6.5.3: Incremental improvements made for the preceding five years with regard to quality (in case of first cycle NAAC A/A) Post accreditation quality initiatives (second and subsequent cycles of NAAC A/A)

1. The research teams working on transgenic crops /genomics/genome, crop improvement under the limitation of climate change and also the diagnostic research for health care, needs to be encouraged adequately so that it is useful for not only the country but also the world at large.

Response: University has taken various steps to promote research in all spheres including research on crops and health care. University has equipped central instrumentation facility (CIF) with world class equipment like Circular Dichroism spectro-polarimeter, Transmission electron microscope, scanning electron microscope to facilitate high end research. Many new equipment has been procured like Mass spectrophotometer, microplate reader. Science specific software and databases are procured through library or Computer centre to facilitate research. In addition, University has mobilised huge amount of funds to maintain and repair this equipment. Besides providing these facilities to research fraternity, University dynamically take up procurement of new equipment, prioritizing instruments in public domain for their optimal use. Central instrumentation facility also has a Biosafety Level 3 (BSL 3) for supporting the TB research. A recent procurement Flow cytometer with Cell sorting (FACS) at CIF has provided means to separate individual cells and study single cell genomics. Currently, University is in the process of purchasing a Digital droplet PCR to facilitate this research further. This will revolutionize the research for cancer research on campus.

Many groups at Departments of Botany, Genetics and Molecular Biology work on diverse crop plants. University has provided a farm land at Bavana Road which is used for growing these crops. University has provided guards and other necessary infrastructure for this land. This has helped ground breaking achievements like characterization of germplasm, long term breeding program and production of various commercial lines. The research on genomics of crop plants has been facilitated by purchasing different software like CLC bench and Omics box. Servers are provided a place at Computer Center where cooling and power backup are available 24 hours. University is now in the process of providing cloud computing to researcher for facilitating genomics research and reducing the problems of server breakdown. Many genomes have been sequenced and published from university campus due to availability of these facilities.

2. Teaching-learning process should be strengthened to be commensurate with the global standards and requirements, as expected by the society.
Response: To elevate the teaching-learning process to meet global standards and societal expectations, several measures have been implemented. First and foremost, curriculum design

incorporates contemporary knowledge and skills demanded on the global stage by involving all stakeholders and domain experts. A plethora of Faculty development programs, emphasizing exposure to international teaching methodologies and trends, do enhance educators' capabilities. Introducing collaborative projects and partnerships with global institutions facilitates inter-disciplinary, trans-disciplinary and cross-cultural learning experiences. Integration of technology into the classroom fosters interactive and innovative learning environments. Regular assessments in all programmes are aligned with international benchmarks ensure a continual focus on academic rigor. Encouraging research and publications with a global perspective adds depth to academic endeavours as evident from ever increasing volume of publications in indexed journals and a very high h-index of the university. Lastly, fostering a culture of continuous improvement in pedagogy and adaptability within the academic landscape of the university, which emphasises inclusivity and differential requirements of its students ensures an ongoing commitment to meeting evolving global standards in the teaching-learning process.

3. Formal feedback mechanism from students and its analyses should be strengthened.

Response: An online   formal feedback mechanism has been instituted. to gather objective feedback on various aspects of their academic journey and overall university experience. The questionnaire includes the comprehensiveness of the curriculum and relevance of the course content and syllabi, and alignment with their career goals. Feedback on the effectiveness of teaching methods, problem-solving, critical thinking, development of skills and competencies, practical applications, and experiential learning opportunities is useful in designing the ongoing postgraduate framework under NEP2020 and which will be open to stakeholder feedback. Feedback on the campus infrastructure, facilities including classrooms, laboratories, libraries, IT infrastructure, recreational spaces, and other amenities has helped the university assess these specific concerns and accordingly take measures to improve the learning environment. Detailed reports of the Feedback of the An*nual Student Experience Survey* are available on https://www.du.ac.in/index.php?page=internal-quality-assurance-cell-iqac

4. Nomenclature of some of the courses should be investigated to match with the employability.

Response: This has been addressed in the curriculum revision undertaken in 2019. Criterion 1 of the SSR details the courses that focus on employability.

