



Best Practice 2

Promotion of Research and Eco Friendly Practices



Submitted to



Objectives of the practice

Gujranwala Guru Nanak Khalsa College, Ludhiana promotes Research and Eco Friendly practices. For this our college encourage faculty to:

1. Organize and present their research papers in National and International Conference/Seminars/Workshops /Symposiums /Webinars.
2. Pursue Ph.D and further Research.
3. Apply for major and minor research projects to UGC, CSIR, DST etc.
4. Establish linkages and collaborations with other Institutes/Industries/Universities abroad for research.
5. Publish quality research articles in UGC listed Journals or Journals with high impact factor.
6. Publish academic and research books, Journals and magazines.
7. Establish research centres.
8. Create awareness about the need to protect the environment and promote love for the surrounding biodiversity.
9. Implement three 'R's (Reduce, Reuse, Recycle) policy in the campus.
10. Use renewable energy resources (solar energy).
11. Enrich and expand green area in the campus through periodical tree plantation.

The Context

Research is not confined to the field of science only, but it also caters to any field where an individual is willing to do extensive study to get relevant information .It is actually an act of studying something carefully and extensively in order to attain conclusions which are useful to mankind. It should be systematic, arranged, summarized and recorded properly. This could be achieved only by enabling the researchers to focus on their research work in clean environment with a proper support system.

Everyone should love and show concern for the nature which is also a part of a holistic approach of life. The sacred vision for environment by Sri Guru Nanak Dev Ji is composed as:



“Pavan Guru Pani Pita, Mata Dharat Mahat”

With this mission, our College, started different kind of ‘Green Practices’ within and outside the college campus. It is a well-known fact that a healthy mind lives in a healthy body, the clean and green ambience of the college provides an environment which helps to nourish the critical thinking. The preaching and keen observation of Guru ji teach both the lessons simultaneously. This eco-friendly ambience strikes a positive chord for promoting education in the institution. Therefore, the promotion of research and green practices is a need of the hour.

The Practice

1. Our institution has a Research Promotion Cell for promoting research culture in the staff and students on the campus.
2. Faculty members are encouraged to participate and present their research papers in National and International Conferences/Seminars/Workshops /Symposiums for which the college provides duty leave.
3. Faculty members are motivated to apply for research grants to different funding agencies.
4. The college provides computing and internet facility, e-journals, INFLIBNET, DELNET etc. for research scholars and teachers.
5. Post Graduation students are encouraged to do small projects and present papers which helps in developing their research attitude.
6. Our college motivates the students for developing research culture, organizing International and National Seminars/ Symposium/Conferences for them.
7. Faculty is granted special leaves to pursue Ph.D degrees.

8. Our college has installed roof-top solar panels. The capacity of this solar power plant is 70 kilowatt power which costed around 28 lakhs rupees. This project includes 223 solar panels of 315 watt capacity each.



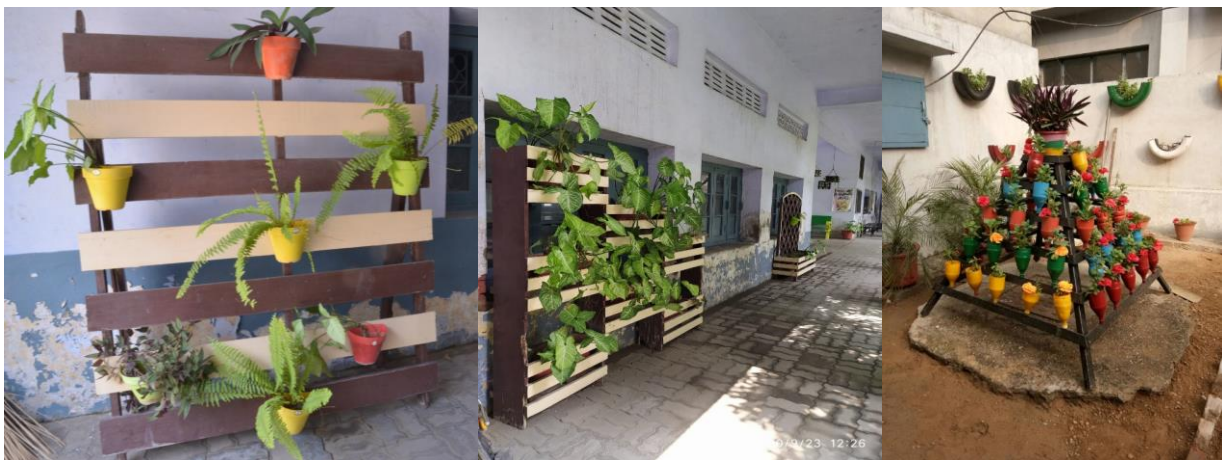
9. Our institution has constituted certain clubs and committees namely Gurmat Sabha, Nek Chand Memorial Club, Bhagat Puran Singh Eco Club, Land Beautification Committee, etc. These clubs actively promote the various projects.



