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Moorttimatee Samantaray

Unison of Library, Archival and Museum for Academic Research: Need of the Hour

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Use of Legal Databases for Research Scholars and Students: An Overview

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Justice as a Service: Empowering Society through Wisdom and Action
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Announcement

Special Issue of 'University News'

A **Special Number of University News** on the theme '*Envisioning Future Higher Education: The Pivotal Role of India*' is being brought out on the occasion of the **AIU Centenary Celebrations and AIU Annual General Meet and National Conference of Vice Chancellors'-2025 in March 2025.**

The **Special Issue** will cover the articles of eminent educationists on the afore-mentioned theme. Readers of the University News are also invited to contribute to the Special Number by submitting papers/articles on the above theme by **February 15, 2025**. The papers will be published in the Issue subject to the approval of the Editorial Committee of the University News. The contributions are invited on the following Subthemes:

Technological Integration in Higher Education

- Blended Learning Models.
- Integrating Emerging Technologies like AI, Virtual and Augmented Reality in the Learning Process.
- Cyber Security and Data Privacy in Higher Education Institutions.

Leadership and Governance in Higher Education

- Developing Academic Leadership.
- Governance of Public and Private Universities.
- Autonomy and Accountability in HEIs.

Rethinking Assessment and Evaluation

- Innovative Assessment Methods and Experiential Learning.
- Viability of One Nation One Exam System.
- Continuous Comprehensive Assessment.

Globalisation and Internationalisation

- Strategies for International Collaboration.
- Global Classrooms (Attracting International Faculty and Students).
- Challenges and Opportunities in Internationalisation of Higher Education.

Equity, Diversity and Sustainability

- Incorporating IKS in Curriculum and Pedagogy.
- Catering to Equity and Diversity on Campuses.
- Creating Green and Sustainable Campuses.

Any Other Relevant Subthemes

Guidelines for contributors are placed on the AIU Website. Manuscripts may be sent to the Editor, University News, Association of Indian Universities, AIU House, 16 Comrade Indrajit Gupta Marg (Kotla Marg), New Delhi- 110 002 through E-mail: ramapani.universitynews@gmail.com with a copy to: universitynews@aiu.ac.in on or before **February 15, 2025**.

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Unison of Library, Archival and Museum for Academic Research: Need of the Hour

Moorttimatee Samantaray*

Introduction

The universe of knowledge is the sum-total of the knowledge created cumulatively through the spiral of scientific method. For primary, secondary and tertiary resources the researchers visit the libraries, archives and museum. The author's idea goes for the togetherness of libraries, archives and museums, on a particular discipline. The article highlights the usefulness of the collections available in libraries, archives and museums and how they have a common goal for which she proposes for convergence of the three components. The author, after coming across the togetherness of Libraries, Archival and Museum (LAM) globally, feels its importance locally. She feels that, education is the most powerful weapon to change the world. An investment in education by the parents pays the best interest. The author realizes the importance of school education for the community, particularly for the parents. NCERT's contribution in this direction through its departments/ divisions/ cells and constituent units is worth publicity. It promotes bilateral cultural exchange programs with other countries too. NCERT brings transformation in the field of school education through different education policies. There are few artifacts displayed in the NCERT campus for the understanding of the general public. The author concludes on the togetherness of LAM and proposes to develop a vision with mandate and scope for incentives by the change agent with proper administrative mooring for its implementation.

Research discovers the answer to the question or problems showing impact on society. Research paves the way for the development of nascent knowledge and acts as a knowledge reservoir. The research methodology remains the same for all the researchers. Research is the art of scientific investigation. According to G. Devarajan, the abbreviation for RESEARCH is as follows:

- "R: Rational way of thinking;
- E: Expert and exhaustive treatment;
- S: Search and solution;
- E: Exactness;
- A: Analysis;
- R: Relationship of facts;
- C: Critical observation; and
- H: Honesty and hardworking" (7)

*Deputy Librarian, LDD, NCERT, Sri Aurobindo Marg, New Delhi-110016.
 E-Mail: murtimati.rath@gmail.com

