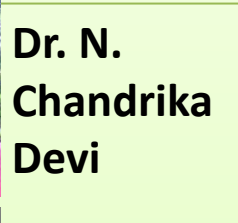
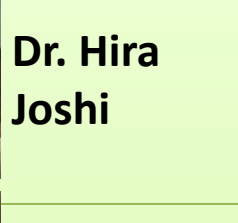
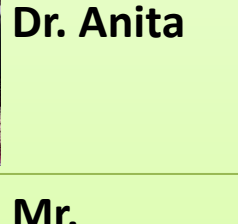
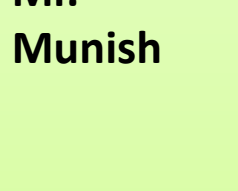
10. Facilitating different platforms to students

1. Physics Society
2. Department Management
3. Physics Research Lab (recognised by BRS, D.U.)
4. Department Library
5. Updated Lab according to Curriculum
6. Teachers' Involvement in Curriculum Development
7. U.G., P.G. and Ph.D. Supervision
8. Update with Latest Research
9. Teachers involvement as Resource Person/Panellist/Contributor
10. Learning and implementing with technology advancement

# Faculty profile with names, qualification, designation and specialization

	Name	Qualifications	Designations	Specialization	Exp. (yrs)	Research Papers 2016-now	Book/ Chapters	Total Contributions/Book & Chapters till date
	<b>Prof. Vandna Luthra</b>	M.Sc, Ph.D (D.U) <b>Post-Doc (6 Months) State Univ of New York, BGM (Raman Fellow) (2014-15)</b>	Professor	Material Sci., Electronics Nanotechnology, Computational Physics, Pedagogy	27	15	2	35/7
	<b>Dr. Deepti Lehri</b>	M.Sc, Ph.D (D.U) <b>Post-Doc (DU) – Two Years</b>	Associate Professor	Semi-Conductors	30	-	-	-
	<b>Dr. Alka Garg</b>	M.Sc, Ph.D (D.U) <b>(Post-Doc (EMDL, DU) – One Year)</b>	Associate Professor	Material Sci. , Opto electronics Superconductivity, Pedagogy	29	4	1	8



 <b>Dr. Supreeti Das</b>	<b>M.Sc, Ph.D (I.I.T Kanpur)</b>	<b>Associate Professor</b>	<b>Non- Linear Dynamics</b>	<b>30</b>	<b>1</b>	<b>1</b>	<b>3</b>
 <b>Dr. N. Chandrika Devi</b>	<b>M.Sc, Ph.D (D.U)</b>	<b>Associate Professor</b>	<b>Astrophysics</b>	<b>18</b>	<b>-</b>	<b>-</b>	<b>3</b>
 <b>Dr. Hira Joshi</b>	<b>M.Sc.,Ph.D. (D.U)</b>	<b>Associate Professor</b>	<b>Solid State Physics</b>	<b>18</b>	<b>7</b>	<b>2</b>	<b>14/4</b>
 <b>Dr. Anita</b>	<b>M.Sc, Ph.D (D.U)</b>	<b>Assistant Professor</b>	<b>Material Science Electronics</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>5/1</b>
 <b>Mr. Munish</b>	<b>M.Sc (I.I.T. KGP) Ph.D Pursuing from IIT Delhi</b>	<b>Assistant Professor</b>	<b>Solid State Physics</b>	<b>11</b>	<b>-</b>	<b>-</b>	<b>0</b>





<b>Dr. Archana Tripathi</b>	<b>M.Sc (D.U), Ph.D (IIT Delhi)</b>	<b>Assistant Professor</b>	<b>Condensed matter physics</b>	<b>10</b>	<b>8</b>	<b>-</b>	<b>13</b>
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<b>Ms. Mansi Agarwal</b>	<b>M.Sc (D.U) Ph.D. Pursuing from IIT Delhi</b>	<b>Assistant Professor</b>	<b>Material Science</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>3/1</b>
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<b>Dr. Manvi Tak</b>	<b>M.Sc., Ph.D (D.U)</b>	<b>Assistant Professor</b>	<b>Material Science</b>	<b>5</b>	<b>2</b>	<b>-</b>	<b>8/1</b>
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<b>Mr. Manraj</b>	<b>M.Sc. (CU Kerala) Pursuing from DU</b>	<b>Assistant Professor</b>		<b>3</b>	<b>-</b>	<b>-</b>	
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# Superannuated Teachers in last five years....



**Dr. Indu Dutt**  
**2020**



**Dr. Nisha Gupta**  
**2017**





*Mr. Shekhar Chand, Mr. Santosh, Mr. Sushil, Mr. Vinod Dubey, Mr. Sher Bhadur, Mr. Baleshwar Prasad ,Mr. Hemraj, Mr. Sanjeev Kumar (From left to right)*

# P r a k t i k

Initiative of Incubation Cell, Physics Department

Gesture car



LED Panel

16:33

LED Panel in front for Physics lab



Propeller Clock





# Contributions by Faculty members

REVIEWER WITH  
INTERNATIONAL  
JOURNALS OF REPUTE

EXPERTS TALKS

KEYNOTE SPEAKER

PARTICIPATION IN  
SYLLABUS  
UPGRADATION

INVITED TALKS

SESSION JUDGE  
& PANELLIST

ORAL & POSTER  
PRESENTATIONS

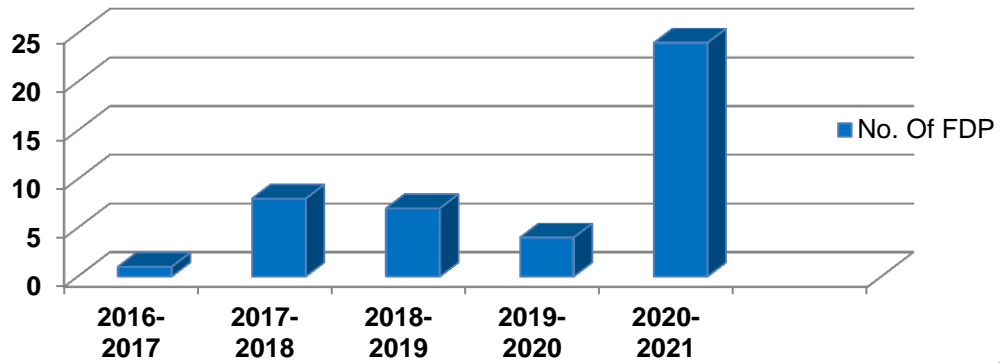
DIFFERENT  
SOCIETIES OF THE  
COLLEGE

UG and Ph.D.  
RESEARCH  
SUPERVISION

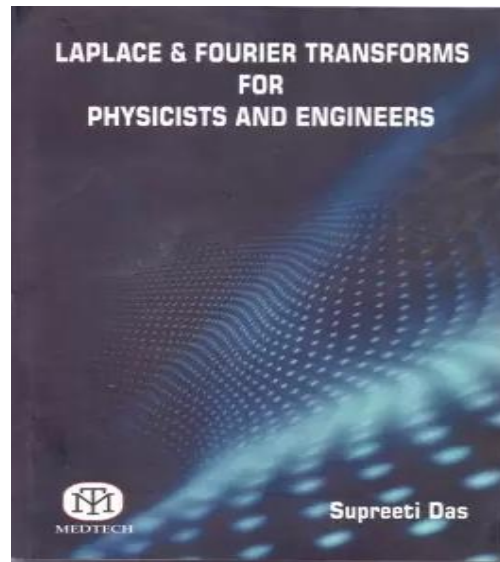
AUTHORSHIP OF  
BOOKS &  
PUBLICATION IN  
JOURNALS

SUBJECT EXPERTS

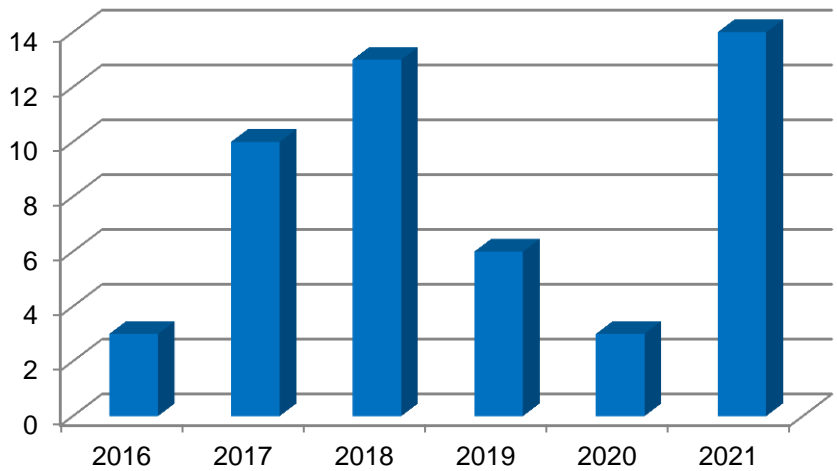
MENTORING AND  
SUPPORT TO THE  
STUDENTS



Number of FDP



One book published



Number of Research Papers/Chapters

# Faculty Awards / Recognitions

## Dr. Alka Garg

1. Awarded “Best performing lecturer” by Government of NCT of Delhi in 2020.

## Dr. Vandna Luthra

1. Dinabandhu Sahu (IAPT-DSM) Award for the year 2017 on 29<sup>th</sup> October 2017 at Haridwar by IAPT.

# Faculty Achievements

## Dr. Vandna Luthra

Supervised 4 Ph.D. students and 2 M.sc. Dissertation.

Supervising 1 Ph.D. student

## Dr. Alka Garg

Supervised 1 M.sc. Dissertation.

Co-Supervising 1 Ph.D. student

## Dr. Anita

Awarded PhD degree in 2021.

## Ms. Mansi Agrawal

ACS Nano Best Poster award at ICONSAT 2018 held at IISc Bengaluru, 21-23 March, 2018.



# RESEARCH BASED PEDAGOGICAL TOOLS (RBPT) : TRAINING AND ADVOCACY BY FACULTY MEMBERS FROM PHYSICS DEPARTMENT : IN RESONANCE WITH THE GOALS OF NEP 2020

→ Level 1, Level 2 and Level 3 trainings by Physics Faculty members  
→ More than 200 UG Teachers were trained by **Dr. Alka Garg and Dr. Vandna Luthra** as Trainer, Resource Persons & Subject Expert  
→ 2 packages were developed in the team on Nanotechnology and Electronics

Initiative by IISER Pune under the Aegis of DBT, Newton Bhabha Fund, PMMMNTT

Dr. Alka Garg and Dr. Vandna Luthra participated in Level 1 Training at IISER Pune (2016)



- Rap-A-Step at Punjabi University, Patiala: *Dr. Alka Garg and Dr. Vandna Luthra*
- St. Joseph College, Bengaluru: *Dr. Vandna Luthra*
- Banaras Hindu University, Varanasi: *Dr. Vandna Luthra*
- Khalsa College and Gargi College: *Dr. Alka Garg and Dr. Vandna Luthra*
- Pandit Ravi Shankar University, Raipur: *Dr. Vandna Luthra*
- Paratbai Chowgule College, Goa: *Dr. Vandna Luthra (Daulat Ram College, DU)*
- HRDC, Integral University, Lucknow: *Dr. Alka Garg*





**Patiala**



**SJC Bengaluru**



**DRC, Delhi**



**Goa**

## **RBPT Workshop : Resource Person/Trainer/Observer/Nominee**



**Level 2 Pune**



**Lucknow**



**BHU Varanasi**



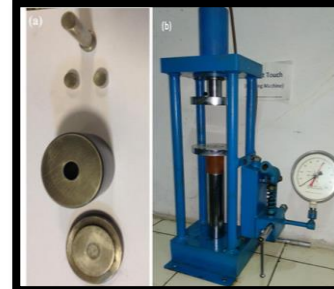
**Gargi & Khalsa  
College**

# Projects sanctioned to Teachers

Type of Project	Principal Investigator/ Co-investigator	Department of Principal Investigator	Duration
Innovation Projects	Dr. Vandna Luthra, Mrs. Arshmeet Kaur, Dr. Sundanda Saini	Physics, Mathematics and B.El.Ed.	1 Year (Extended for 6 months)
Innovation Projects	Dr. Aparajita Mohanty, Dr. Jasmeet, Dr. Supreeti Das	Botany and Physics	1 Year (Extended for 6 months)
Minor Project, UGC	Dr. Supreeti Das	Physics	3 Years
NASI (India) Science Society Project	Dr. Vandna Luthra, Dr. Shashi Chawla	Physics	1 Year (Ongoing)
IUAC Project	Dr. Alka Garg	Physics	3 Year (Ongoing)

# Physics Research Laboratory

- ❖ Recognised by BRS, D.U. thereby granting the status of supervisor to Prof. Vandna Luthra (2003-2004) .
- ❖ Infrastructure development for research in the field of Material Science for UG and PhD students.
- ❑ Synthesis Techniques (Synthesis routes like Solid State Route, Sol-gel, Co-precipitation etc.)
- ❑ High Temperature Furnace
- ❑ Ball-milling
- ❑ Pellet pressing
- ❑ Weighing Balance
- ❑ Characterisation Techniques (Temperature Dependent Electrical Characterisation, UV-Vis Spectrophotometer etc.)
- ❖ Grants from different agencies that have helped to further develop the lab facilities include DST, UGC-UKIERI, Three Innovation projects & many projects under Star College Grant by DBT.
- ❖ 5 PhD students, 2 M.Sc. Dissertations & a large number of UG students have completed projects using these facilities.