5. Evaluation of the answer script of the PG course examination should be shown to the respective students for their satisfaction.

Response: To facilitate the evaluation transparency in PG course examinations, various measures have been implemented. Firstly, there is clear communication of the transparent evaluation criteria at the beginning of the course. This helps students align their efforts with the expected standards and reduces ambiguity in assessment. Secondly, the evaluation procedure has been made robust, ensuring anonymity of the examiner and the examinee. Moreover, the

evaluation of answer scripts is undertaken by a group of examiners with in-built mechanisms of review, thus minimising chances of erroneous evaluation of scripts.

The University's examination branch has formalized an appeal process where students can challenge evaluation decisions if they believe there is a discrepancy by a facility known as re-evaluation, wherein the student's scripts are re-evaluated by two additional examiners independently to arrive at the revised assessment (if any). Owing to the huge numbers of its students, the university does not, at present show the evaluated answer script to all. However, as mandated by the RTI, any student is provided a copy of her evaluated answer script for a small fee. This adds an extra layer of accountability and fairness. Details of Revaluation policy is available on Home (du.ac.in)

6. The administrative machinery should be geared up to expedite the matters in a time bound manner.

Response: Multiple efforts have been made to expedite the processing of different matters. One important aspect has been decentralization of power. For example, the administrative approval is given by Research Council while financial approval is given by Finance Officer. Similarly, new projects do not need approval from Registrar office and instead this power has been delegated to Research Council. Head of Departments and Deans have the power to take decisions for financial matter up to 2.5 Lakhs. Such distribution of power has made the system more efficient. The submission of Medical bills have been made online which has smoothened the process significantly.

7. Wi-Fi facilities should be extended to all the hostels
Response: The Wi-Fi facility has been extended to hostels.

8. Placement cell in each department may be revitalised

Response: The university's Central Placement Cell further ensures that timely sessions are organised for the students to benefit and upgrade their soft skills and get acquainted with the opportunities available. The Placement and Internship Drive, as well as Job Mela, organized by the Central Placement Cell provides students with opportunities to interact and explore job opportunities under one roof with potential employers. This initiative facilitates the placement of students in internships and job positions. Some departments have dedicated Placement Cells. In other departments, a robust mentorship and recommendations given by faculty helps students immensely in their career progression.

9. The main library should be expanded to provide free access to all students

Response: Library has taken steps to deliver its resources in a hybrid mode to meet varied expectations. Many online facilities are provided and a greater availability of computers in the Departments have further helped students to access resources easily. Delhi University Library System (DULS) and the libraries established in the faculties, schools, departments and centers of both the campuses of the University of Delhi provide ample resources. The physical resources include 1.7 million books, 1,002 current print journals, 4,20,591 bound back volumes of journals, 49,173 thesis and dissertations, and other renowned Digital Archives.

DU-E-Library was launched on 3rd December 2021, and the web platform is a latest initiative to connect with more users and serve them with about 88,000 eBooks,35,000 e-Journals, 10,00,000 e-Theses and dissertations, 1,30,000 Video Lectures, 50 e-News publications, 1000s of Expert Talks and Literary Works, etc.It serves as a single click discovery window and provides seamless access to e-resources from anywhere, any time and through multiple devices with a response team to cater to student requests. It is actively involved in promoting the use of e-resources in teaching, learning and research by conducting Information Literacy Programs focusing on e-resources, research metrics, academic integrity, etc. for the benefit of scholars at large.