Research is not a compilation but a purposive investigation after applying the scientific method. Modern research is becoming more and more interdisciplinary in nature. Formation of new subjects takes place due to fusion, fission, agglomeration, lamination, denudation, loose assemblage, distillation, and filtration. International organizations like FORD foundation, UNESCO (United Nations Educational, Scientific and Cultural Organization), UNDP (United Nations Development Programme), FAO (Food and Agriculture Organization), WHO (World Health Organization) are a few to mention, who act as sponsoring bodies for social research. National organizations like UGC (University Grant Commission), AICTE (All India Council for Technical Education), ICSSR (Indian Council of Social Science Research), ICHR (Indian Council of Historical Research), MoE (Ministry of Education), and other organizations of national importance are also collaborating for research. The emergence of knowledge takes place when the knower and knowee interact with each other. When the thought content is embodied in the documents it is disseminated and used by the researchers. "Language, record and other forms of communication across space and through time make it possible through mankind to cumulate one another's knowledge and add to it co-operatively either in a systematic or in a casual way."⁽²¹⁾

The universe of knowledge is the sum-total of the knowledge created cumulatively. Different domains of the universe of knowledge are developed by different methods. According to Dr. Ranganathan, "Scientific method is one of the recognized methods of development". It is a never-ending spiral movement. Four cardinal points are- Nadir, Ascendant, Zenith, and Descendant."⁽²¹⁾ The four cardinal points give rise to four quadrants in the cycle implied in the spiral. The four phases of research are: Empirical (data collection), hypothesizing (inductive logic), deductive logic (deduction of law), and verification (testing of results). In natural sciences, the fundamental laws are called hypotheses. In social sciences, the fundamental laws are called normative principles. Normative Principles of Library science are used by library professionals for library management and administration. Understanding the spiral of the scientific method, it is the first phase, in which the domain knowledge is gathered with the help of a literature search. The literature search includes different sources of information embodied in the document. The documents can be divided on the

basis of their physical form, nature of presentation, publication characteristics and information contents. On the basis of information characteristics, the sources can be divided into primary, secondary and tertiary sources.

Information transmission/dissemination is the central activity of all institutions. This objective is fulfilled through a number of products and services undertaken by individual information units. National services and products relating to Indigenous knowledge, acquisition of national databases on different subjects, and re-packaging of need-based capsulated information available either in libraries or archives or museums act as the primary resource for knowledge. Modernization of information services and products with integration of ICT is meant for dissemination. Standardization plays a major role in this direction. National information networks and systems are available nationwide.

According to the handbook of libraries, archives and information centres in India, "Archival activities started in India in the eighteenth century. The concept traveled from England".⁽¹¹⁾ The functions of NAI (National Archives of India) are to appraise the current and non-current records, which are 25 years old of the central Govt. offices to acquire the public and private records of permanent and historical importance; to rehabilitate and restore the brittle records;.."⁽¹¹⁾ Nowadays, academic institutions are developing their institutional repositories treated as a very important example to information products and services. Prior to the development of digital resources, the libraries develop their own archive and then developed their Institutional Repository by the use of the software. As we, the library professionals know that, many similarities exist between traditional reference services and referral services. The referral service adds to the value of the reference service activities. Referral service assists users in choosing material appropriate to their needs ⁽³⁾. This is a type of advice in locating the resources in the parent body where the resources are born or located. There are standards/guidelines for archival retention.

The archival collection of the institution takes the shape of a museum as the documents in the archive remain under the "not be issued" category and act as the base for development of digital resources as part of the institutional repository. Museum is one of the educational and research centre giving rise