10. Nek Chand Memorial Club and Bhagat Puran Singh Eco Club of our college organized an intra college competition on 'Beautification of the Campus'. The students brought waste bottles and waste iron rods, discarded tyres from their homes and painted the same with vibrant colours. Those were used to grow beautiful little flowering plants in the parking area of the college. This activity had helped the students to explore their hidden talent on one hand and to beautify the campus with a sense of belongingness on the other.



11. The old and broken benches are reused to create flower-pots and flower-pot-stands.



12. Old and rusty drums from the college store-room are recycled and used for plantation.



13. To fight the COVID-19 pandemic, waste wood and iron is used to make Sanitizer Dispenser which are installed at different locations inside the campus to assure the safety of all the college staff members and visitors.



14. Vermi-composting unit has been developed in our campus thus replacing use of pesticides and harmful chemical fertilizers by organic manure produced by green waste.



15. College has started modern method of irrigation called Micro irrigation for watering vertical gardens avoiding wastage of water through evaporation and flooding.



16. Use of Polythene bags is discouraged.

Evidence of Success

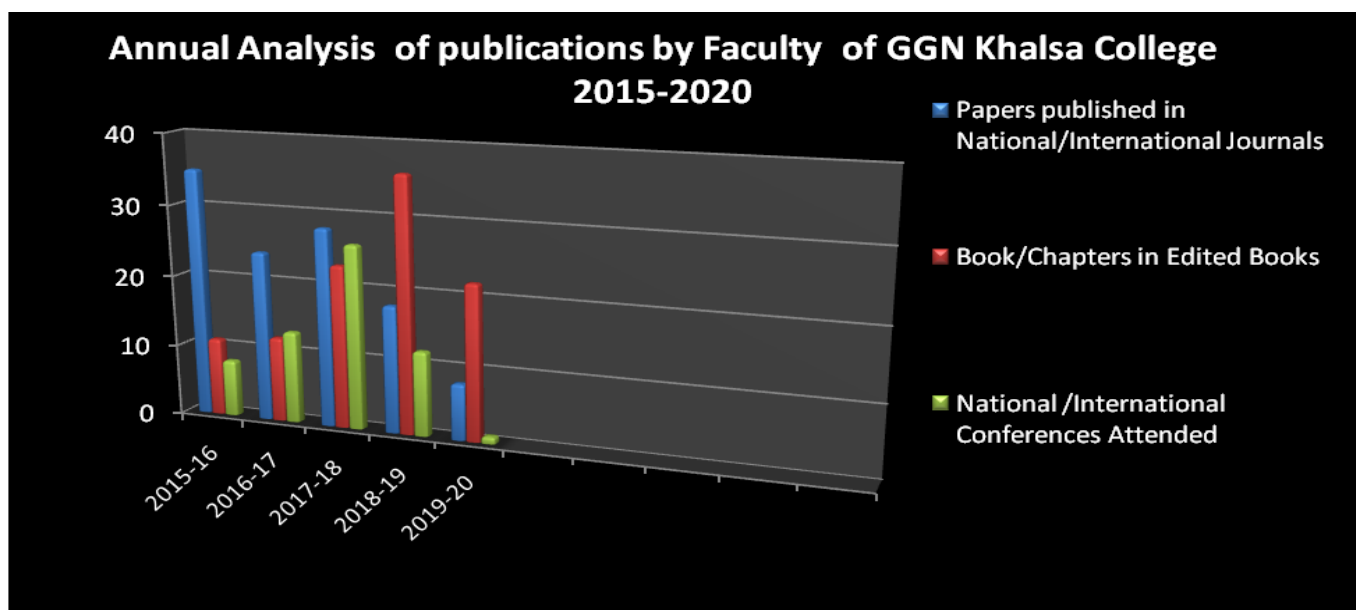
1. Utilizing ICT facilities and to promote Research, the departments of Punjabi, English, Hindi, Commerce, Chemistry, Physics, Economics, Advertising Sales Management and

various committees have successfully organised 35 Extension lectures and 33 International and National Seminars/webinars/Symposium/Conferences etc.