# TEACHING-LEARNING

- ❖ According to academic calendar
- ❖ Extensive use of ICT tools (Padlet, Kahoot, V-lab, Slido, Jamboard, Xournal, OBS studio etc.)
- ❖ e-resources
- ❖ Videos and simulations.
- ❖ Practical class -hands on experience in various techniques
- ❖ Discussion on recent developments
- ❖ Seminar presentations
- ❖ Exposure of students
- ❖ Continuous internal assessment





**At Inter University  
Accelerator Centre**



**At Inter University  
Accelerator Centre  
(2017)**



**At Nehru Planetarium  
(2018)**



**At Inter University  
Accelerator Centre  
(2018)**



**At Inter University  
Accelerator Centre  
(2019)**



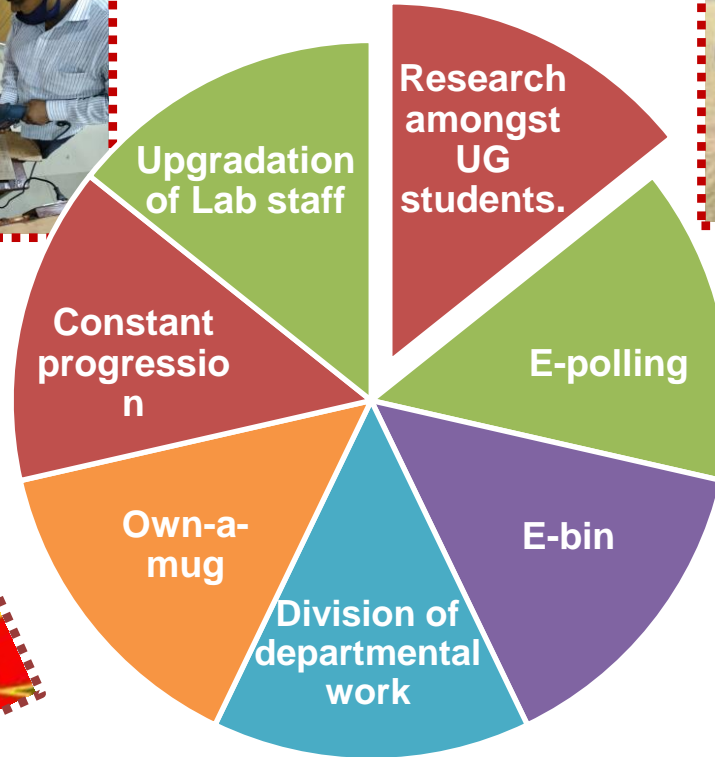
**At Inter University  
Accelerator Centre  
(2020)**

**Visits to  
Research/  
Academic  
Institutes**





# GOOD PRACTICES



# E-FRIENDLY INITIATIVES

Initiative

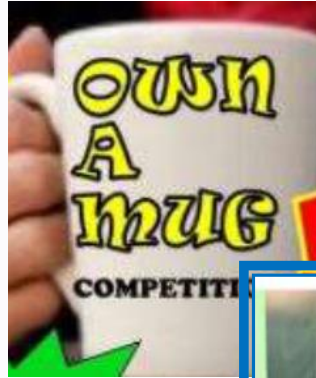
- Own A Mug

Initiative

- E-Waste Collection

Awareness

- Talks with Experts
- Competition

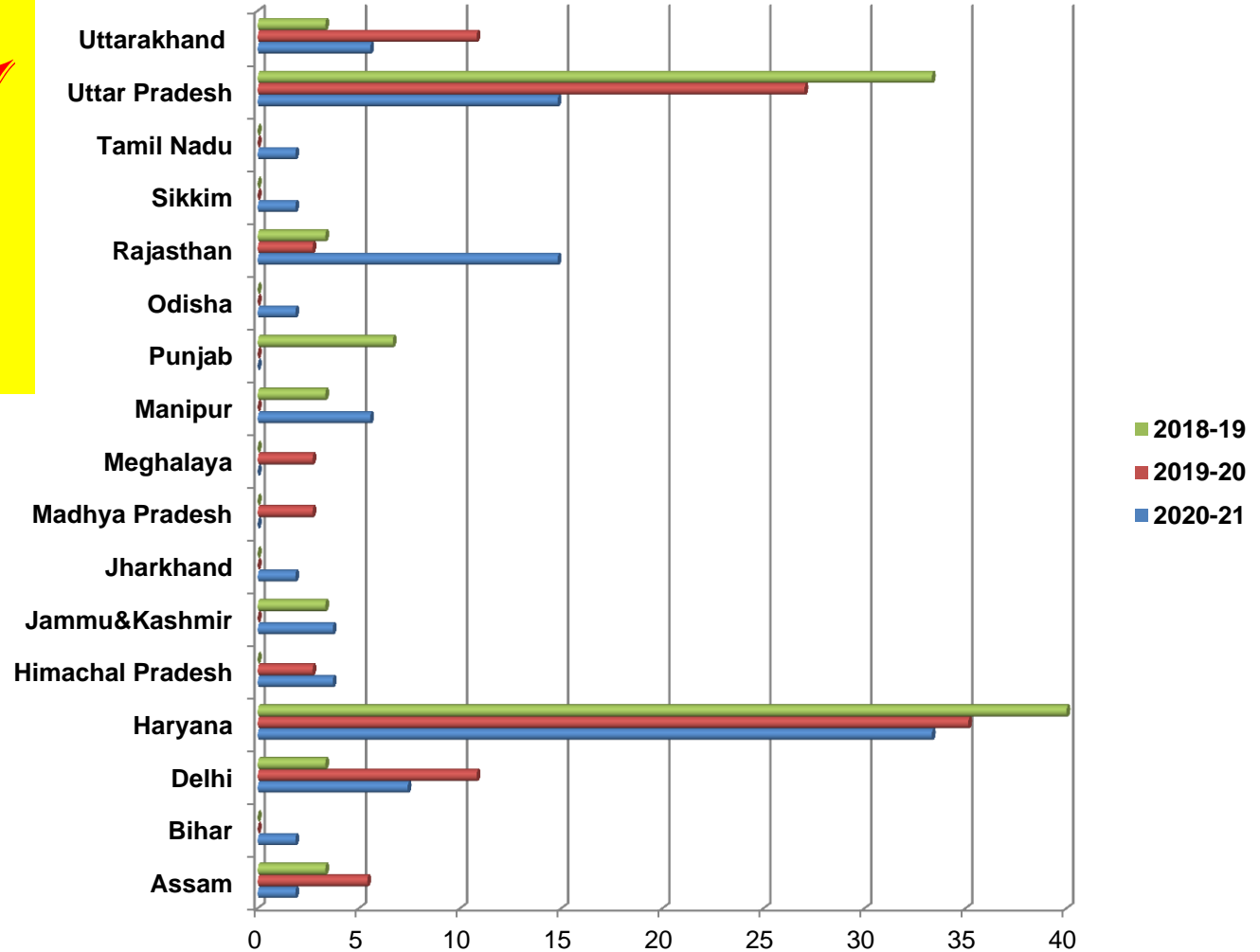


From teachers and lab staff

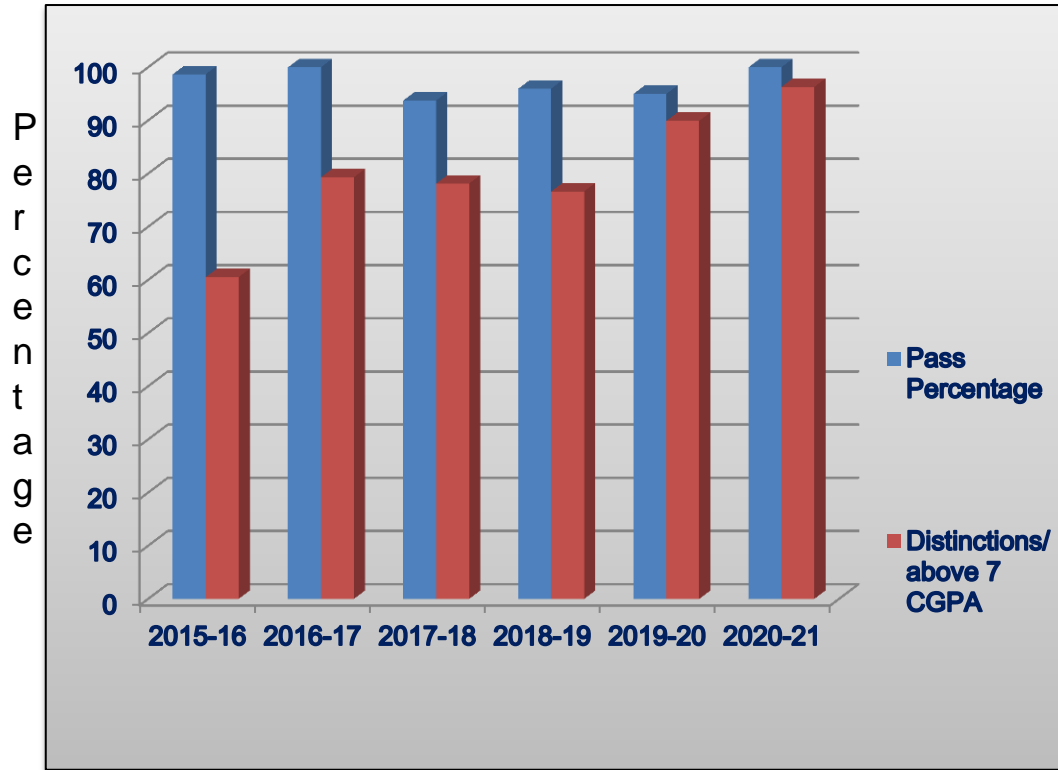


**e-Waste  
Collection &  
Awareness Drive  
18<sup>th</sup> - 25<sup>th</sup>  
September 2018**

# DIVERSITY OF STUDENTS



# RESULTS



GARGI YEAR WISE

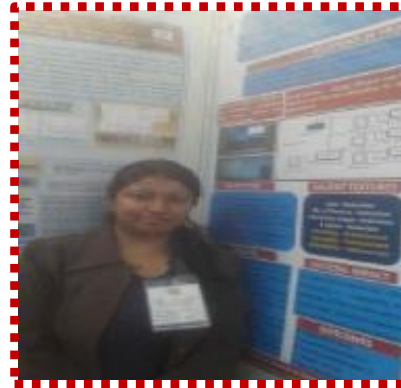


# UNIVERSITY TOPPERS

Year	Name	Marks/ CGPA	Year	Position in College	Position in University
2017-18	Simmie	3459	Third	1st	2nd
2017-18	Vrinda Garg	3355	Third	2nd	5th in south campus
2017-18	Ayushi Tyagi	9.14	first	1st	6th in south campus
2017-18	HIMANI	9.46	second	1st	5th in south campus
2017-18	NEETU VERMA	9.46	second	1st	5th in south campus
2017-18	SUNITI	9.46	second	1st	5th in south campus
2018-19	MUSKAN KHANNA	9.89	second	1st	3rd
2018-19	ARJYAMA	9.79	second	2nd	5th
2018-19	JYOTISMITA	9.71	second	3rd	7th
2018-19	HIMANI SHARMA	9.324	Third	1st	5th in south campus
2018-19	Sangeeta	9.324	Third	1st	5th in south campus
2018-19	SHIVANI SHARMA	9.27	Third	2nd	7th in south campus
2019-20	RITIKA PANDEY	10	Second	1st	1st
2019-20	SHABANA KHATOON	9.89	Second	2nd	2nd
2019-20	KASHISH BHATIA	9.79	Second	3rd	4th
2019-20	MUSKAN KHANNA	9.743	Third	1st	3rd
2019-20	ARJYAMA BORDOLOI	9.703	Third	2nd	5th



# UNDERGRADUATE RESEARCH GUIDANCE





## Preetisha Goswami

- Participated and presented papers in 2 conferences
- Received best oral presentation award in conference ICRAMC-2021



## Ananaya Shankar

- Participated and presented papers in 2 conferences

Both of them have published one paper in AIP conference proceedings with one faculty member

**AIP** Conference Proceedings

HOME BROWSE INFO FOR AUTHORS FOR ORGANIZERS

Home > AIP Conference Proceedings > Volume 2352, Issue 1 > 10.1063/5.0052490

No Access • Published Online: 05 August 2021

**First principle investigations of half metallicity in Heusler compounds with  $X_2TiZ$  ( $X = V, Cr, Mn, Fe, Co,$  and  $Ni$ ;  $Z = Si, Ge$ )**

AIP Conference Proceedings **2352**, 020092 (2021); <https://doi.org/10.1063/5.0052490>

Archana Tripathi<sup>a)</sup>, Ananya Shankar<sup>b)</sup>, and Preetisha Goswami<sup>c)</sup>

View Affiliations View Contributors

PDF E-READER

ABSTRACT TOOLS

SHARE METRICS

TOPICS

- Alloys
- Electronic band structure
- Density functional theory

**ABSTRACT**

In this paper, we have investigated the electronic structure and half-metallic properties of full-Heusler compounds with  $X_2TiZ$  ( $X = V, Cr, Mn, Fe, Co,$  and  $Ni$ ;  $Z = Si, Ge$ ) type structure using the density functional theory (DFT). The electronic band structures were calculated and the density of states for both up spin and down spin was studied to predict the half-metallic properties in these various compounds. One of the spins shows metallic properties

# Under-Graduate Research

Cadmium Iodide as a Gamma Ray Sensor (2015-16) BY Vrinda Garg and Purvi Asthana

TGS crystal growth (2015-16) by Deepshikha

Synthesis of ZnO nanoparticles doped with chromium and their XRD study (2015-16) by Ekta Singh, Sejal Mahajan and Shubhi Giri

Automation of LEDs using PHOENIX (IUAC) and PYTHON (2015-16) by Prapti Bajaj, Divya Aggarwal and Hina Singh

10 UG students were supervised for innovation project in association with Dr. Arshmeet and Dr. Sunanda Saini(2016-17) by Simmie Jaglan, Shivani Dashmana, Anshul, Neha Malik, Meenakshi Uniyal, Apoorva Singh, Mansi Pal, Karuna, Avantika Bharadwaj

Fabrication of a capacitor and evaluation of capacitance using interfacing device, Expeyes Junior (IUAC) by Ayushi Tyagi, Rupal and Asma

Interdisciplinary project "Progression dynamics of Ross River Fever through Susceptible- Infected- Recovered Mathematical Model" by "Prarthana Pasricha Jyoti Singh, Vidhi Jangid and Leimapokpam Nancy Chanu



**Synthesis of compound Bi-Sr-Ca-Cu-O and study of its normal modes through Raman Spectroscopy (2017-18) BY Bharti (3rd year Physical Science) and Chehek(3rd year Physical Science)**