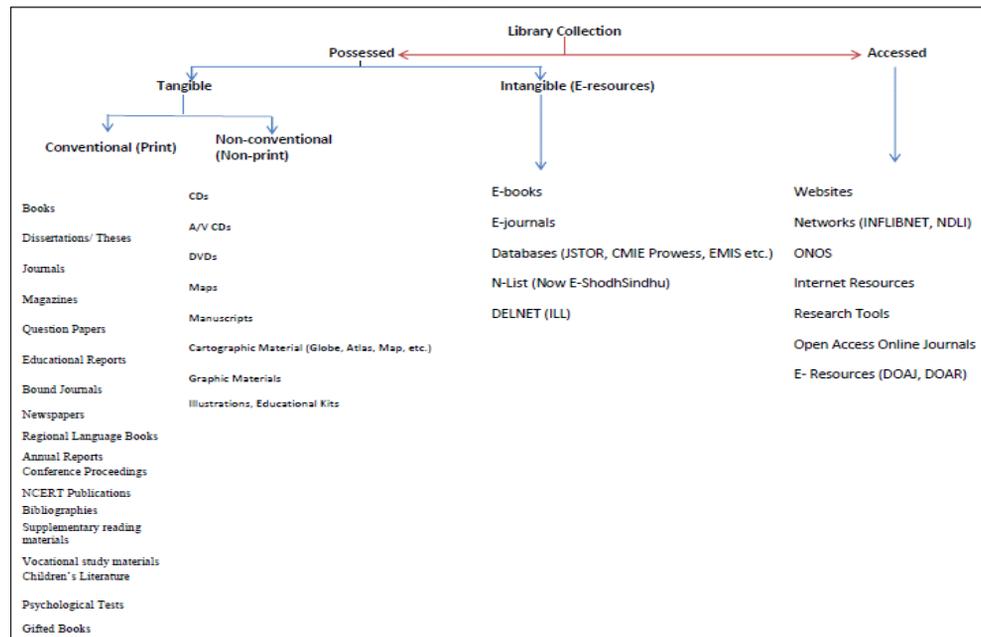
to museum libraries worldwide. Museum is called by Huxley, “consultative library of objects”⁽¹⁾. The aim of the museum is to collect authentic objects, conserve and present them in an understandable form for the visitors to fulfill their educational needs. The museum is a perennial source of information. We can consider it as the primary source of information. “Museums all over the world build up libraries with special collections of books and non-book materials so that they may be able to play their role as research and educational institutions”.⁽¹⁹⁾ The visual representation of the displayed material makes a great impact on the minds of the visitors. “The library is the bedrock on which the superstructure of museum research and education is based.”⁽¹⁹⁾ A library is designed to promote research, scholarship and in-depth studies. A library develops its own archive for the development of I.R., which are digital resources of the physical material. If libraries of national importance like NCERT can develop their museums for research scholar, it will be a productive investment to generate revenue. “There are six types of primary sources of evidence distinguished as (1) artifacts (2) Inscriptions (3) official Public records (4) official private records (5) Newspapers (6) Personal sources”.⁽²⁶⁾ Artifacts are most reliable type of evidence. Inscriptions may be described as linking artifacts & graphic records. These are coming under primary resources. The library gives rise to archive, archive give rise to museum and institutional repository. Therefore, togetherness of library, archive and museum is felt as the need of the hour. Integration of LAM, in the same subject field would definitely ignite young minds. Now is the age of Artificial Intelligence (AI). We all know that, AI cannot think for itself. It is the human mind or Human Intelligence (HI) that shows the path for the development of AI. Only HI delivers something new. Innovation, discovery

or invention is done by Human Intelligence. Human Intelligence can be created from scratch. Scientists go beyond experience to create something new.

Library and its Collection

A library is made reputed not by the number of its books but by its use. The library uses all codes and rules in a liberal way so that book can be used. The first law of Library Science- “Books are for use” - and second law of Library Science “Every reader his/her book.”- can be satisfied through proper book selection, Inter Library Loan, scientific organization of the library and following open access. Proper shelving and accessibility would help to satisfy the third law, i.e., “Every book its reader.” Proper library services, standardization, circulation of library material, would help in fulfilling. “Save the time of the reader.” The library is the trinity of readers, books and staff. The library exists only when three members of the trinity remain in touch with each other with one purpose. The library extension service develops the reading circle. The library tries to tap the community’s potential through intellectual centers. The library ethics and hygiene helps in attracting the reader. The library services and products are discovered to match user profile and document profiles in print and non-print environments. Libraries mainly focus on the collection of published documents in different formats. The library resources can be arranged as follows (Fig 1):⁽²⁴⁾

Fig 1: Arrangement of Library Resources



Different types of libraries exist in order to serve the readers of different nature. They can be categorized as public libraries, academic libraries and special libraries, depending upon the library resources and readers. Accordingly, the information products are released and information services are provided. Nowadays, libraries and archives have reached from subordination to partnership. Without archives, libraries are feeling incomplete irrespective of small and large libraries.

