

Miscellaneous criteria for internal evaluation

Institution Incubation Centre, R&D cum Innovation Centre.

SESSION 2023-2024

1. "Policy for Research Promotion and Faculty Development"

Subject: "Policy for Research Promotion and Faculty Development"

Introduction:

In response to the growing emphasis on research and faculty development in higher education, as highlighted by the National Assessment and Accreditation Council (NAAC) and the National Education Policy (NEP) 2020, GC Sanjauli recognizes the need to establish a comprehensive policy for fostering a culture of academic excellence. The "Policy for Research Promotion and Faculty Development" aims to create an environment that encourages knowledge creation, innovation, and professional growth, ultimately enhancing the quality of education and research at the institute.

1. Enhancing Research Awareness and Promoting Faculty Development:

1.1. The institution shall organize discussions with eminent researchers and conduct national and international conferences, seminars, symposia, faculty development programs, and workshops on research methodology, IPR, and patenting to enhance research awareness among faculty.

1.2. The institution shall provide a conducive environment and motivation for faculty to pursue doctoral and post-doctoral assignments at reputed national and international universities and organizations.

1.3. The institution shall encourage faculty to undertake research projects in thrust areas in various subjects funded by various national and international agencies.

1.4. The institution shall explore new horizons of knowledge and ensure its practical implementation through collective efforts and quality research work.

1.5. The institution shall provide a creative atmosphere, complemented by adequate facilities and resources, in which higher studies and research thrive among the faculty and students.

1.6. The institution shall establish Centers of Excellence in thrust areas and set

upIncubationCenters to motivate innovations andstartups.

1.7. The institutions shall mentor academic and industry-based research projects.

1.8. The institutions shall publish research works in renowned journals.

1.9. The institutions shall develop products and file IPR.

2. Financial Assistance for Faculty Development:

2.1. The institutions shall provide financial assistance to teachers for attending conferences, workshops, and seminars, as well as for membership fees in both national and international professional bodies (sponsored by government-accredited organizations). The maximum assistance provided shall be INR 3,000 per year.

2.2. The Cell shall ensure the proper allocation of funds from the institution before the starting of the academic session.

2.3. The Cell shall audit the utilization of the fund and ensure that proper documentation and evidence are provided by faculty members (sponsored by accredited Government agencies).

3. Establishment of Industry-

Institute Partnership Program (IIPP) Cell in GC Sanjauli in Accordance with National Education Policy (NEP) 2020

The primary objective is to provide a framework for the establishment and functioning of an Industry-Institute Partnership Program (IIPP) Cell at GC Sanjauli, in line with the National Education Policy (NEP) 2020.

The purpose of the IIPP Cell is to strengthen the collaboration between academia and industry, with a focus on fostering innovation, enhancing skill development, and promoting entrepreneurship.

Scope:-

Consultancy Work by Teaching Faculty:

3.1. The institutions shall establish a dedicated Consultancy Cell to facilitate consultancy work by teaching faculty.

3.2. The Consultancy Cell shall formulate rules and guidelines for the consultancy work, including the allocation of projects, sharing of revenue, and other relevant aspects.

3.3. The Consultancy Cell shall promote collaboration between the institution and industry partners to foster a mutually beneficial relationship.

3.4. The Consultancy Cell shall monitor the progress of consultancy projects and ensure their timely completion.

3.5. The Consultancy Cell shall ensure that the consultancy work does not interfere with the regular teaching and research responsibilities of the faculty members.

4. Plagiarism Prevention:

4.1. The institution shall adopt strict measures to prevent plagiarism in research work.

4.2. Faculty members shall be required to submit their research work through a plagiarism checker tool before publication or presentation.


4.3. The institution shall provide training and workshops to faculty and students on proper citation practices and plagiarism prevention techniques.

5. Implementation and Monitoring:

5.1. The Research and Promotion Cell shall be responsible for implementing and monitoring the various policies outlined in this document.

5.2. Periodic reviews and evaluations shall be

conducted to ensure the effectiveness of these policies and to make necessary adjustments as needed.


Principal
Govt. College Sanjauli
Shimla-68
Govt. College
Sanjauli, Shimla-6

Detailed Report on the Research and Incubation Cell Activities for the Session 2023-2024

1. "Concepts of Longevity of Life,"

The Research and Incubation Cell at our college has been actively involved in fostering academic and research excellence throughout the 2023-2024 academic session. One of the key highlights of this period was an in-depth research project titled "Concepts of Longevity of Life," led by Dr. Brijesh Chauhan, an Associate Professor in the department of Physics.

Research Focus and Objectives:

The primary objective of the project was to investigate the various factors influencing the longevity of life, with a holistic approach that combined biological, physical, psychological, and social perspectives. The overarching aim was to understand how these factors contribute to living a happy, healthy, and prolonged life. By adopting an interdisciplinary methodology, the research sought to provide a nuanced understanding of longevity, moving beyond traditional biological explanations to include lifestyle and social factors.