**Density functional theory {Bandwidth study of Full Heusler compounds Ru<sub>2</sub>YZ ((Y=Fe, Mn, Ti, Cr) (X = Si, Ge))} (2017-2018) by Ananya Bansal and Shruti Gupta**

**Performance analysis of passive single slope solar still for cold climatic conditions (2018-19) by Vani Malik and Ektapreet Kapoor**

**Performance analysis of passive single slope solar still for hot climatic conditions (2018-19) by Srishti Bishnoi and Jahnabi**

**Synthesis and electrical characterization of Bismuth iodide composite for photovoltaic applications (2018-19) BY Himani and Muskaan**

**Understanding of image processing and communication with the help of software (2019-20, 2020-21) BY Kashish**

**Ross River : An SIR Model (2019-2020) BY Jyoti, Leimapokpam Nancy Chanu, Prarthna Pasricha and Vidhi (presented the work at a Conference held at JMI)**

**Density functional theory to study DOS and bandstructure of full Heusler compounds) (2019-2020) by Ananya Shankar and Preetisha Goswami (published paper in AIP conference proceedings)**

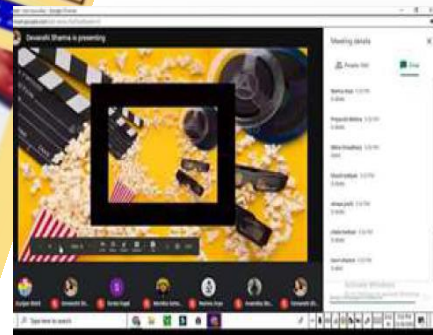
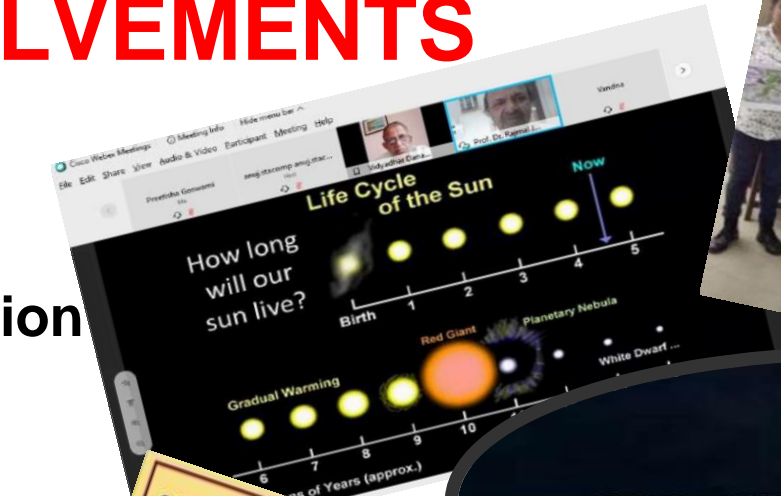
**Half metallicity in full Heusler compounds. (2020-21) by Ananya Shankar and Preetisha Goswami**

# The Physics Society

Quasar  
The Physics Society  
(Events and Activities)

# EVENTS/INVOLVEMENTS

Summer Workshop  
Formation of union  
Inaugural Lecture  
Career Guidance Session  
Freshers' Orientation  
Quiz  
Lecture  
Farewell  
Magazine  
Interaction with Alumni



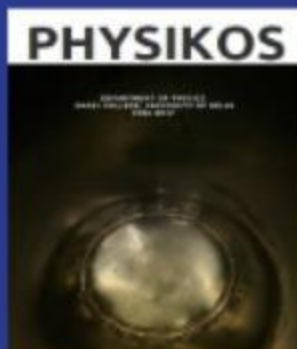
*THE  
TALENT STORY  
SHOW*

30 DEC, 2020

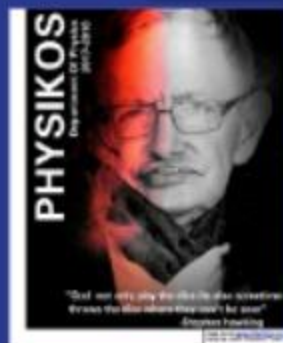




2014-16

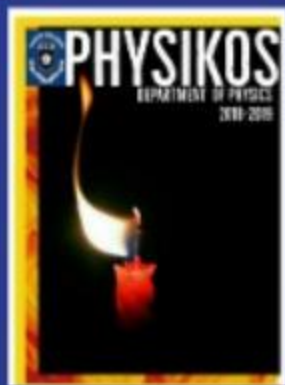


2016-17



2017-18

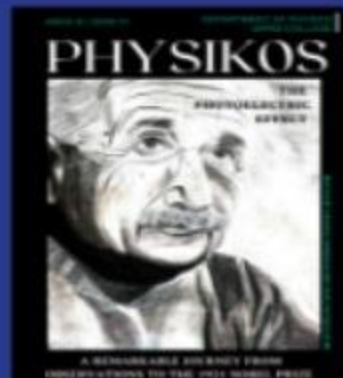
## PHYSIKOS - DEPARTMENTAL MAGAZINE



2018-19



2019-20



2020-21



2021-22

# Glimpses: 2016-2017



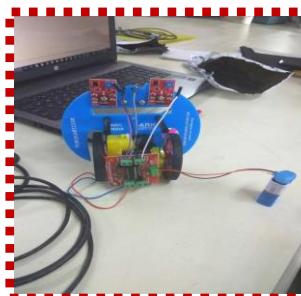
**Inaugural Lecture: Prof. Shubha K. Gokhale (IGNOU), Jan. 10-11, 2017**



**Physicharades**



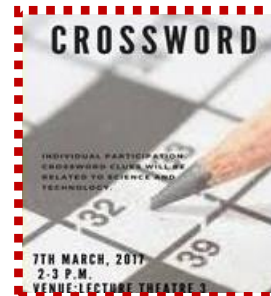
**Physics for Society Inaugural Talk: Prof. R. K. Kotnala (NPL)**



**2-day National Level Workshop cum Championship on i-Senso Robotics in collaboration with e-Cell IITB and Robokart Jan. 10-11, 2017**



**"Lecture Series cum Workshop" on the theme "Physics and Society" in association with NASI, Mar. 23, 2017**



**Scintillations 2017: Events by Physics Department**

# Glimpses: 2017-2018



**Summer Workshop  
July 18-19, 2017**



**Inaugural Lecture : Prof. Neeraj  
Khare (IIT Delhi) July 18-19, 2017**



**Cartoon Making  
Competition**



**PHYSITANKSHRI  
Jan 13, 2018**



**Nehru Planetarium visit  
accompanied by Prof. Vandna  
Luthra Feb 28, 2018**



**2<sup>nd</sup> position in March  
past, Annual Sports Day**



# Glimpses: 2018-2019



**Summer Workshop  
July 18-19, 2018**



**Inaugural Lecture:  
Prof. Binay Kumar  
Sept. 12, 2018**



**Own-a-mug,  
Sept. 12, 2018**



**Film screening : "Quantum  
Indians" &  
Talk: Prof. P. K. Ahluwalia,  
Mar. 2, 2019**



**Talk: Dr. Atya Kapley &  
Tree Plantation Drive,  
Sept. 25, 2018**



**Talk: Prof. Daksh Lohiya,  
Jan. 11, 2019**



# Glimpses: 2019-2020



**Summer Workshop  
July 18-19 2019**



**Talk: Dr. Dinakar Kanjilal  
(IUAC) Sept. 11, 2019**



**E-Bin initiative  
Feb. 2020.**



**Screening of Cosmos Ep. 1  
Jan. 24 2020**



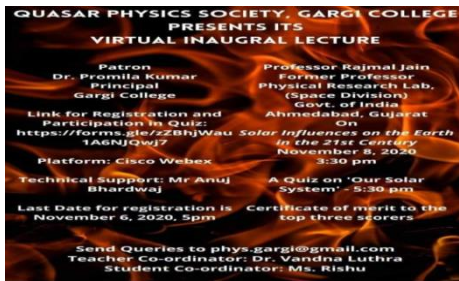
**Visit to IUAC  
Feb. 28 2020**



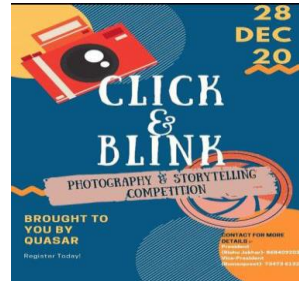
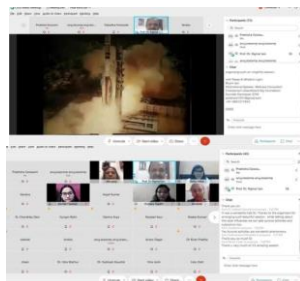
**March Past  
Winners  
Feb. 2020.**



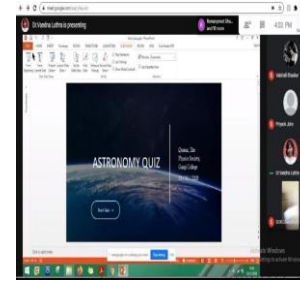
# Glimpses: 2020-2021



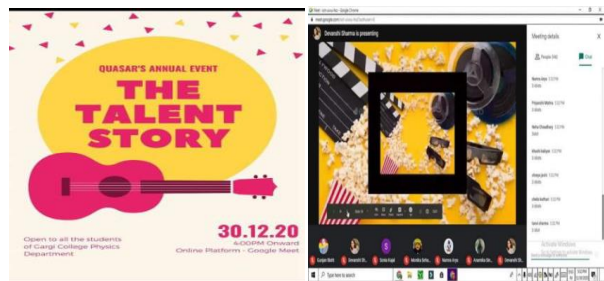
**1<sup>st</sup> virtual inaugural lecture:  
Prof Rajmal Jain,  
Nov. 8, 2020**



**Click n Blink: The  
Photography Competition  
Dec. 28 2020**



**Astronomy Quiz  
Dec. 28 2020**



**Annual Talent Show  
Dec. 30 2020**



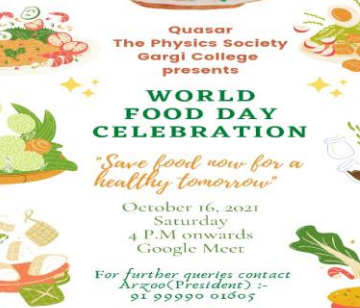
**Quiz Bee  
Feb. 28, 2021**



**Enhancing Mathematical  
and Computational Skills  
using Spreadsheets**

# Glimpses: 2021-2022

## Summer Workshop- 12-13 July



Quasar  
The Haryana Society  
Gargi College  
presents

**WORLD  
FOOD DAY  
CELEBRATION**

*"Save food now for a  
healthy tomorrow"*

October 16, 2021  
Saturday  
4 P.M onwards  
Google Meet

For further queries contact  
Arzoo (President) :-  
91 99990 01005

***World Food Day-16 Oct***

**QUASAR**  
The Physics Society  
Gargi College,  
University of Delhi  
Presents

**Inaugural Lecture**  
on  
**Nanotechnology for  
Semiconductors :  
Opportunities and  
Challenges**

**- DR. ASHUTOSH KUMAR  
(SCIENTIST , RISE SWEDEN)**

---

Date : 28.10.2021  
Time : 2:30 PM  
Platform : Cisco Webex

## Inaugural Lecture-28 Oct

**QUASAR**  
The Physics Society  
Gargi College  
Presents

**IRSHAAD :**  
guidance session for IIT-JAM  
and JEST -2021

*By -*




**Ms Manisha**  
AIR-27 in JUNESET in  
CSIR (June 2020)  
AIR-908 in IIT-JAM (Jan)



**Ms Tanvi Sharma**  
Cleared JEST -2018 (AIR 134)  
Cleared GATE -2018 (AIR 744)


**Schedule**  
21 November , 2021  
Timing :- 4 PM  
Link -> Google Meet

*Alumni Interaction-21 Nov*



**QUASAR**

The Physics Society  
Gargi College



"Rise up, start fresh, see the bright  
opportunity in each new day"

*Orientation*  
*Day*

**SESSION 2021-24**

November 22, 2021  
1 PM onwards  
Google Meet

For further queries contact  
Arzoo(President)  
99900 01605  
Neha(Vice- President)  
94620 25145

***Freshers' Orientation- 22  
Nov***

## Quiz- 16 Jan

[illegible]

***Paper Presentation- 28 Feb***

 QUASAR  
The Physics Society  
Gargi College  
University of Delhi  
presents

☆☆☆☆

INTER-COLLEGE MEME  
MAKING COMPETITION

**MEMANIA**

**THEMES :-**

- Perks of being a physicist
- Astronomy and astrophysics
- Physics in daily life

**\*\* Entries are acceptable till 20 March, 2022**

**Registration Link**  
[https://www.google.com/forms/view/F9qUzSd5SO-OTjgncwvCnQyagCZwvnmRmNnpqrUw\\_CWEZ?viewform=true](https://www.google.com/forms/view/F9qUzSd5SO-OTjgncwvCnQyagCZwvnmRmNnpqrUw_CWEZ?viewform=true)

Winners will be provided E-certificate and shoutout on our Instagram handle.

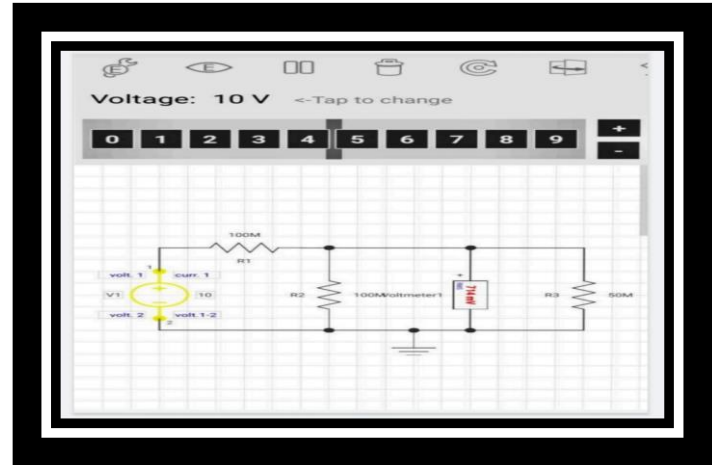
**For any queries contact -**  
**Aarya Gargi @aaryagargi05**

## *Meme making competition*

**PANDEMIC TIME**

# LAB EXPERIMENTS

- ❑ Online lab experiments have been performed using Vlab from Amrita Vishwavidyalaya and IIT Kharagpur site.
- ❑ ECS (Electronics Circuit Studio) was used to make circuits for better understanding.
- ❑ Scilab was taken on Cloud.
- ❑ Also mobile version of C++ has been used for coding so that it will be easy for those who were not reachable to laptop.
- ❑ Videos from you tube were also used to improve the concepts and to show the practical procedures.