A category wise list of print and e-resources is given below

Table I

Category	2018-19	2019-20	2020-21	2021-22	2022-23
Books	13,637	10,595	2,571	4,229	6,574
Journals	1,174	1,087	756	902	1,002

Table II

Category	2018-19	2019-20	2020-21	2021-22	2022-23
E-Books	Nil	Nil	962	2,424	84,418
Subscribed Databases	26	30	35	35	37
E-Shodh Sindhu Databases	13	13	13	13	13

Integrated Library Management Software: DULS continued with TROODON version 4.0, to render all library services like circulation, serial control, acquisition and reference in automated environment. The Web OPAC is prominently linked on the library website at http://dulsopac.du.ac.in/

The details of DULS membership, outside visitors and usage for 2018-19 to 2022-23 is given in Table III

Table III

Year	Membership	Visitors	Documents	
			Circulated	Consulted
2018-19	22,317	9,33,065	6,30,774	11,76,046
2019-20	21,001	8,69,422	5,11,699	9,88,688
2020-21	16,929	3,01,421	3,87,641	5,46,088
2021-22	21,113	7,43,518	7,61,030	9,00,000
2022-23	23,681	7,31,466	3,83,366	5,85,235

Use of E-Resources: The usage of e-database and e-books during 2019 to 2023 are given in Table IV and Table V respectively:

Table IV

Year	Downloads		Total
	DULS Databases	**E-Shodh Sindhu Databases**	
2019	50,89,090	5,50,483	56,39,573
2020	36,19,247	7,33,785	43,53,032
2021	52,10,212	11,11,511	63,21,723
2022	163,37,463	16,69,675	180,07,138
2023	270,36,418	13,99,261	284,35,679

Table VI

Resource	2019	2020	2021	2022	2023
E-Books	23,162	85,469	1,01,098	1,41,080	4,10,674

University has allocated funds to the tune of Rs.110 crores for extension of Central Library complex building, Rs.1.65 crores for implementation of surveillance system in Central Science Library and Ratan Tata Library and Rs.25,50,000/- for Pattern Traffic Control System in Central Library complex, CSL, RTL and SDC library.

10. Excessive use of paper to be minimised and a unit of paper recycling needs to be established to protect the environment.
Response: Significant efforts have been made toward this in the regular administrative activities. Payroll, leave, recruitment, promotion, admission, student lifecycle, examination, PhD thesis submission, alumni registration are being done online. The Samarth Portal is being extensively used towards digital processes; Digital revolution has brought down the use of paper. A unit for recycling the paper is being set at Department of Botany.

11. Delay in payment of scholarships may be looked into.

Response: The delay in disbursal of scholarship by funding agencies has been discussed and addressed. The process of scholarship is also digital now. This has been a mandate with funding agencies like UGC and CSIR and a portal has been set where student raise request for scholarship issues. The scholarship is remitted to the account of the students directly. This has lessened the burden on Scholarship Cell, giving them space for addressing other related matters.

12. Grievance redressal mechanism should be strengthened and early disposal of each case must be ensured. The existence of the mechanism may be brought to the notice of all stakeholders through wide publicity.

Response: The Student Grievance Redressal Cell (SGRC) has been constituted to addresses a wide range of issues related to examinations, admissions, hostels, functioning of academic departments and grievances of SC/ST and PwD candidates. There is a cell for addressing grievance related to SC/ST candidates. An Ombudsperson for grievance has also been appointed as per UGC regulations.

To facilitate the process of making complaints a step wise procedure has been put on the University web site i.e www.du.ac.in under important links

ICC deals with complaints related to sexual harassment. The committee members along with their contact details are updated time to time. ICC completed inquiry in five cases under sexual harassment including one case which was registered in the last academic year. Distributions of posters detailing what is sexual harassment & how to complaint & various functions of ICC under Awareness & Sensitization activities is done continuously throughout the year to all Departments and Administrative staff to spread awareness about ICC, its duties and roles.

Contact details of Women Helpline is also displayed on the university webpage.

Shyama Rath

Coordinator
IQAC