Methodology:

The research utilized an interdisciplinary approach, integrating insights from various fields such as biology, psychology, sociology, and physical health sciences. This comprehensive method was chosen to reflect the complexity of factors that affect human life expectancy and well-being. A survey was conducted among 100 students, who represented a diverse sample in terms of lifestyle, social habits, and health practices. Data collection involved both quantitative and qualitative measures to ensure a robust analysis of the factors influencing longevity.

Key Findings:

The survey yielded several important findings, offering a glimpse into the contemporary challenges faced by young adults:

1. **Electronics Overload:** A significant portion of the participants reported spending excessive time on electronic devices, including smartphones and computers. This overuse was linked to increased stress levels, disrupted sleep patterns, and a general decline in physical activity, all of which are detrimental to long-term health.
2. **Lack of Social Engagement:** The study found that many students did not actively participate in social or community activities. This lack of social interaction was noted

as a contributing factor to feelings of isolation and stress, which negatively impact both mental and physical health. Social engagement was identified as a critical factor in promoting emotional well-being and a sense of belonging.

3. **Music as a Stress Relief:** One positive finding from the survey was the widespread use of music as a coping mechanism for stress. Students frequently turned to music as a form of relaxation, which was shown to have a beneficial impact on reducing anxiety and promoting mental peace. The study highlighted the potential of music as a non-invasive tool for stress management.

Conclusion and Implications:

The research project successfully provided deep insights into the lifestyle choices and behaviors that influence long-term health and well-being. The findings emphasize the importance of reducing electronic device dependency, fostering greater social interaction, and utilizing stress-relief mechanisms such as music to promote a balanced and fulfilling life. The interdisciplinary nature of the study underscores the need for a multifaceted approach when addressing health and longevity in modern society.

Moving forward, the Research and Incubation Cell plans to expand on these findings by exploring interventions that can be implemented within the college community to promote healthier lifestyles. This may include workshops on time management and digital detox, as well as initiatives to encourage social engagement and mental health awareness.

Through these efforts, the Research and Incubation Cell continues to play a vital role in nurturing a culture of research and innovation, contributing to both academic development and the well-being of our college community.

2. Report on the Department of Geography's Cartography Initiative for the Session 2023-2024

In line with the college's commitment to promoting research and practical learning, the Department of Geography launched an important project on cartography during the 2023-2024 academic session. The primary objective of this initiative was to teach students the art and science of map-making and composition, providing them with essential skills that could lead to viable livelihood opportunities.

Objective and Purpose:

The cartography project aimed to offer students a comprehensive understanding of map-making, combining both theoretical and practical aspects. By mastering the techniques of cartography, students were empowered with a skill set that extends beyond academic knowledge, enabling them to pursue professional avenues such as geographic information systems (GIS), urban planning, and land surveying.

Methodology:

The project was designed to integrate geographical theory with hands-on training. Students participated in both classroom sessions and practical workshops, where they applied

cartographic techniques to create detailed, functional maps. Emphasis was placed on utilizing modern tools and technology to ensure that students were familiar with current industry standards in map-making and composition.

Conclusion and Implications:

This initiative not only enhanced the students' academic experience but also provided them with practical skills that could be translated into career opportunities. By focusing on the art and science of map-making, the Department of Geography contributed significantly to promoting research and applied learning within the college. This project highlights the potential of geography as a discipline that offers both intellectual growth and practical pathways for livelihood.

3. Report on the Free Thinkers Club: Research Focus for the Session 2023-2024

The *Free Thinkers Club*, founded under the Department of Political Science, has established itself as a dynamic platform that fosters intellectual curiosity, critical thinking, and academic research among students. In the 2023-2024 session, the club placed a strong emphasis on promoting research as a core element of its activities.

Objective and Purpose:

The primary objective of the Free Thinkers Club is to encourage students to explore diverse perspectives on political, social, and cultural issues. Through structured discussions, debates, and collaborative projects, the club aims to build a research-driven environment where students can delve into critical topics with an interdisciplinary approach.

Research Initiatives:

During the 2023-2024 session, the club organized a series of research-based activities, including seminars, panel discussions, and student-led research projects. These initiatives focused on topics such as the impact of inclusive and democratic learning environments, the intersection of politics and society, and the evolving nature of global governance.

By emphasizing the importance of thorough research, the club has contributed to enhancing students' analytical skills and academic growth. The research conducted within the club has also inspired participants to develop independent projects, furthering their academic pursuits beyond the classroom.