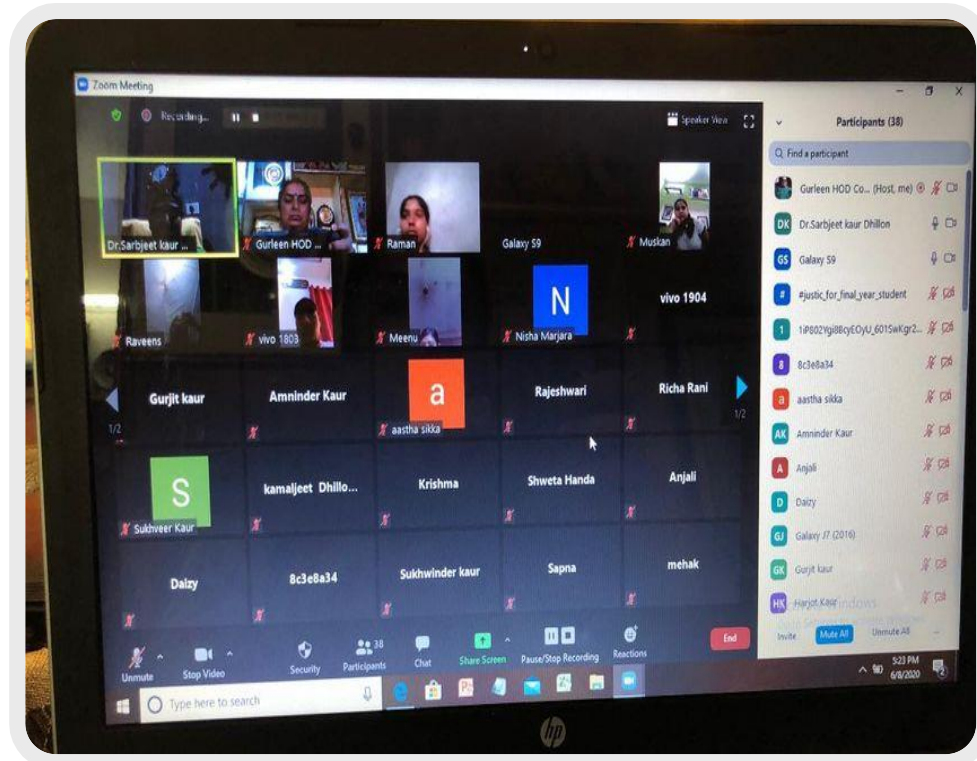


# RECORDED CLASSES

- ❑ All lectures were recorded and have been uploaded so that students who missed their classes can also cope up to the syllabus.
- ❑ Also in labs we played videos of performing experiments and gave instructions on how to do the experiment.


## DOUBT SESSION

- ❑ Doubt classes have been taken apart from regular lectures.





# Challenges faced by the students/teachers in general and in pandemic

- 
- Internet connectivity problems.
  - Laptops were non accessible to students from remote places
  - Lack of knowledge about using computer software.
  - Purchasing of new laptops/tablets.
  - Screen fatigue
  - Maintaining reading habits post COVID.

# MEASURES TAKEN DURING PANDEMIC TO HELP THE STUDENTS

- ☐ • Remedial classes
- ☐ • Virtual lab experiments
- ☐ • Demonstrations for using software like ECS, Scilab, microprocessor etc.
- ☐ • FDPs for digital upgradation
- ☐ • One to one discussions of teachers with students.
- ☐ • Video lectures or recorded Gmeet lectures were made and shared.
- ☐ • Youtube video shared related to many topics of the syllabus.

# Physics Laboratory Upgradation

**Books were added in the departmental library by Alumni and Superannuated teachers of Physics department.**

**Redesigning of physics laboratory to add more storage space in the existing laboratory.**

**Addition of Instruments for effective running of lab and exam.**

**Deep cleaning of electronic instruments like CRO, power supplies etc. by the lab staff after college reopening.**

# March Past Winners: 2020



# Students Achievement: Sports

- ❖ Racing
- ❖ Volleyball
- ❖ Long Jump
- ❖ Kho-Kho
- ❖ March Past



**Ravina Sihag**

- 1<sup>st</sup> (Gold Medal) in Long Jump at Delhi State Athletics Championship
- 3<sup>rd</sup> (Bronze Medal) in Triple Jump at Delhi State Athletics Championship
- 1<sup>st</sup> (Gold Medal) in Medley Race at North Zone Athletics Championship
- 2<sup>nd</sup> (Silver Medal) in Triple Jump at North Zone Athletics Championship
- 3<sup>rd</sup> (Bronze Medal) in Long Jump at North Zone Athletics Championship
- 1<sup>st</sup> (Gold Medal) in Triple Jump at North Zone Athletics Championship



**Pratibha**

- Gold medal at Bits pilani BOSM2018.
- Silver medal in relay race 4×400m at sports day
- Gold medal at JJIT, Noida

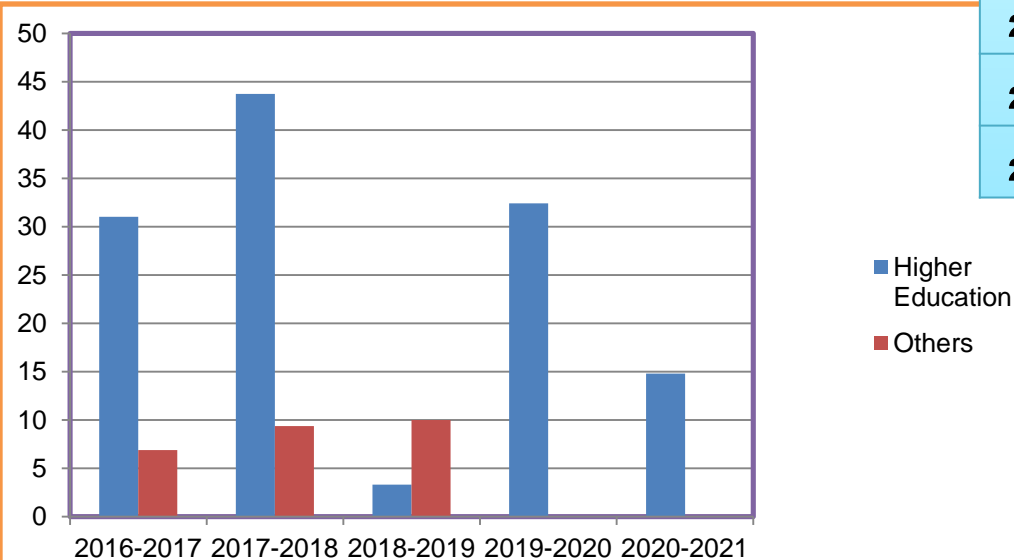


# LEARNING BEYOND CLASSROOM

<b>Names of students-</b>	<b>Name of the Organization-</b>
<b>Ananya Gupta(2019-20)</b>	<b>1. NGO- Navaagat 2. Internshala training on data science challenge</b>
<b>Krati (2019-20)</b>	<b>India Redefined</b>
<b>Sonali Bharadwaj (2019-20)</b>	<b>1.Hareen Team Work 2.Social media marketing intern at sunschool</b>
<b>Tanya (2019-20)</b>	<b>1.Jindal Trianing Company (HR business development) 2.Virtual intern in Kind Beings 3. Marketing intern in Kind Beings 4. Campus Ambassdor internship at internshala</b>
<b>Yukta (2019-20)</b>	<b>Brand Associate internship at Baywise</b>
<b>Kalpana (2019-20)</b>	<b>HCL and Shiv Nadar Foundation at strategy office</b>
<b>Riya Verma (2019-20)</b>	<b>1.YOURSHELL Internship program 2.Social Media Marketing at Bling stores</b>
<b>Vrinda Garg (2016-17)</b>	<b>Summer research fellowship programme</b>

# STUDENT PROGRESSION (COMPETITIVE EXAMS CLEARED)

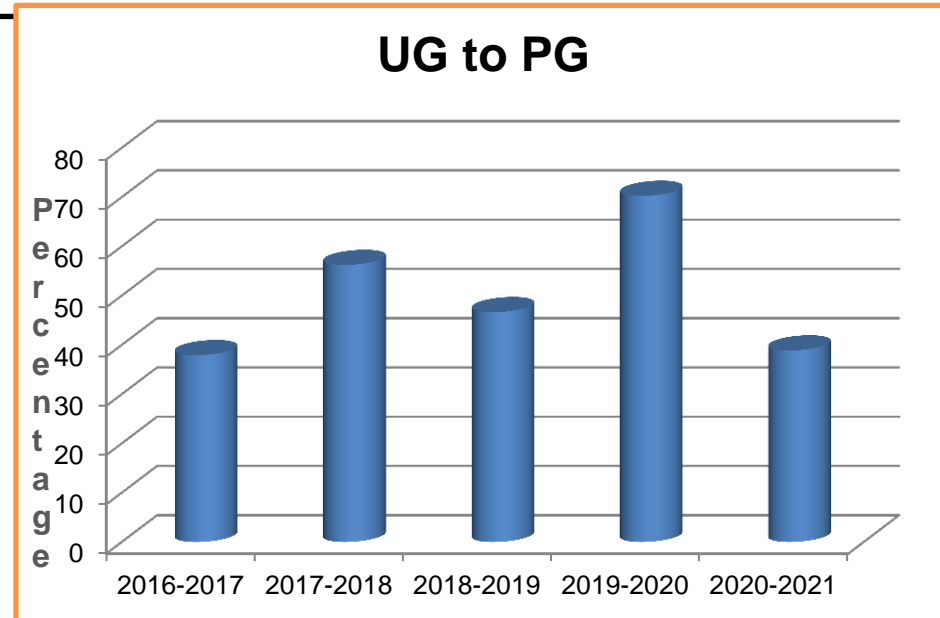
Percentage



	Higher Education						
Year	JAM (%)	CAT (%)	GATE (%)	GRE (%)	NET (%)	IELET (%)	Other examination s conducted by the State / Central Government Agencies (%)
2016-2017	10.34	-	13.79	3.45	6.9	3.45	-
2017-2018	28.12	3.12	6.25	-	9.38	-	6.25
2018-2019	-	-	-	-	3.33	10	-
2019-2020	32.43	-	-	-	-	-	-
2020-2021	14.81	-	-	-	-	-	-

# Student Progression (against % enrolled)

Student Progression	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
UG to PG	37.93	56.25	46.67	70.27	38.89
PG to PhD	17.24	-	-	NA	NA



# All rounder Student-2018



- Good Academic Record
- NCC Cadet Corp
- State level and North zone championship in sports (Race and Long Jump).

**CURRENTLY POSTED AS DEFENCE  
PERSONNEL IN INDIAN AIR FORCE AS  
FLYING OFFICER**

**RAVINA SIHAG (2015-18)**  
**Dr. Chaya Biswas award 2018**

# ALUMNI



Dr. Indira Sulania  
(2003)  
Scientist F (IUAC)



Apoorva Mittal  
(2012)  
Young Scientist  
(AIIMS)



Varsha Yadav  
(2013)  
Asst. Professor (DU)



Bani Nanda(2013)  
Owner/Head Chef at  
Miam



Jyoti (2014)  
Assistant  
Professor (DU)



Palak Kapoor (2018)  
Varroc Engineering Pvt.  
Ltd. Pune



Khushwinder Kaur  
(2015)  
Accenture



Abhilasha Saini (2014)  
Hospital Physicist at  
Næstved University  
Hospital



Meghna Acharjee  
(2013)  
Senior User  
Assistance  
Developer at Oracle



Jasdeep Kaur (2014)  
Assistant Editor,  
Journals Peer  
Review at Taylor &  
Francis Books India  
Pvt. LTD.



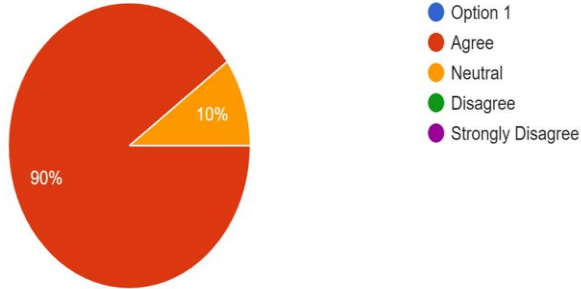
# PLACEMENT

Year	Name of Student	Name of The employer	Pay package at appointment
2016	Mansi Singh	Punjab National Bank	8 LPA
2016	Divya Dixit	Punjab National Bank	3.6 LPA
2016	Namrata Bhatia	Novartis	3.5 LPA
2016	Shivani Pandey	Vedantu Pvt Ltd	3.3 LPA
2016	Poorvi	NIIT	2.01 LPA
2017	Udisha Shukla	Trident Group, India	15 LPA
2018	Pragati Goel	ACME Global School	Rs. 9300-34800 with Grade pay 4800
2018	Ayushi Gupta	Deloitte	6.5 LPA
2018	Palak Kapoor	Varroc Engineering Lmt.	1 LPA
2020	Parul	Freeskout	3.0 LPA
2020	Sonali Bhardwaj	Siddhartharya.com	2.5 LPA
2020	Megha Kandari	Zomato	3.9 LPA

# DEPARTMENT FEEDBACK

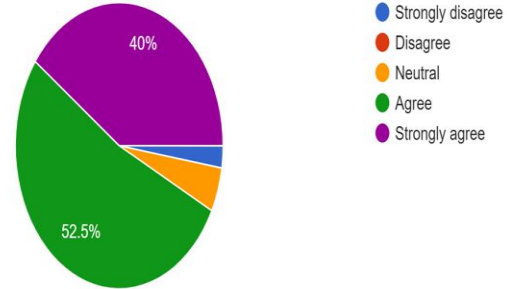
1. Teachers explain the objectives of the paper you attended.