Archive and its Collection

An archive is a collection of historical documents or records pertaining to the institution, place or group of people. Records are unpublished documents. These may be texts, pictures, manuscripts or historical information. All organizations and institutions produce records, which after collection, preservation, and conservation is converted to archival items. As a national library, every country has a national archive. The grey literature of the individual institutions is nowadays developed in the form of institutional repositories in digital form by integration of ICT. Primarily libraries serve the researchers, whereas archives play secondary role for the same. However archival items act as the primary resources for the researchers. The archival collections may include special collections, Government documents, architectural drawings, diaries, financial records, healthcare data, maps, historical society, photographs, corporate archives, Government archives, College and University archives, electronic records, speeches, research reports, and so on. We have national archives of India having regional offices at Bhopal, Bhubaneswar, Jaipur and Pondicherry. "National Archives of India was established in 1860 and transferred from Kolkata to New Delhi, in 1911 as IRD (Imperial Records Department) and shifted to the present building in 1926."⁽²⁸⁾ It has witnessed manifold expansion of activities since then in the field of accession of public records, acquisition of private papers/collections and library materials, records management; research and reference, publication, training, conservation, reprography, digitization, outreach programs, coordination at national and international level and expansion of office at regional level." George William Forrest is known as the father of National Archives of India. Sandeman, the civil auditor is the founder of archives in his report he stressed the need of archives. Now, NAI, in New Delhi is the biggest storehouse of records of all of

India and Asia, whereas French National Archives is the largest in the world."⁽²⁸⁾ To name a few archives- National Archives of India (1891), National Film Archives of India. (1964) , National Mission for Manuscript (2003). "State archives have emerged in Bihar, Delhi, Goa, H.P, Karnataka, Kerala, M.P, Maharashtra, Manipur, Mizoram, Nagaland, North Bengal State Library, Odisha state archives, oriental Research Institute Mysore, Punjab. Rajasthan, Sikkim, state Central Library, Hyderabad; state Central Library, Kerala; Tamil Nadu state Archives, West Bengal state archives."⁽²⁹⁾

India has a complex heritage of archaeology and civilization, literatures, food preferences and trade network. India, 2022: A reference Annual classifies the important chapters as "Land, people and jurisprudence; Land & People, national symbols, polity, Defense Law & Justice, India and the world. Economy, Labour & Financial Architecture (Basic economic data, finance, corporate affairs, commerce, industry, Labour, skill Development and employment), Building Human Resources, Farmers & Food grains, Infrastructure, Energy & Resources, Communication & Content, Science, Culture & Sports, Federal structure & National events."⁽¹⁴⁾ which are unique to our country. The Library and archives organize scientifically following the standard scheme of classification and cataloguing codes.

Textbook Archive at NCERT Library

"The National Council of Educational Research and Training (NCERT), an autonomous organization is set up in 1961 by the Govt. of India to assist and advise the central and state governments on policies and programs for qualitative improvement in school education."⁽³⁰⁾ Its library acts as the referral library for NCERT publications. Researchers from different countries like Finland, UK, USA, Japan, and Singapore visit for their literature search as part of their research project. The textbooks were scattered and it was thought to be placed together for which a PAC program was taken in 2011-12, 2012-13 to develop a textbook archive. "The textbook archive at LDD holds the textbooks published by NCERT as per different National Curriculum Frameworks (NCFs). The list is available on the website. It also houses the textbooks of 13 states, like Assam, Chhattisgarh, Himachal Pradesh, Karnataka, Nagaland, Odisha, Rajasthan, Tamil Nadu, Uttarakhand and West Bengal and so on"⁽³⁰⁾ Gradually the state textbooks increased to 19 states. The textbooks are usually

