Report
Internal Quality Assurance Cell (IQAC)

The Internal Quality Assurance Cell (IQAC) was set up in Maharaja Agrasen College, University of Delhi on October 3, 2015 in response to the latest set of guidelines laid down by NAAC for the setting up of the Internal Quality Assurance Cell in higher institutions. The MAC-IQAC is committed towards enhancing the academic and research environment of the college.
The IQAC 2017-18 comprising of Principal as Chairperson and Dr Maneesha as the Coordinator along with teachers-in-charge and administrative officials work in tandem to prepare the academic calendar prior to the commencement of the session. In accordance with decisions taken in IQAC in previous meetings, all departments have been submitting not just their calendar of activities in advance but also the budget for the same in the prescribed format in order to minimize time spent on approvals. The departments have been regularly analysing paper wise results along with follow up remedial measures. The IQAC laid down norms for department activities and meetings and specified that all activities should be organised in the second half of the semester/ month/ day so that there is minimal disturbance of the teaching schedule. The IQAC was also emphatic that all such activities should be organised keepings students' needs in mind. Student Feedback after any such activity must be sought in order to plan the next. Administrative Staff were encouraged to organise and participate in skill upgradation and training programmes.

In light of the fact that the procedure for purchase and procurement of goods in the College and University have been modified and the new e-procurement norms have been implemented, the Internal Quality Assurance Cell (IQAC), MAC organized a one-day seminar titled as "E-Procurement: A Step Towards Transparent Digital India" January to create awareness and update the faculty members with the new e-procurement norms and procedures. Dr Vikas Gupta, Deputy Registrar, University of Delhi presented a talk on the purchase policies regarding Government e- market (GEM). Mr Sanjeev Kumar, Director, , Communications & Information Services, JNU delivered a talk on the policies and procedures of e-procurement. More than 60 faculty members and Non teaching faculty participated in the seminar.

IQAC organised a 5-day hands-on workshop titled ‘Programming with Arduino’ July 2017 in collaboration with SIP1606, Abdul Kalam Centre (AKC). The workshop was attended by 36 students from 4 colleges. The participants went through rigorous sessions for first 3 days. The last 2 days were dedicated for project work. Students prepared a working project in a team of 2 to qualify for the certificate. The sessions were conducted by Dr. Praveen Kant Pandey, Dr. Maneesha, Dr. Sachin Kumar from Maharaja Agrasen College and Dr. Sukhbinder Singh from Hansraj College.

Internal Quality Assurance Cell and Abdul Kalam Center organized a two day National Conference on 'Fostering Quality Research in Higher Education' on 23-24

March 2018. The primary objective of the conference was to provide a forum to share the wide and varied initiatives and practices of student driven and institutionally supported research leading to pedagogical effectiveness and enhanced learning outcomes. This conference was organised to foster interdisciplinary research and to provide a platform for all Principal Investigators and their students to showcase the objectives and research outcomes of their respective projects through paper presentations and poster presentation sessions.

Dr. Chandra B. Sharma, Chairman, National Institute for Open Schooling inaugurated the conference and enthralled the audience by delivering the keynote address. Keeping in tune with the theme, the conference attracted more than 70 innovative and significant contributions to both research and practice across a wide range of academic disciplines and application domains out of which more than 70% were presented by the students. Eminent educators from University of Delhi and IGNOU, and famous media personalities captivated the audience throughout the span of two days by delivering highly informative invited lectures in the conference. The highlight of the conference was the participation of researchers from various parts of India and abroad through the use of technology (skype), and the resulting diversity in attendees.

The conference was divided into 4 technical sessions namely, ‘Pedagogy, Culture and Society’; ‘Learning through Experimental Research’; ‘Augmenting Research in Higher Education Institutes'; and ' Enhancing Pedagogy through Technology & Media’.

The first session 'Pedagogy, Culture and Society’ was chaired by Prof Prakash Narayan from Department Of Adult, Continuing Education And Extension, Univeristy Of Delhi. The session saw many interesting presentations based on the research outcomes of various star innovation projects. The first presentation was based upon the research findings of star innovation project 'Culture and Communication in Global Organizations' and sought to address the issues arising due to emergence of global development in human society with respect to technology, management, culture and communication. The rapid development of communication and transportation technologies connecting people with different cultural backgrounds around the world demands a new way of communication in order to achieve competence in the process of intercultural interaction. During the presentation, the project team mentored by Dr. Sunil Sondhi emphasized to integrate the impact of global development on human society in terms of scope and scale through the examination of the relationship between global development and intercultural communication. The next paper showcased the research work done under the star innovation project titled 'Workspace Optimization for Innovation and Communication'. The paper highlighted the crucial role of workspace management in promoting productivity in any organisation by supporting interactive work and autonomous work simultaneously, thereby leading to effective communication. The research concludes with some key recommendations that must be adopted by

educational institutions in order to directly enhance student efficacy and productivity. Next presentation titled ' A Pilot Study on Performance Appraisal for Non Teaching Staff of University of Delhi' was presented by the team of students led by T. N. Ojha and Preeti Goel. The research presented a study about the performance appraisal system of Non- Teaching staff of University of Delhi based on a proper set of guidelines known as APAR. The pilot study for the same was conducted in 5 sample colleges of University of Delhi and analysis was done to find out the gap between the actual guidelines and the one which has been practically implemented. The main objective of the research paper titled ' Identification of the “Pandava Trail” in Karsog Valley of Himachal Pradesh and Influence of Pandavas / Mahabharata Heroes in Local Culture and Folk Songs' was to identify the Pandava trail and various temples associated with Mahabharata and to document their influence on local songs and culture of Karsog Valley. The paper titled 'Impact of Surya Namaskar in socio-political context' evaluated the socio political effect of Surya Namaskar on youth.