40 responses



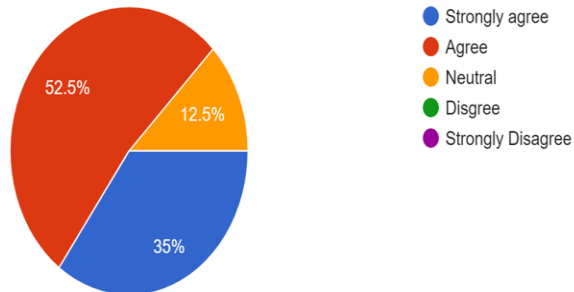
2. Teachers are punctual and take classes regularly.

40 responses



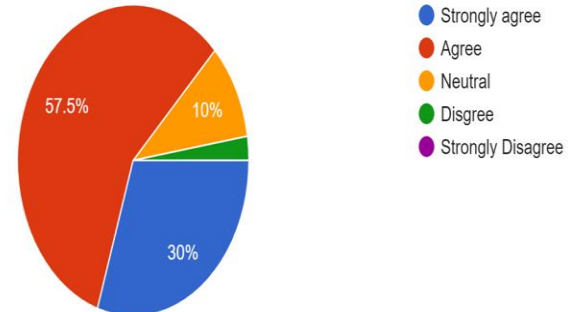
3. Teachers encourage you to interact freely and are open to discuss your queries in and outside the classroom.

40 responses



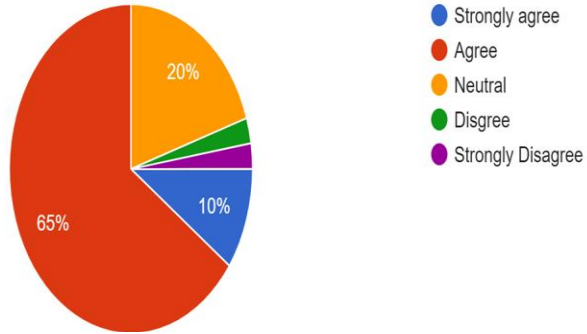
4. Teachers are familiar with technology and use ICT infrastructure and e-resources.

40 responses



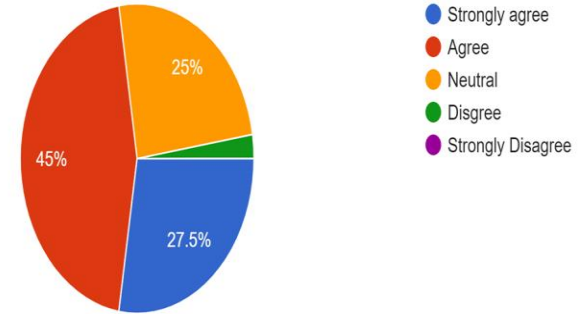
5. Curriculum is up to date and teachers discuss higher education opportunities in your program.

40 responses



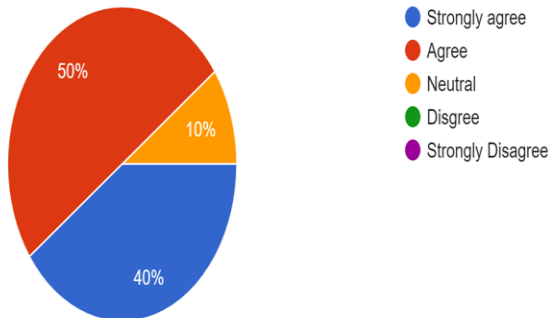
6. Teachers are supportive of extracurricular activities and mentor students on all aspects.

40 responses



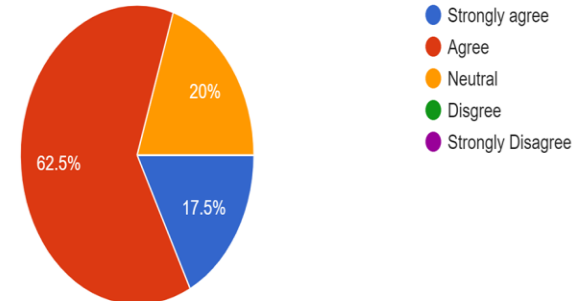
7. Teachers are sympathetic and supportive in terms of access to e platforms/accessibility/network related issues during the Covid time.

40 responses



8. Teachers provide you opportunities and guidance to plan events in your societies and in your college festivals.

40 responses





# Enhancing Mathematical and Computational Skills using Spreadsheets

## Workshop

Thanks for organizing such a wonderful workshop. I learnt a lot in last seven days and as Prof. P K Ahluwalia Sir pointed that this is the starting not the end, I will try to ease my life wherever possible by using the this knowledge about spreadsheet.

It's was a very informative workshop got to learn how amazing spreadsheets is !!!  
-Yashika Thakran

Please write your names with the feedback

Very informative and learn alot of new things.  
- Tamanna Jangid

Spreadsheets are life line of any Documentation and Numerical calculations. I learnt so many applications of

Thanku for such an interesting workshop. Have learnt so much in these 7 days!!

-Vanshika Kalra

Amazing session,kept our attention till the end of day. Thankyou this is such a fun and informative session Aditi.

The one thing that I learnt from this workshop is I can do whatever I want using worksheets and I'm going to get a great benefit from this workshop.

Priyanka  
(student, Gargi college)

Its my pleasure to join such an amazing workshop . Its really a wonderful experience.

It was a very informative one week. Explored quite new things in excel and google sheets. Looking forward to such great workshops.

-Anchal

Very informative and enjoyable workshop

Asmita Surve

I never thought that we can stimulate radioactive decay from a set of dies ,generate the value of pi from a collection of matchstick and paper.

THANK YOU MAM  
ABHINAV KRISHNAN

Feedback and your experience in one sentence as

amazing workshop different from usual workshops

It's my pleasure to enjoy and learned the Spreadsheet through a beautiful journey. Thank you so much. Waiting for future similar kind of workshop.

Smritimoy Chakraborty

Totally enjoyed and learnt a lot from this amazing experience. Thanks a lot for conducting this workshop.

-Megha Kandari (Student,Gargi College)

Absolutely enjoyed the workshop a lot, I didn't know that spreadsheets had such a wide variety of applications, especially the importance of

Very interesting and informative session. Great experience. Looking forward to such workshops. -Preetisha Goswami

Thank you so much for the most interesting and inspiring workshop! I didn't only enjoy it but have tried to practise it.Now I feel more confident to do something.  
-Neha Saini (Student,Gargi College)

**Splendid**  
It was a Great experience. I learnt a lot of new features and I'm sure these are gonna help me in future a lot.  
Payal Makhija

Spreadsheets are one of the greatest, most powerful, most important software applications of all time. Got so

# STRENGTHS

**Well equipped labs with various specialized facilities.**

**Diverse skills of the individual faculty members for theoretical and experimental fields.**

**Collaboration with inter-departmental, intra-, inter college, local scientific institutes as well as international universities.**

**Peer support to students on diverse fields.**

**Teaching beyond curriculum**

**Faculty and staff development**

**PhD Supervision**



# OPPORTUNITIES



**Upgrading  
research facilities**

**Training/  
career counselling  
students**

**Collaboration  
with national and  
international  
universities**

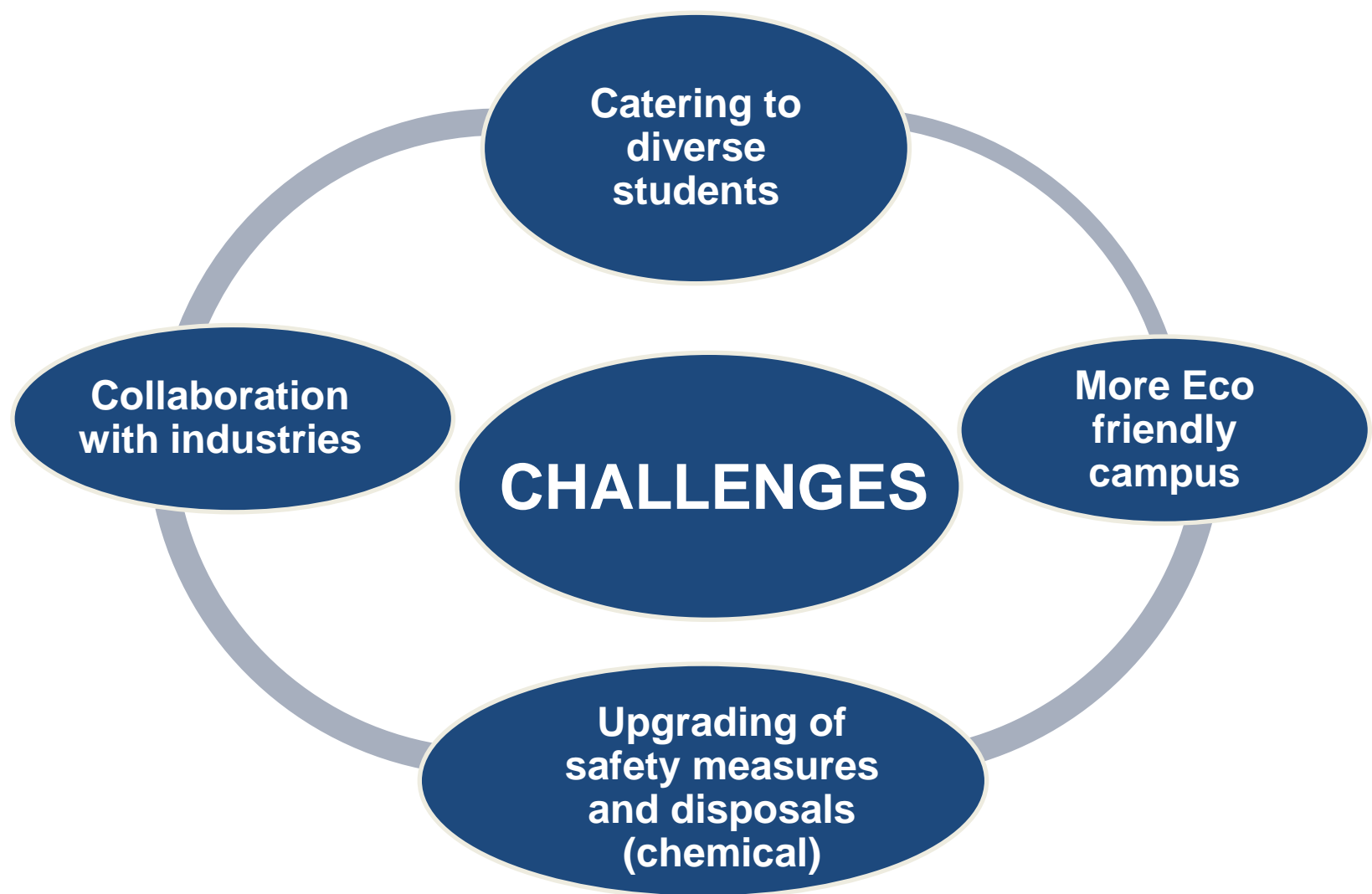


# **WEAKNESS**

→ More emphasis on non-English medium students

→ Limitations of lab facilities

→ Only small % pursuing higher studies



# **Future Plans**

**Emphasis on digital literacy as a mission**

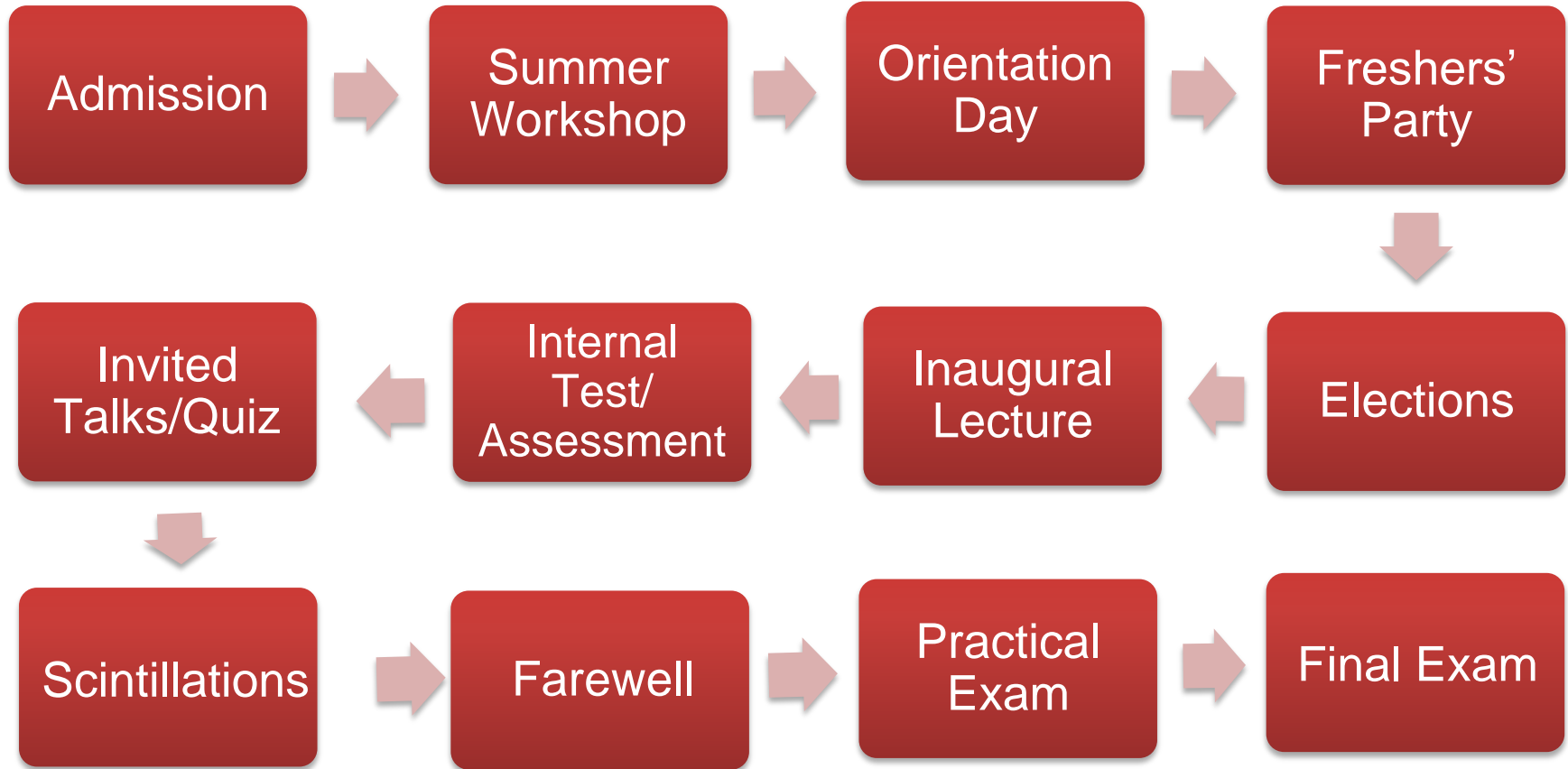
**Undergraduate research : Up gradation of instruments, facilities and approach**