<p align="center">Summary of the Academic Events</p> <p align="center">(2015-2020)</p> <p align="right">Total Number: 68</p>								
	Extension Lectures	Seminars	Conferences	Workshops	Symposium	Webinars	Faculty Development Programme	Conclave
National	NA	10	1	2	5	1	NA	1
International	NA	-	5	2	3	2	NA	NA
Total	35	10	6	4	8	3	1	1

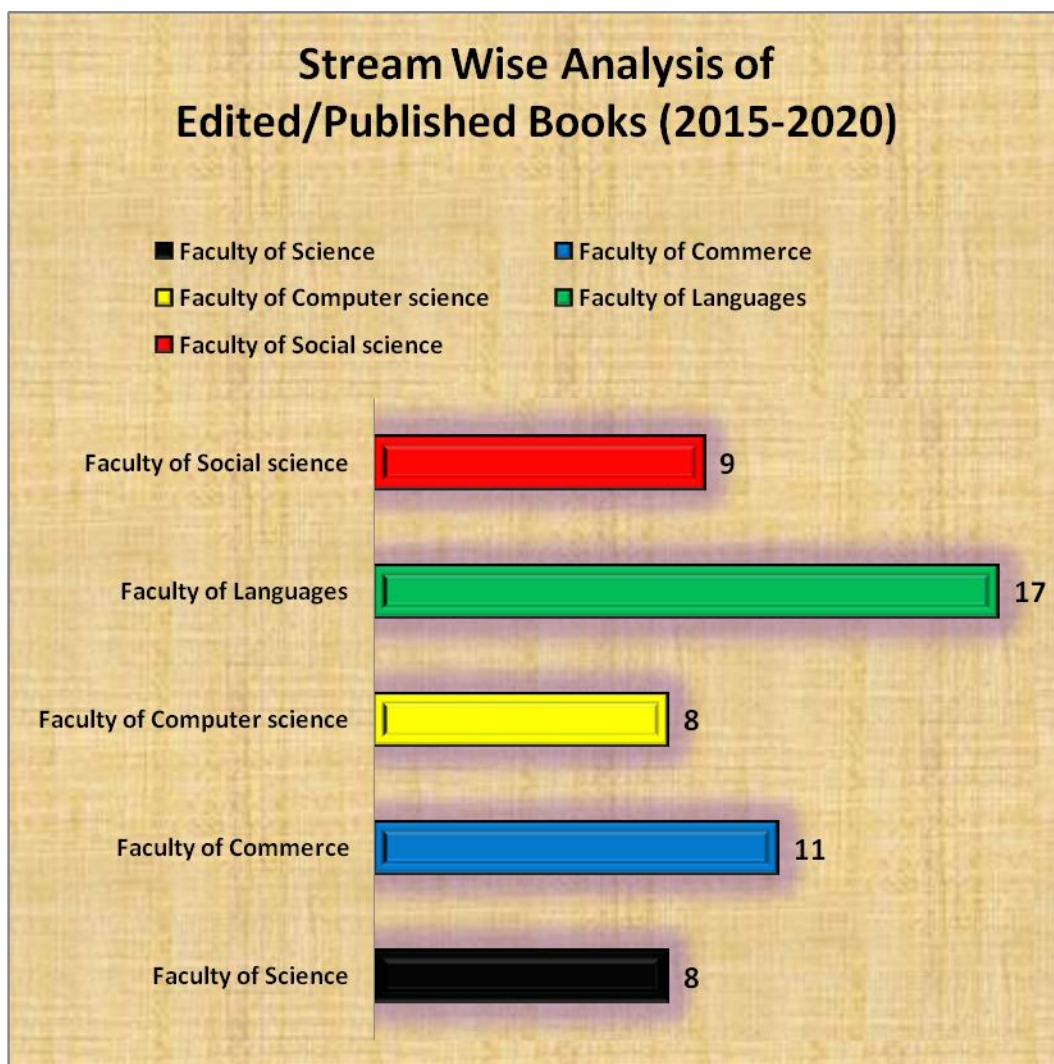
2. Parvasi Adhyan Kendra of the college using ICT facilities organized many international events presenting their research work.
3. Parvasi Adhyan Kendra of the college is publishing quarterly e-magazine “Parvas” catering poets and writers across the borders
4. Principal Dr. Arvinder Singh presented a research paper entitled ‘Guru Nanak’s Model of Multicultural Society and Peaceful Coexistence & its Relevance in the 21st century’ in the International Conference on ‘A Journey of 550 Years: Sikh Studies in Academia’ (3rd To 5th September 2019) organized by the Centre for Sikh and Punjab Studies of University of Wolverhampton, (United Kingdom) and Dr. Sushmindarjeet of English Department went to Surrey, Canada to present her research paper entitled “Eradicating the use of Narcotics in Gurpreet Singh Toor’s “ Sambhlo Punjab”, Dr Hargunjot delivered a talk on immigrant literature at Surrey, Canada, Dr Paramjit Singh of Physics department presented his research work on “Polymer Nanocomposite Membranes: Synthesis and Applications” at TJPU, Tianjin ,China.
5. Dr. Arvinder Singh, Principal, GGN Khalsa College has been sanctioned minor research project entitled “Guru Nanak’s Model of Multicultural Society and Peaceful Coexistence & Its Relevance in the 21st Century” of 4 lakhs by ICSSR in November 2019.