Experimental methods have been used extensively for many years to conduct research in education. The next session ‘Learning through Experimental Research’ saw diverse range of presentations examining ways in which experiments can be used productively by higher education researchers to increase the quality and rigor of studies. The session was chaired by Prof Suresh Chandra Rai, Head ,Department of Geography in the Delhi School of Economics, University of Delhi. The first presentation was the design of a dual-mode robotic system for landmine detection presented by the team working under star innovation project ' To Design and Develop Low Cost, Self-learning Heterogeneous Swarm Robotic Ecosystem'. The students discussed the causalities due to millions of landmines laid on the ground across the world and presented the design of a robotic system that can operate both in autonomous mode as well as remote mode for landmine detection using various sensors, accelerometer and gyroscope. The paper 'Augmenting pedagogical practices through Innovative Technological Interventions' presented a comprehensive research and analysis of the various educational technologies available addressing the concern for the flexible use of teaching spaces along with ensuring a quality learning experience for Undergraduate students when on campus and off campus.

The paper 'Corrosion Combating Properties of Hydroxyl Based Compounds on Mild Steel in Assam Coal Mine Water' presented a cost effective and environmentally safe hydroxyl based phosphonium compounds that could be used for inhibiting the corrosion of mild steel in mine water environment from Indian coal mines. The use of such substances will simultaneously achieve the economic and environmental goals. The aim of the next presentation 'Celestia: The Construction of an 8 inch Dobsonian Telescope' was to promote astronomy, teaching the technique to build basic astronomy instruments, to make astronomical observations affordable to everybody and to appreciate the night sky beauty and extraterrestrial objects by building a Newtonian-type reflector telescope fitted on an alt-azimuth mount for portability and comfortable observation. This project undertaken by the third year students of B.Sc. Physics(H) at Kalindi College sought to promote a new genre of

hobby amongst the young minds of tomorrow.The paper 'XRF: A Deterministic Tool for Elemental Contamination', a part of an under-graduate project sanctioned by Kalindi College, University of Delhi aimed to quantify the contamination level in environmental samples (air, water, soil, plants) of Delhi and surrounding regions using a non-destructive and portable technique X-ray Fluorescence (XRF). The paper 'Resonance Problem in a Geo-Centric Synchronous Satellite Including Earth' Equatorial Ellipticity Parameter' investigated the resonance in a geo-centric synchronous satellite under the gravitational forces of the Sun, the Moon and the Earth including it's equatorial ellipticity.

The third technical session on the theme 'Augmenting Research in Higher Education Institutes' was chaired by Dr. Gulab Jha, Regional Director, IGNOU. Dr. T. N. Ojha and his team of students from star innovation project SIP03 presented a detailed review of performance appraisal systems existing in different organisational structures. The paper 'Making India a World Class Research Destination' analysed the current state of higher education in the country while also taking into account the challenges and opportunities present in the field of research. The research paper ' Promoting Quality in Higher Educational Institutions in India: Role of Faculty and Students' examined the evolution of governance and management of Indian higher education and discussed the strategic management of faculty and students at the institutional levels in promoting quality. The paper also examined the concerns of access, equity, accountability and transparency in selection process as a pre-requisite to quality. Another informative paper in the session explained at length the concept and role of research and researcher and analyzed the status of a doctorate degree holder in India. The highlight of the session was the presentation of research papers through video and chat communication tool skype. Paper titled ' Education for Employability: Industry Links in Teaching Pedagogy Prospective' was presented by Utsav Krishan Murari from Central University of South Bihar from Bihar using skype in which addressed the issue related to the current structure of higher education and further discussed various elements related to teaching pedagogy which hampers the employability. Abhishek Singh from Ministry of Higher Education, Sultanate of Oman, drew attention to the impact of research utilization in professional development of academicians in his paper 'Significance of Research in the Professional Development of Academicians, in special context to Higher Education System in India' presented through skype from Oman.

The last session of the conference ' Enhancing Pedagogy through Technology & Media' chaired by eminent media personality and political analyst Ram Kripal Singh saw very informative presentations. The research findings of the star innovation project' Cyber Security Help System' were presented through the paper ' Cyber Security – Assessing and creating awareness against cybercrimes; protective measures for Social Media, e-mail, online transactions and e-Payments'. The paper identified some of the prevalent cybercrimes and highlighted key cyber security measures with a focus on social media and E-mails and served to create awareness about IT Act in a bid to empower the netizens in this digital age and further

discussed protective measures to be adopted for social media, emails, online transactions and e-payments. The student members of star innovation project 'Information Flow Management in Higher Education Institutions', led by Sudhir Rinten raised awareness of the significance, role and scale of media and information literacy and discussed the policies and professional strategies at international, regional and national levels in their presentation, in line with UNESCO's mandate. Other papers in the session presented the latest research results relevant to the theme of the session and led to enhanced and constructive dialogue between the paper presenters and audience.

The session was followed by Valedictory session where paper presenters were presented with certificates. Overall, the conference provided a valuable learning experience and an excellent opportunity to the academics and participants to gather together, interact and exchange their findings and views during conference sessions, tea breaks and conference lunches. The organizing committee plans to come out with the book incorporating select papers presented in the conference.