**Continuing teaching beyond curriculum like summer schools/ workshops, conferences and seminars etc.**

**Faculty and staff development with special reference to skill and technical enhancement.**

**Continuing national and international co-operation with other countries.**

# PLANNER





**THANK YOU**

# List of FDP/Webinars/Seminars/Workshop/Orientation program/FIP

2016-2017	Dr. Supreeti Das	National Workshop on Nanotechnology: Emerging Frontiers & Applications	Shyam Lal College, University of Delhi	30-01-2017 to 31-01-2017
	Dr. Alka Garg	Research as Pedagogy a science Teacher Education Program	Indian Institute of Science Education and Research (IISER), Pune	29-09-2016 to 01-10-2016
	Dr. Vandna Luthra	Research as Pedagogy a science Teacher Education Program	Indian Institute of Science Education and Research (IISER), Pune	29-09-2016 to 01-10-2016
	Dr. Vandna Luthra	Research as Pedagogy a science Teacher Education Program	Indian Institute of Science Education and Research (IISER), Pune	01-03-2017 to 04-03-2017

<b>2017-2018</b>	<b>Dr. Alka Garg</b>	<b>STEM Teacher Training Workshop to Develop Research Pedagogical Tools</b>	<b>06-12-2017 to 08-12-2017</b>
<b>2017-2018</b>	<b>Dr. Vandna Luthra</b>	<b>Research as Pedagogy- A science Teacher Education Program</b>	<b>09-05-2017, 18-08-2017 to 19-08-2017</b>
<b>2017-2018</b>	<b>Dr. Vandna Luthra</b>	<b>STEM Teacher Training Workshop to Develop Research Pedagogical Tools</b>	<b>07-10-2017 to 09-10-2017</b>
<b>2017-2018</b>	<b>Dr. Vandna Luthra</b>	<b>Research based Pedagogical Tools</b>	<b>17-11-2017 to 19-11-2017</b>
<b>2017-2018</b>	<b>Dr. Vandna Luthra</b>	<b>Prohibition on open burning of any kind of material-A small step targeting big impact</b>	<b>14-07-2017</b>
<b>2017-2018</b>	<b>Dr. Archana Tripathi</b>	<b>Introduction to Gaussian: Theory and Practice</b>	<b>08-01-2018 to 12-01-2018</b>
<b>2017-2018</b>	<b>Dr. Supreeti Das</b>	<b>Introduction to Gaussian: Theory and Practice</b>	<b>08-01-2018 to 12-01-2018</b>
<b>2017-2018</b>	<b>Dr. Vandna Luthra</b>	<b>Introduction to Gaussian: Theory and Practice</b>	<b>08-01-2018 to 12-01-2018</b>
<b>2017-2018</b>	<b>Dr. Deepti Lehri</b>	<b>Research as Pedagogy- A science Teacher Education Program</b>	<b>09-05-2017, 18-08-2017 to 19-08-2017</b>
<b>2017-2018</b>	<b>Dr. Hira Joshi</b>	<b>Introduction to Scilab</b>	<b>22-09-2017 to 23-09-2017</b>
<b>2017-2018</b>	<b>Ms. Mansi Agrawal</b>	<b>Introduction to Scilab</b>	<b>22-09-2017 to 23-09-2017</b>
<b>2017-2018</b>	<b>Dr. Deepti Lehri</b>	<b>Introduction to Scilab</b>	<b>22-09-2017 to 23-09-2017</b>
<b>2017-2018</b>	<b>Dr. Vandna Luthra</b>	<b>Introduction to Scilab</b>	<b>22-09-2017 to 23-09-2017</b>
<b>2017-2018</b>	<b>Dr. N Chandrika Devi</b>	<b>Refresher Course in Winter School (Inter-Disciplinary)</b>	<b>28-11-2017 to 19-12-2017</b>
<b>2017-2018</b>	<b>Dr. Hira Joshi</b>	<b>Faculty Development Programme on Applied Physics</b>	<b>14-12-2017 to 15-12-2017</b>

2018-2019	Dr. Alka Garg	National workshop “ commission for Scientific and Technica; Terminology”	14-03-2019 to 16-03-2019
2018-2019	Dr. Alka Garg	Research based Pedagogical Tools	23-10-2018 to 25-10-2018
2018-2019	Dr. Alka Garg	Research based Pedagogical Tools	20-01-2019 to 23-01-2019
2018-2019	Dr. Vandna Luthra	Research based Pedagogical Tools	20-01-2019 to 23-01-2019
2018-2019	Dr. Hira Joshi	E-learning, Moocs and ICT Tools for Blended Learning	02-07-2018 to 07-07-2018
2018-2019	Dr. Vandna Luthra	Faculty Development Program on MOOCS	17-11-2018
2018-2019	Dr. Vandna Luthra	Climate across the Curriculum : Resources for integrating climate topics in Discipline Specific Teachings	13-10-2018 to 14-10-2018
2018-2019	Dr. N Chandrika Devi	Entrepreneurship, Motivation & Leadership	24-12-2018 to 30-12-2018
2018-2019	Dr. N Chandrika Devi	Advancements in Integrated Sciences: Learning & Adaptation for Effective Teaching and Research	10-12-2018 to 16-10-2018
2018-2019	Dr. Munish	DISABILITIES STUDIES: PERSPECTIVES AND EMERGING TRENDS	17-12-2018 to 23-12-2018
2018-2019	Dr. Munish	Entrepreneurship, Motivation & Leadership	24-12-2018 to 30-12-2018
2018-2019	Dr. N Chandrika Devi	Refresher Course in Contemporary Studies (interdisciplinary)	31-12-2018 to 25-01-2019
2019-2020	Dr. Munish	114TH Orientation Programme	15-07-2019 to 02-08-2019
2019-2020	Dr. Vandna Luthra	MOOCs and e-Content Development	13-07-2019 to 17-07-2019

2019-2020	Dr. Deepti Lehri	FIGHTING PANDEMICS WITH ARTIFICIAL INTELLIGENCE	29-05-2020
2019-2020	Dr. Deepti Lehri	Online lecture series	20-06-2020
2019-2020	Dr. Supreeti Das	Online Teaching and Learning Technology	27-04-2020
2019-2020	Dr. Supreeti Das	Learning Physics, Opportunities and Difficulties	26-06-2020
2019-2020	Dr. Supreeti Das	Art and Science of mentoring	01-06-2020
2019-2020	Dr. Supreeti Das	Open Educational Resources	21-05-2020
2019-2020	Dr. Supreeti Das	Managing Challenges and exploring opportunities	09-05-2020
2019-2020	Dr. Supreeti Das	Staying centred with Medidation and Pranayam	23-05-2020
2019-2020	Dr. Supreeti Das	Preventative Health care diagnostics platforms based on micro nano technologies	30-05-2020
2019-2020	Dr. Supreeti Das	Material Science Technology and Society	08-05-2020 to 09-05-2020
2019-2020	Dr. Supreeti Das	Enhancing quality and visibility of research output of faculty and researchers	16-05-2020
2019-2020	Dr. Supreeti Das	Faculty Development Programme	01-06-2020 to 06-06-2020
2020-2021	Dr. N Chandrika Devi	DIGITAL TEACHING TECHNIQUES	29-06-2020 to 04-07-2020
2020-2021	Dr. N Chandrika Devi	ICT ENABLED TEACHING LEARNING	07-09-2020 to 13-09-2020
2020-2021	Dr. Vandna Luthra	Exploring New Frontiers of Learning	01-07-2020 to 02-07-2020
2020-2021	Dr. Vandna Luthra	FDP on Scilab	23-09-2020 to 29-09-2020
2020-2021	Dr. Archana Tripathi	DIGITAL TEACHING TECHNIQUES	29-06-2020 to 04-07-2020



2020-2021	Dr. Deepti Lehri	Webinars on COVID-19: Management & Simulation Efforts	02-07-2020 to 03-07-2020
2020-2021	Dr. ALka Garg	Learning Physics with Conceptual & Problem-based Approach	27-07-2020 to 11-10-2020
2020-2021	Dr. ALka Garg	Characterization techniques and data analysis tools in material science	02-09-2020
2020-2021	Dr. ALka Garg	UG Level Computational Physics Practical Using Python	04-01-2021 to 09-01-2021
2020-2021	Dr. Supreeti Das	New Chemistry and Physics in Magnetic oxides	03-07-2020
2020-2021	Dr. Supreeti Das	Wave Optics Lecture Series, Polarization	11-07-2020
2020-2021	Dr. Archana Tripathi	UG Level Computational Physics Practical Using Python	04-01-2021 to 09-01-2021
2020-2021	Dr. N. Chandrika Devi	Programming and Software Tools For UG Courses	19-03-2021 to 21-03-2021
2020-2021	Dr. Archana Tripathi	Enhancing Mathematical and Computational Skills using Spreadsheets	21-02-2021 to 27-02-2021
2020-2021	Dr. Archana Tripathi	Challenges of Teaching Physics Laboratory Courses in Online mode	23-01-2021 to 25-01-2021
2020-2021	Dr. Archana Tripathi	Staying Nourished with Correct Nutrition	29-05-2020
2020-2021	Dr. Archana Tripathi	DIGITAL TEACHING TECHNIQUES	29-06-2020 to 04-07-2020
2020-2021	Dr. Archana Tripathi	Staying Mobile with Lifestyle Interventions	25-05-2020
2020-2021	Dr. Vandna Luthra	Simulation in Physics	10-07-2020 to 12-07-2020
2020-2021	Dr. Vandna Luthra	Challenges of Teaching Physics Laboratory Courses in Online mode	23-01-2021 to 25-01-2021
2020-2021	Dr. Vandna Luthra	Elements of Quantum Computing	12-03-2021 to 14-03-2021
2020-2021	Dr. Vandna Luthra	Programming and Software Tools For UG Courses	19-03-2021 to 21-03-2021
2020-2021	Dr. Vandna Luthra	FDP on Scilab	23-09-2021 to 29-09-2021

2020-2021	Dr. Vandna Luthra	UG Level Computational Physics Practical Using Python	04-01-2021 to 09-01-2021
2020-2021	Dr. Vandna Luthra	Artificial Intelligence	03-04-2021 to 06-04-2021
2020-2021	Dr. Vandna Luthra	Big Data Analytics	19-04-2021 to 23-04-2021
2020-2021	Dr. Vandna Luthra	Python Programming	26-04-2021 to 30-04-2022
2020-2021	Dr. Hira Joshi	Emerging Trends in Nano-Electronics	21-08-2020 to 25-09-2020
2020-2021	Dr. Hira Joshi		24-08-2020 to 29-08-2020
2020-2021	Dr. Hira Joshi	Recent Trends in Advanced materials & Devices	21-2Sep
2020-2021	Dr. Hira Joshi		14-11-2020 to 15-12-2020
2020-2021	Dr. Hira Joshi	Transformation in Higher Education: Issues and Road Ahead	28-09-2020 to 12-10-2020
2020-2021	Mansi Agrawal	UG Level Computational Physics Practical Using Python	04-01-2021 to 09-01-2021
2020-2021	Dr. Anita	Transformation in Higher Education: Issues and Road Ahead	28-09-2020 to 12-10-2020
2020-2021	Dr. Anita	Research Methodology	1 <sup>st</sup> Oct 2020 to 15 <sup>th</sup> Oct 2020
2020-2021	Dr. Anita	Development of Teacher's e-kit and MOOCs in Four Quadrant Format of e-Content	12 <sup>th</sup> Sept -20 <sup>th</sup> Sept 2020
2020-2021	Dr. Anita	Advanced Pedagogical Techniques	29th Oct to 5th Nov 2020
2020-2021	Dr. Anita	Digital Pedagogy to enhance teaching and learning experience	15 <sup>th</sup> Dec to 21 <sup>st</sup> Dec 2020
2020-2021	Dr. Anita	Faculty in Universities/Colleges/Institutions of Higher Education	10 <sup>th</sup> Nov-9 <sup>th</sup> Dec 2020
2020-2021	Dr. Anita	ICT - based Learning and Developing MOOCs for Teaching Process in Higher Education	29 <sup>th</sup> DEC to 4 Jan 2021

# List of Research Papers/Chapters/Books

Year	Name of the teacher	Title of the book/chapters published	Name of the publisher
Jan 2017-Dec 2017	Lovedeep Sahota	Advanced Solar-Distillation Systems Basic Principles, Thermal Modeling, and Its Application	Springer, Singapore
	Supreeti Das	Laplace and Fourier Transforms for Physicists and engineers	MED-TECH
Jan 2018-Dec 2018	Lovedeep Sahota	Exergy and Technoeconomic Analysis of Solar Thermal Desalination	Elsevier
	Vandna Luthra	Tuning operating temperature of BaSnO <sub>3</sub> gas sensor for reducing and oxidizing gases	AIP Conference Proceedings
	Anita Singh and Vandna Luthra	Modulating Structural, Optical and Electrical Properties of Zinc Oxide by Aluminium Doping	Springer International Publishing
	Neha Sarin, Sachin Kumar, Ivan P. Parkin and Vandna Luthra	Influence of Humidity on the NO <sub>2</sub> Sensing Properties of SrCo <sub>0.1</sub> Ti <sub>0.9</sub> O <sub>3</sub>	Springer International Publishing
	Mansi Agrawal, B. R. Mehta and R. Muralidharan	Effect of Surface Treatments on the Evolution of Microstructures in GaN Thin Films and GaN/AlGaIn/GaN Heterostructures	Springer International Publishing