6. Dr. Paramjit Singh was also offered “Dr. D.S. Kotari Postdoctoral Fellowship by UGC New Delhi in 2017.
7. In last five years Faculty have published 113 research papers in peer reviewed/ UGC approved/SCI/SCOPUS indexed Journals, 104 total numbers of books/book chapters and published 60 full papers in conference proceedings.

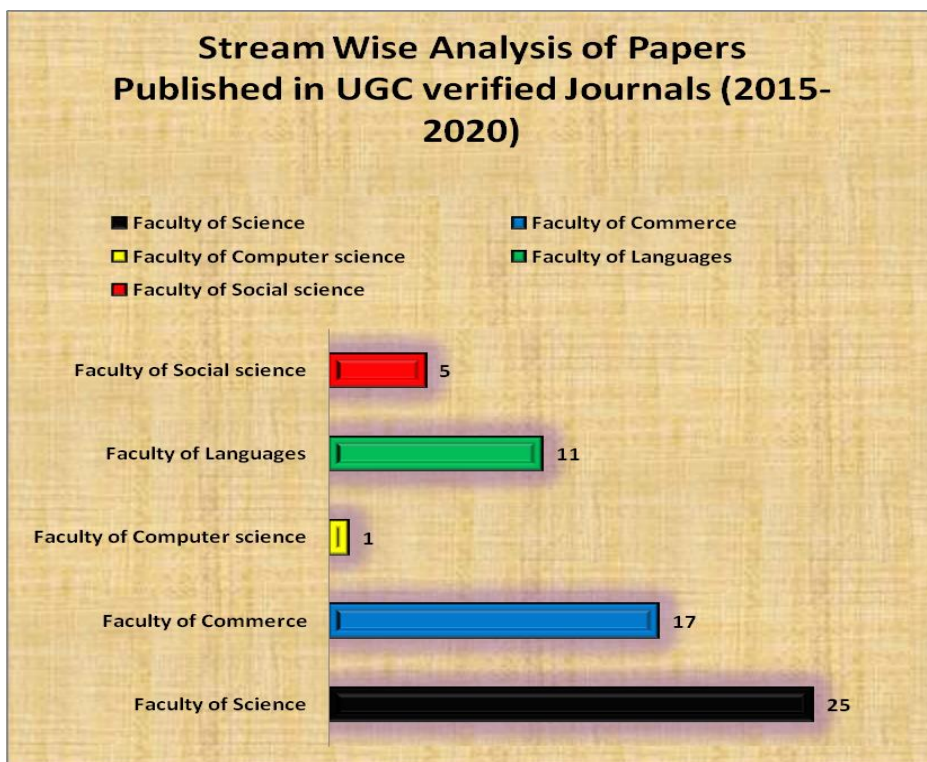


8. Our college has signed a MoU with University of Wolverhampton, (United Kingdom) for mutually beneficial programs for organizing joint conferences, workshops, joint research projects. <https://www.ggnkcl.com/page/mou-with-university-of-wolverhampton-england>
9. Department of Chemistry has also received approval for partial sanction of Conference proposal entitled” Recent Trends in Chemistry and Biochemistry” from DST, SERB.
10. Prof. Sushmindarjeet Kaur of English Department is Deputy Chief Editor of Journal of Literary Aesthetics and member of Editorial Board of International Journal of Creative Literature for Peace and Humanity.
11. Many students of English, Physics and Chemistry department also presented papers in the conferences organized by our college or other colleges.
12. Post-Graduate students of Chemistry had completed mini projects and also published/ presented some of their research work in conferences. The main objective was to promote scientific temper and encourage young minds to take research as their career.