Conclusion:

The Free Thinkers Club continues to play a pivotal role in promoting a research-oriented culture within the college. Its focus on intellectual engagement and academic inquiry has empowered students to think critically and conduct meaningful research on contemporary issues, aligning with the college's broader mission to foster academic excellence

4. Report on the Department of Chemistry's Soil Testing Training Program for the Session 2023-2024

The Department of Chemistry conducted a specialized training program on soil testing during the 2023-2024 academic session. This initiative aimed to provide students with hands-on experience and practical knowledge in soil analysis.

Program Overview:

The soil testing training program was organized as a one-week intensive course designed to familiarize students with the methodologies and techniques involved in soil analysis. The program covered various aspects of soil testing, including sample collection, analysis of soil properties, and interpretation of results.

Participant Details:

A total of 50 students participated in the training program. Throughout the week, students engaged in both theoretical lessons and practical exercises, which included laboratory work and field sampling.

Objectives and Outcomes:

The primary objective of the training was to equip students with the skills necessary for conducting soil tests and analyzing soil quality. The program aimed to bridge the gap between academic knowledge and practical application, preparing students for careers in environmental science, agriculture, and related fields.

By the end of the training, participants had gained valuable insights into soil chemistry and were proficient in using various testing methods and equipment. This hands-on experience has enhanced their understanding of soil analysis and its importance in environmental management and agricultural practices.

Conclusion:

The one-week soil testing training program organized by the Department of Chemistry successfully achieved its objectives. It provided students with practical skills and knowledge in soil analysis, contributing to their academic and professional development. The program exemplifies the department's commitment to integrating practical experience with academic learning.

5. Workshop on Mathematics Software and MATLAB

In the session 2023-2024, the Department of Mathematics proposed a three-day workshop on mathematics software and MATLAB to the Incubation Cell. The objective of the workshop was to enhance the technical skills of both students and faculty through practical training in these essential tools.

Key Details:

- **Duration:** 3 Days

- **Target Audience:** Students and Faculty
- **Content:** Covered an introduction to mathematics software, fundamentals of MATLAB, and advanced techniques.
- **Objective:** Aimed to equip participants with the skills needed for effective mathematical analysis and problem-solving.

The workshop included hands-on sessions and practical projects, which provided a comprehensive understanding of software applications and MATLAB functionalities. This proposal highlighted the department's commitment to advancing research and technical proficiency within the college.

6. **Research Proposal: Understanding the Geological and Geochemical Aspects of Springs in the Shimla Region**

During the session 2023-2024, the Department of Geology proposed a research project aimed at understanding the geological and geochemical aspects of springs in the Shimla region. This research was crucial for gaining insights into the factors influencing spring water quality and availability in the area.

Objective:

The primary objectives of the research were to:

1. **Analyze Geological Factors:** Examine the geological structures and processes affecting spring formation and flow in Shimla.
2. **Assess Geochemical Properties:** Investigate the chemical composition of spring water to understand its quality and suitability for various uses.
3. **Identify Environmental Impacts:** Explore how environmental changes and human activities influenced the geological and geochemical characteristics of these springs.

Methodology:

The research involved:

- **Field Surveys:** Conducting detailed field surveys to collect data on spring locations, geological formations, and water samples.
- **Laboratory Analysis:** Performing geochemical analyses of water samples to determine mineral content, pH, and other relevant parameters.
- **Data Interpretation:** Analyzing geological and chemical data to identify patterns and correlations related to spring water quality and availability.

Expected Outcomes:

The research was expected to provide a comprehensive understanding of the geological and geochemical factors affecting springs in Shimla. The findings aimed to offer valuable insights into the management and preservation of spring resources, contributing to sustainable water resource planning in the region.

Conclusion:

The research proposal by the Department of Geology highlighted the importance of exploring the intricate geological and geochemical aspects of springs in Shimla. The study aimed to enhance understanding of these vital water sources and support informed decision-making for their management and conservation.

7. Report on Memorandum of Understanding Between Government College Sanjauli and Skill Labs Resource Services Private Limited

In the session 2023-2024, Government College Sanjauli entered into a Memorandum of Understanding (MoU) with Skill Labs Resource Services Private Limited. The MoU proposed the establishment of a financial lab and incubation center aimed at advancing educational and entrepreneurial initiatives.

Key Details:

- **Objective:** The MoU outlined the creation of a financial lab and incubation center designed to offer innovative solutions in line with the New Education Policy.
- **Focus Areas:**
 - **Industry-Academia Collaboration:** Foster partnerships between academic institutions and industry to bridge the gap between theoretical knowledge and practical application.
 - **Entrepreneurship and Innovation:** Promote entrepreneurship and innovation through hands-on experience and support for new ventures.
 - **Research:** Enhance research opportunities by providing resources and infrastructure to support academic and industry research projects.

The proposed lab and center were expected to play a significant role in advancing educational practices, supporting startups, and facilitating collaborative research efforts. This initiative highlighted the commitment of both parties to driving innovation and practical learning in alignment with contemporary educational policies.