Jan 2019- Dec 2019	Hira Joshi	Composite Nanostructures for Enhanced Plasmonics	Materials Science Forum
	Hira Joshi, N. Kamal Singh and S. Annapoorni	Plasmonic response of gold nanoparticle in ZnO-Au hybrid structure	AIP Conference Proceedings
	Richa Jain, Vandna Luthra and Shubha Gokhale	Dysprosium doping induced correlated electrical and optical behaviour of magnetite nanoparticles	AIP Conference Proceedings
Jan 2020- Dec 2020	Hira Joshi	Optical properties of plasmonic nanostructures	AIP Conference Proceedings
	Hira Joshi	Comparative study of optical constants of nanocomposites	AIP Conference Proceedings

# Ph.D. Guidance

## Under Dr. Vandna Luthra

1. Dr. Rajveer Singh - “Investigations on Strontium Bismuth Niobate Ferroelectric Ceramic”(Awarded)
2. Dr. Anita : Studies on Zinc Oxide Based Nanopowders and radiation induced effects. (Awarded 2021)
3. Dr. Sachin Kumar : Investigations on the ferroelectric properties of Yttrium and/ or tin doped Barium Titanate (Awarded 2021)
4. Dr. Neha Sarin- Synthesis, characterization and Gas sensing applications of undoped and Fe-/Co-substituted Strontium Titanate Ceramics (Awarded 2021)

Total awarded 5(4)

Ongoing (1 )

## *Under Dr. Alka Garg*

1. One student is jointly registered for Ph.D. in material Sciences since 2019 at IGTDU(Indira Gandhi Delhi Technical University for Women) *Ongoing (1)*



## Ph.D Guidance (Awarded/Ongoing)

Name of the Scholar	Subject	Name of the guide	Year of Registration	Year Awarded
Dr. Sachin Kumar	Physics	Prof. Vandna Luthra	2014	2021
Dr. Neha Sarin	Physics	Prof. Vandna Luthra	2014	2021
Dr. Anita	Physics	Prof. Vandna Luthra	2012	2021
Dr. Rajveer Singh	Physics	Prof. Vandna Luthra	2013	2019
Mr. Sharavan Kumar Meena	Physics	Prof. Vandna Luthra	2021	Ongoing
Ms. Ritu Chaudhari	Physics	Co-supervisor: Dr. Alka Garg	2019	Ongoing

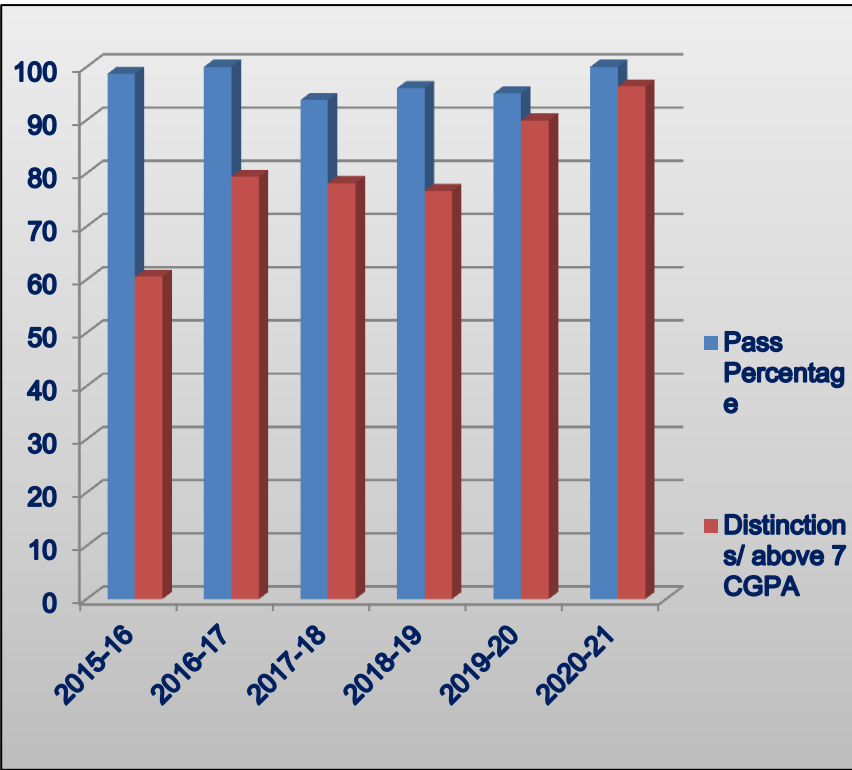
### Number of M.Sc. Dissertation Guided

Prof. Vandna Luthra: 2

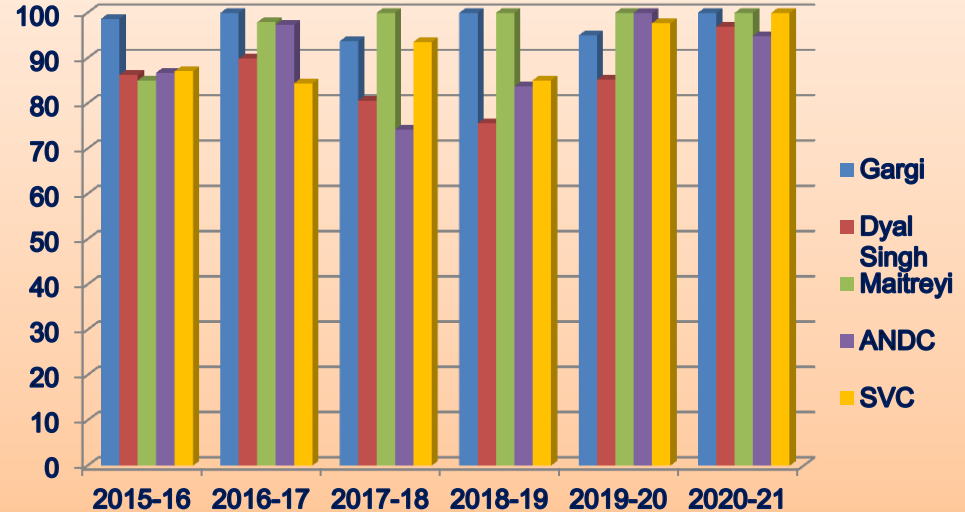
Dr. Alka Garg: 1

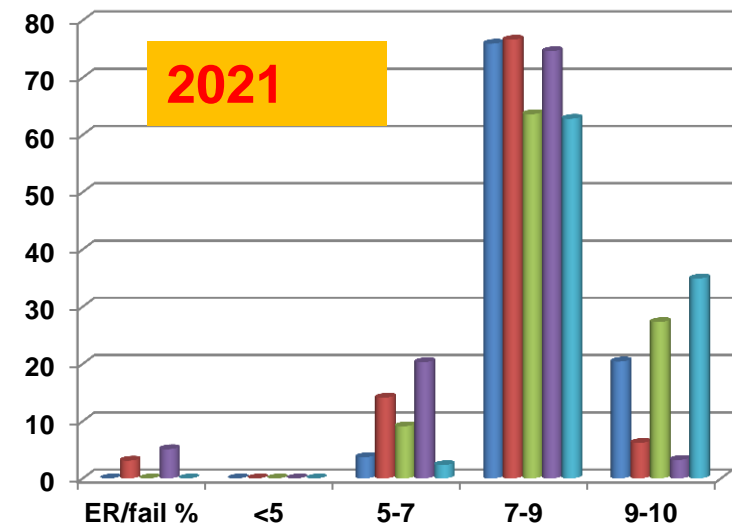
# RESULTS

## COMPARISON WITH NEIGHBORING COLLEGES PASS PERCENTAGE

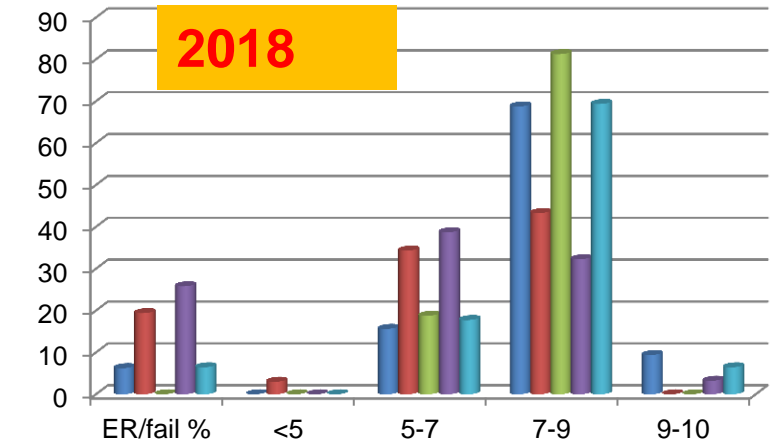
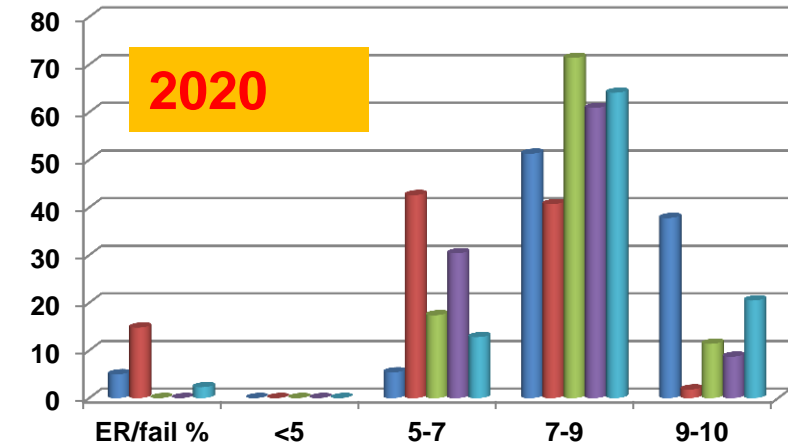
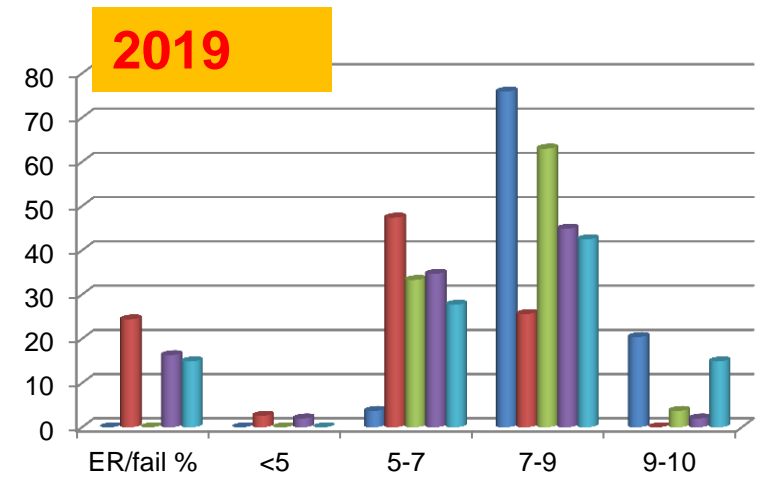


## GARGI YEAR WISE





■ Gargi  
 ■ Dyal Singh  
 ■ Maitreyi  
 ■ ANDC  
 ■ SVC



\*CGPA in X-axis

## **Student's Achievements in Sports**

S.No.	Student Name	Year	Sports
1.	Ravina	2016-17	Bronze medal in long jump in Delhi state athletics championship
2.	Ruchi		1 <sup>st</sup> position in 100 m race
3.	Pratibha		1 <sup>st</sup> position in volleyball in LSR tournament
4.	Ayushi Saxena	2017-18	3 <sup>rd</sup> prize in March Past competition held on Sports Day in Gargi College.
5.	Himani Sharma		3 <sup>rd</sup> prize in March Past competition held on Sports Day in Gargi College.
6.	Mahima Rathi		CATC camp in NCC.
7.	Pratibha Singh		<ul style="list-style-type: none"><li>• In college volley ball team</li><li>• Gold medal at Bits Pilani BOSM2018.</li><li>• Silver medal in relay race 4×400m at sports day</li><li>• Gold medal at IIIT, Noida</li></ul>
8.	Sangeeta Yadav		<ul style="list-style-type: none"><li>❖ Gold medal in Kho-Kho against Commerce Dept. in Gargi Olympiad.</li><li>❖ Gold medal in Kho-Kho against Arts Dept. in Gargi Olympiad.</li></ul>
9.	Shivani Gangwar		❖ 3 <sup>rd</sup> prize in March Past competition held on Sports Day in Gargi College.
10.	Priya		❖ 3 <sup>rd</sup> prize in March Past competition held on Sports Day in Gargi College.