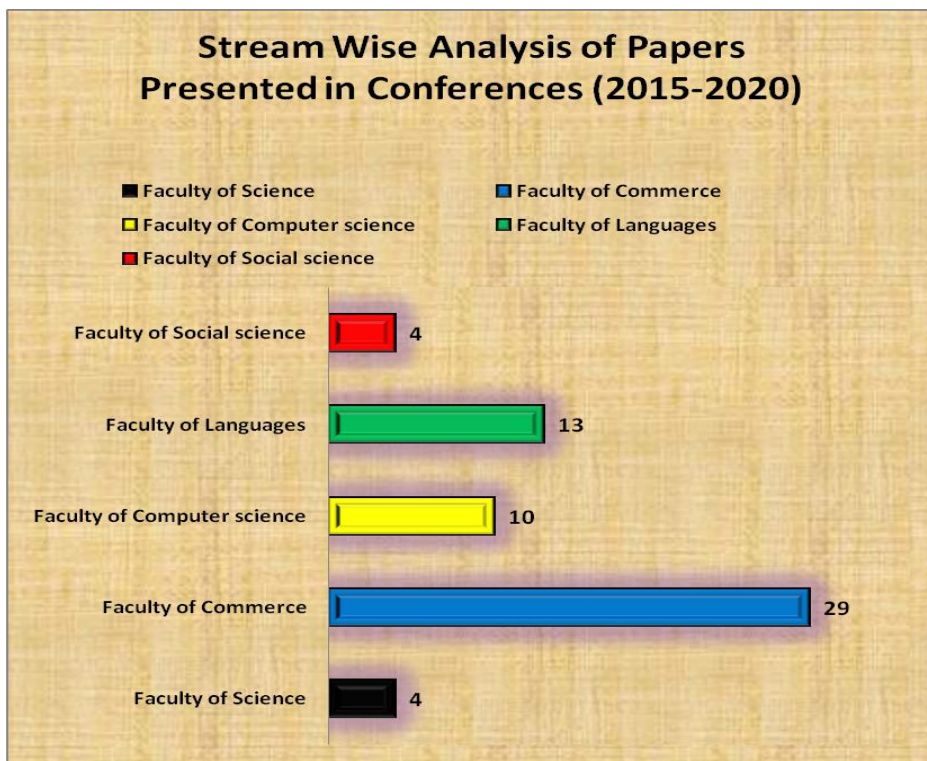
13. Dr. L.S Bedi, Dr. Sushminderjit Kaur, Dr. Harpreet Dua, Dr. Hargunjot Kaur, Dr. Gurdas Singh, Dr. Mandeep Kaur have completed their Ph.D during last five years availing the one period exemption facility.
14. Dr. L.S Bedi had availed special sabbatical leave for writing his Ph.D thesis.
15. Prof. Manpreet Kaur, Prof. Asha Rana, Prof. Balkar, and Prof. Jagkiran are provided full support for pursuing their Ph.D.
16. Faculty of our college has Edited/Published 53 books.