S. No.	Name	Year	Sports
11.	Ruchi	2017-19	❖ Intercollege game silver medal in heptathlon event.
12.	Ruchika		❖ 3rd prize in March Past competition held on Sports Day in Gargi College.
13.	Mansi		❖ 3 <sup>rd</sup> prize in March Past competition held on Sports Day in Gargi College.
14.	Rishu Jakhar	2018-19	❖ 3rd prize in March Past competition held on Sports Day in Gargi College
15.	Preetisha Goswami		❖ 3 <sup>rd</sup> prize in March Past competition held on Sports Day in Gargi College.
16.	Neha Pandey		❖ 3rd prize in March Past competition held on Sports Day in Gargi College
17.	Navita Yadav		❖ 3 <sup>rd</sup> prize in March Past competition held on Sports Day in Gargi College.
18.	Mansi Saini	2019-21	❖ 3rd prize in March Past competition held on Sports Day in Gargi College.
19.	Priya		❖ 3 <sup>rd</sup> prize in March Past competition held on Sports Day in Gargi College.
20.	Anju Sharma		❖ 3rd prize in March Past competition held on Sports Day in Gargi College.
21.	Prachi Rauthan		❖ 3 <sup>rd</sup> prize in March Past competition held on Sports Day in Gargi College.
22.	Vinita Prajapat		❖ 3rd prize in March Past competition held on Sports Day in Gargi College

## **Student's Achievements in ECA**

S.No.	Student Name	Year	ECA
1.	Neelam Bisht	2016-17	Winner of Triathlon in Reverie 2016
2.	Shivani Pandey		Winner of Triathlon in Reverie 2016
3.	Shreya Singh		General Secretary- College's Student Union
4.	Divya Rawat		Winner of Triathlon in Reverie 2016
5.	Himani Nigam		1 <sup>st</sup> prize Lecture Series by PHYSICS DEPARTMENT
6.	Jaya Bharadwaj		1 <sup>st</sup> position at Natika Vatika 2016, the annual theatre festival of IIT Delhi
8.	Priya Rao		1 <sup>st</sup> position at Annual Theatre Fest of Stephen's College, 2017
9.	Prarthana Pasricha		1 <sup>st</sup> prize – Kavita Path, IIT Kanpur
10.	Sakshi		1 <sup>st</sup> in esthetic science competition organized by zenith
11.	Ananya, Ayushi Bhawna, Shruti		Won in Treasure hunt organized by zenith
13.	Kalpana Sharma		2 <sup>nd</sup> position in ARSD college NCC FEST



S.No.	Name	Year	ECA
1.	Ayushi Saxena	2017-18	1) NCC member                      2)CATC camp in NCC.
2.	Himani Sharma		❖ Ek Bharat Shresth Bharat National camp with Sikkim and Calcutta Directorate. ❖ Project in material science with Dr.Alka Garg.
3.	Mahima Rathi		Secured first position in the Physics quiz competition.
5.	Prarthana Sharma		❖ Secured second position in poetry competition. ❖ Project on Density Functional Theory with Dr. Archana.
6.	Sangeeta Yadav		❖ Project on Density Functional Theory with Dr. Archana.
7.	Neha Sharma		❖ Secured first position in poetry competition . ❖ INSPIRE scholarship(2016- 2019).
8.	Ayushi Tyagi		❖ Project on the study of capacitors with Dr. Vandna Luthra.
9.	Prarthana Pasricha		❖ Member of the Eco club (Avni) of Gargi College. ❖ Unmukti (Women development cell)member. ❖ Physikos designing head. ❖ Second position in physics charades. ❖ Second position in circuit making competition. ❖ Donated blood in blood donation camp at Gargi College.
10.	Priyanka		❖ Member of the Eco club (Avni) of Gargi College. ❖ Unmukti (Women development cell) member. ❖ Physikos designing head. ❖ Second position in physics charades. ❖ Second position in circuit making competition. ❖ Donated blood in blood donation camp at Gargi College.

S. No.	Name	Year	ECA
1.	Saifali	2017-19	❖ Face painting (Sri Venkateswara College):1st position. ❖ Costume designing (IIT Roorkee): 2nd position. ❖ Kaagaz-ae- kaarigari (Khalsa College): 2nd position. ❖ Costume designing(Dyalsingh college): 3rd position. ❖ Best out of waste (DTU): 1st position.
2.	Nikita		❖ Botanical Card Making Competition (Botany Department Gargi College) :1st position.
3.	ANANYA GUPTA		➤ 3rd prize-Data Science Challenge on Internshala (cash prize worth Rs.10,000/-).
4.	ANSHULIKA		➤ 1st position -Saraki (Gargi Olympiad).
5.	MANSI SINGH		➤ 1st position - Doodling Competition (Department of Chemistry, Gargi College).
9.	PARUL		➤ 1st position-Poster making (Department of Political Science, Gargi College). ➤ 1st position-Saraki (Gargi Olympiad).   ➤ 1st position-Vigoro (Gargi Olympiad)
10.	RIYA VERMA		➤ Internship with K5 solution and Yourshell in social media marketing.
11.	RIYA		➤ 1st position-Vigoro (Gargi Olympiad)
12.	SAKSHI		➤ 2nd position-Hand painting competition (Department of Botany, Gargi College). ➤ 2nd position-Costume making competition (Lady Irwin College, DU). ➤ Member of Hues (The Fine Arts Society of Gargi College).
13.	MEEMANSHA BAHUGUNA		➤ Internship under Eisystems Technex 2020 (IIT BHU) on python programming.
14.	SRISHTI DEHMIWAL		➤ Internship on python programming at Eisystems Technex 2020 (IIT BHU).
15.	PRIYANKA GUPTA		➤ Internship under Unschoool on social media marketing.
16.	SONALI BHARDWAJ		➤ Internship under Program for International Student Assessment. ➤ Internship under Unschoool on social media marketing

S. No.	Name	Year	ECA
1.	Reha Thongam	2018-19	<ul style="list-style-type: none"> <li>❖ 2nd prize in Pop Quiz by Quizzito in Gargi College.</li> <li>❖ Winner of the online quiz question in Zistatva.</li> <li>❖ Member of creative writing team of Physikos</li> </ul>
2.	Rishu Jakhar		<ul style="list-style-type: none"> <li>❖ Union Volunteer in Zistatva and Reverie.</li> <li>❖ Main stage performance of slam poetry at Reverie'19.</li> </ul>
3.	Kashish Bhatia	2018-19	<ul style="list-style-type: none"> <li>❖ Winner of the creative writing competition organised by the college magazine team.</li> <li>❖ A member of the Physics magazine team- Physikos</li> <li>❖ Participated as a poet in the Busking team for Zistatva and Reverie.</li> </ul>
4.	Preetisha Goswami		<ul style="list-style-type: none"> <li>❖ A member of the Physics magazine team- Physikos.</li> </ul>
5.	Ananya Shankar		<ul style="list-style-type: none"> <li>❖ Second place in Costume Designing in Thomso'18, Roorkee.</li> <li>❖ " Convenor " of Quiz society, Quizzito. AND Attended ISSAA Summer School 2021.</li> <li>❖ Presented paper in ICRAMC Conference 2021. and in AMRP Conference 2020.</li> </ul>
6.	Ripundhi Lepcha		<ul style="list-style-type: none"> <li>❖ 3<sup>rd</sup> prize in IIT-D Rendezvous in western singing.</li> <li>❖ 3<sup>rd</sup> in Lady Shri Ram College in western singing.</li> <li>❖ 2<sup>nd</sup> in Shiv Nadar University in western singing.</li> <li>❖ 1<sup>st</sup> in Ramjas College in Western Singing.</li> <li>❖ 1<sup>st</sup> in Hindu College in Western Acapella Music Event</li> </ul>
14.	Tisha Khandelwal		<ul style="list-style-type: none"> <li>❖ Submitted a group project on SIR Modeling on Covid Data</li> </ul>
15.	Preetisha Goswami		<ul style="list-style-type: none"> <li>❖ Awarded Best Oral Presenter ICRAMC-2021.</li> <li>❖ Presented paper in the 5th National e-Conference 2020.</li> <li>❖ Selected to attend the virtual Introductory Summer School in Astronomy and Astrophysics</li> <li>❖ Participated in a workshop organized by Quasar, the Department of Physics, Gargi College.</li> </ul>
16.	Komal Kumari		<ul style="list-style-type: none"> <li>❖ Secured Third position in poetry competition. Currently doing an internship in Doubtnut.</li> </ul>

S. No.	Name	Year	ECA
1.	<b>Romanpreet Kaur</b>	2019-21	<ul style="list-style-type: none"> <li>❖ "Vice President" of Physics Department Quasar.</li> <li>❖ Secured 2nd position waste competition by Mata Sundri College.</li> </ul>
2.	<b>Shruti Rana</b>		Secured 2nd position in AMFLIX - The Binger's Tournament in Acharya Narendra Dev College.
3.	<b>Namra Arya</b>		Secured 2nd position in AMFLIX - The Binger's Tournament in Acharya Narendra Dev College.
4.	<b>Priyanshi Mishra</b>		<ul style="list-style-type: none"> <li>❖ Secured 3rd position in quiz in Gargi college.</li> <li>❖ Secured 2nd position in the paper presentation at Motilal Nehru college.</li> <li>❖ Qualified the physics quiz organized by Kanya Mahavidyalay, Jalandar.</li> </ul>
5.	<b>Gunjan Bisht</b>		<ul style="list-style-type: none"> <li>❖ "Treasurer" of Physics department.</li> <li>❖ Elected as the President of the White Rose Club.</li> </ul>
6.	<b>Kashish Bhatia</b>		Internship at Unscool Internship at Investment Tree Fincorp Editor, College Magazine (Voices)
7.	<b>Ayushi Choudhary</b>		Submitted a group project on SIR Modeling on Covid Data
8.	<b>Neha</b>		<ul style="list-style-type: none"> <li>❖ "Joint secretary" of Physics department Quasar.</li> <li>❖ Participated in Polaroid completion organized by SRCC Internship at younger.</li> <li>❖ Scholarship by Sakshat for educational help</li> </ul>

<b>SN</b>	<b>NAME</b>	<b>YEAR</b>	<b>WORKING</b>
<b>1.</b>	<b>Dr. Indira Sulania</b>	<b>2003</b>	<b>Scientist F (IUAC)</b>
<b>2.</b>	<b>Ms. Garima S.</b>	<b>2009</b>	<b>Assistant Prof. (DU)</b>
<b>3.</b>	<b>Ms. Surabhi Sharma</b>		<b>PhD (IITD)</b>
<b>4.</b>	<b>Ms. Swati</b>		<b>PhD (IITD)</b>
<b>5.</b>	<b>Ms. Nilanjana</b>	<b>2010</b>	<b>MSc (Vansthali)</b>
<b>6.</b>	<b>Ms. Namrata</b>		<b>MSc (DU)</b>
<b>7.</b>	<b>Ms. Gurpreet</b>		<b>PDF (IEMN France)</b>
<b>8.</b>	<b>Ms. Neha Sharin</b>	<b>2011</b>	<b>PhD (DU)</b>
<b>10.</b>	<b>Ms. Sweety Pandey</b>		<b>PO in CANARA BANK</b>
<b>11.</b>	<b>Ms. Rubina</b>		<b>MSc (IITB)</b>
<b>12.</b>	<b>Ms. Apporva Mittal</b>	<b>2012</b>	<b>Young's Scientist in AIIMS</b>
<b>13.</b>	<b>Ms. R. Rubia</b>		<b>Ph.D</b>
<b>14.</b>	<b>Ms. Varsha</b>		<b>Assistant Prof. (Kalandi College)</b>
<b>15</b>	<b>Ms. Namrata Gugrug</b>	<b>2013</b>	<b>Abroad</b>
<b>16.</b>	<b>Ms. Sanjoli Sasawat</b>		<b>Abroad</b>
<b>17.</b>	<b>Ms. Shayoni Panja</b>		<b>Abroad</b>
<b>18.</b>	<b>Ms. Neeraj Kumari</b>		<b>Abroad</b>

19	Ms. Falta	2013	PhD (DU)
20	Ms. Meenu Pandey		IIM
21	Ms. Tanvi		Aboard
22	Ms. Jyoti	2014	Assistant Prof. (DRC)
23.	Ms. Dipti Yadav		
24	Ms. Anisha Dua		
25	Ms. Himanshi Kathuria		Summer research internship IISc Bangalore
26	Ms. Surabhi Sharma		ICICI Bank
27	Ms. Surabhi Mangla		MCA (IP)
			MSc (BITS Ranchi)
28	Ms. Meenu Pandey		MBA (AMITY)
			MSc (IITD)
29	Ms. Arshia	2015	Abroad
30	Ms. Devina		Abroad
31	Ms. Niharika		Abroad
32	Ms. Sonia		Abroad
33	Ms. Vinnie		Abroad
34	Ms. Angira		PhD (IISER PUNE)
35	Ms. Bhawana		MSc (BITS HYDERABAD)
26	Ms. Garima		MSc (DU)
27	Ms. Jyoti Sardana		PhD (DU)
28	Ms. Kathy		MSc (DU)
29	Ms. Kaushambi Jyoti		MSc (IITD)
30	Ms. Khushwinder		Content Writer NIIT
31	Ms. Neeraj		Abroad
32	Ms. Rashmi		MSc (IIT Jodhpur)



33	Ms. Reshu	2015	MSc (BITS HYDERABAD)
34	Ms. Urvashi		PhD (IITB)
35	Ms. Vaibhavi		MSc (BITS HYDERABAD)
36	Ms. Sipaz		MSc (IISc BANGLORE)
37	Ms. Honey Mittal		PhD ( JAMIA )
38	Ms. Mansi Singh	2016	Panjab National Bank
39	Ms. Divya Dixit		Panjab National Bank
40	Ms. Namrata Bhatia		Novartis
41	Ms. Shivani Pandey		Vedantu Pvt. Ltd.
42	Ms. Udisha Shukla	2017	Trident Group, India
43	Ms. Ravina	2018	Indian Air force
	Ms. Ayushi Gupta		Deloitte
44	Ms. Palak Kapoor		Varroc Eng. Ltd.
45	Ms. Pragati Kapoor		ACME Global School

Name of the Project/ Endowments, Chairs	Name of the Principal Investigator/Co-investigator	Department of Principal Investigator	Year of Award	Amount Sanctioned	Duration of the project	Name of the Funding Agency	Type (Government/ non-Government)
GC 301: Low cost and novel-Integrated Test, Measure and Analysis Station (ITMAS) for teaching and research; Advocacy for open sources: Paradigm changers for Science and Mathematics Education in India	Vandna Luthra Arshmeet Kaur Sundanda Saini	Physics Mathematics B.El.Ed.	2015	5,50,000	1 Year	University of Delhi	Government
GC 305: DNA barcoding for grasses of Aravalli range in Delhi region and subsequent creation of database of DNA barcode sequence information: An essential study for formulating future conservation strategies	Dr. Aparajita Mohanty, Dr. Jasmeet, Dr. Supreeti Das	Botany and Physics	2015	5,50,000	1 Year	Delhi University	Government
Designing efficient thermal flow nanofluids	Dr. Supreeti Das	Physics	2017	2,32,500	2 Years	UGC, Minor Project	Government