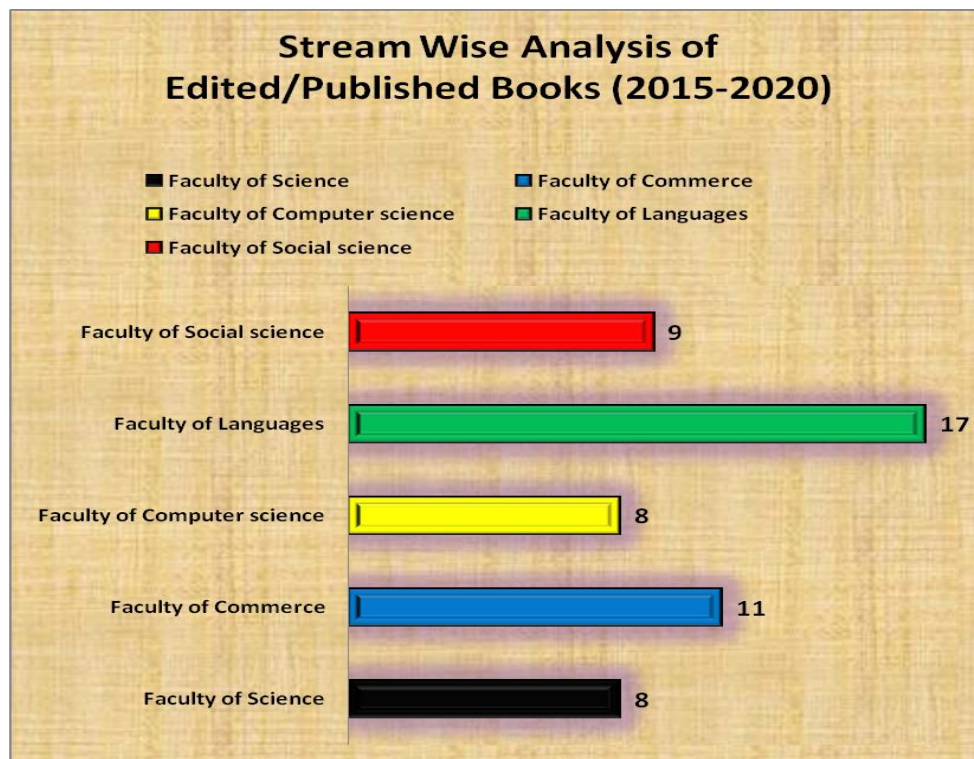
17. Faculty of our college has published about 59 research papers in UGC verified Journals.



18. The faculty of our college has presented about 60 research papers in national and International conferences.



19. Faculty of our college has published about 45 chapters in edited books.

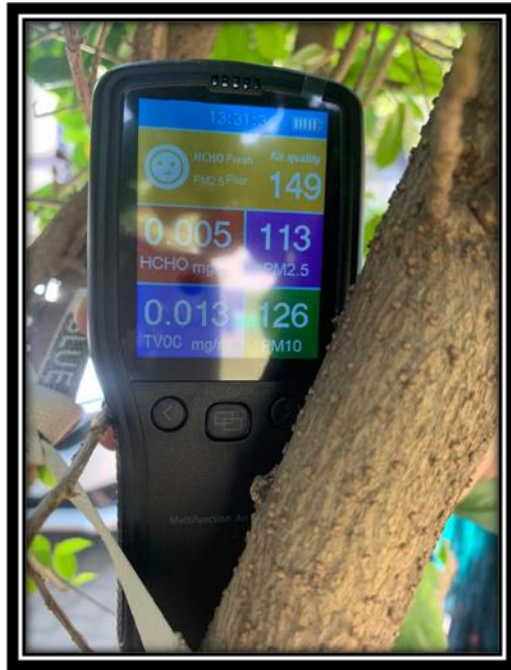


Summary of Publications by the College and Faculty Members (2015-2020)				
				Total:217
	No. of Books Published or Edited by Faculty of College by Compiling Conference Research Papers	No. Of Papers Presented By faculty in Conferences	Chapters/ Papers in Edited Books	Papers published in National/International Journals by Faculty Members
Number	53	60	45	59

20. The solar power plant installed in the institution produces approximately 160 units of electricity per day in the winter season which almost doubles in the summer season and it saves around 7 lakh rupees per year.
21. Micro irrigation system ensure uniform distribution of water and uses 30-50% less water. This system not only conserves our very precious natural resource such as water; but it will also serve as a demonstration unit to conserve water for students, staff and other visitors in the college.
22. Vermi-composting unit helped us to convert solid waste into organic fertilizers which have minimized the solid waste on the campus.



23. In our campus we have 21 different varieties of avenue trees, 8 varieties of palms, 22 varieties of Shrubs, 28 varieties of pot plants and 6 varieties of climbers and many more flower plants inside the campus.
24. Air quality tester meter has been installed in our campus. Through this air quality tester quality of air has been tested inside and outside the campus and it has been observed that quality of air inside the campus is much better than outside.



25. On 550th birth anniversary of Sri Guru Nanak Devji, a massive plantation drive was done by establishing a new park in the college named “*Guru Nanak Bagichi*”.





Problems Encountered and Resources Required:

1. The continued motivation of the students and the faculty is always a challenge.
2. Challenges of plagiarism and quality in research.
3. Fewer funds for research projects of PG students
4. Less budgetary provision for research activities due to rigorous procedures of UGC/CSSIR for sanctioning Major/Minor projects.
5. ‘Green campus initiatives’ is an expensive practice. It needs an expert advice and investment of resources.
6. Many resources are required to maintain green practices.