developed on the basis of NCFs developed in 1975, 1988, 2000, 2005 and NCF *FSFS* 2022 & NCF SE 2023. The textbooks are collected and preserved as Textbook archive since 2012. Other items developed by NCERT include:-Educational KIT, PAC Report, NCF & Position Papers, Art Resource Centre, Children Literature, Psychological tests, Journals of NCERT, NAS, NTS, Public Policies, Committee/Commissions Reports, Training Modules, Seminar/Conferences, Proceedings, Lecture Series, Science Exhibition (Theme-based), Yoga Olympiad, Audio/Video CDs, Sign Languages, Audiobooks, NPEP activities, IKS (Indian Knowledge Systems), Contents for Examination reforms, Atlas, Annual reports, Online Courses, Flipbooks, Manodarpan, Vocational Textbooks, Virtual Skill Lab, Language Resource Centre, STEM Park & Weather Station, NRCVE, Science Resource Centre, Digital Platforms, Online Apps, T.V. , Radio, Standards, Journey of Foundation Day, Public/Private Records on education, Kala Utsav Details, Jaadui Pitara, and so on. As per the administrative structure of NCERT, NIE is under the direct administration of the Director. CIET and PSSCIVE develop resources as per their need. NIE has 10 departments, 07 divisions and 02 cells to fulfill the mission of NCERT. According to NEP 2020, the school education structure got changed giving rise to NCF for Foundational Stage and NCF for School Education by the National Steering Committee for NCFs. The textbook archive is the apple of the eye for the IAS aspirants. Now institutional repository of NCERT is under development in which the digital form of textbooks is available for browsing purposes. The textbooks are available in English, Hindi and Urdu languages. This needs to be visible worldwide.

Museum and its Collection

A museum is a place devoted to procuring, preserving, conserving and displaying items matching the vision and mission of the parent institution. We have heard of the Nehru Memorial Museum and Library, PM Museum in Delhi, Indian Museum of Kolkata Kiran Nadar Museum, Yuge Yugeen Bharat National Museum (Erstwhile National Museum in Delhi), and National Gallery of Modern Art. Rashtrapati Bhawan Museum and so on. “American Association of Museums (AAM) recognizes 13 kinds of museums in a classification- based, largely on function. Art, Children and Junior, College and University, Company, Exhibit area, General History, Libraries having collection other than books, National

and state agencies, councils and commissions, Nature eaters, Park museums and visitor Centers, Science, Specialized...”⁽¹⁵⁾ Hugo relock opines that “the relatively small group of large, well supported university museums seems to have well-established functions and activities and to be performing them in a commendable manner.” W.W NEWCOMB, Jr. has suggested that university museums are playing an increasingly important role in college education because they provide visual, three-dimensional forms of knowledge not obtainable elsewhere in the campus, because they act as an important supplement to many beginning or survey courses and because the campus museum also serves to tie together fields of knowledge formally separated in the classroom but inseparably linked in nature. Certain museum collections have always been essential to the teaching of subjects such as Anthropology, Geology, Zoology, Botany. The basic purpose of the University museum is to strengthen and deepen the foundation of Science.

Ashmolean Museum was named after its founder Elias Ashmole (1617-1692) opened in 1683. It is located at University of Oxford, UK. Ashmolean Museum was named after its founder Elia Ahmole, who was a royalist, lawyer, antiquarian, scholar and collector, who gave his collections to the University of Oxford in 1677. The famous items in the museum are – Raphael drawings in the world, fossil bones of the first dinosaur, four engrossments of the Magna Carta and some of the UK’s oldest redwood trees.

Museums are a great source of knowledge. Museum can be owned by individuals, Government or combination of both. According to American Association of Museum, (1970) “Museum is an Organised and permanent non-profit institution essentially educational or aesthetic in propose, with professional staff, which owns and utilize tangible objects, cares for them and exhibits them to the public on same regular basis. The functions of museum can be categorized as collection, study and communication.”⁽¹⁵⁾

Collection

The museum saves objects, the contents of collections justifying their existence in the museum, and objects come to the museum as gifts. Collection varies from Art museums to historical museums to natural history museums to science museums. Collection activity is not complete after acquisition. Collections are curated by the curators for efficient use.

Study

Study in the museum is usually spoken in awed tones as ‘Research’. As museum study is object-oriented, requires objects only as ancillaries to study. Museum research is not limited to stored collections, they have field stations at different locations and they also meet the scientists besides referring the library resources.

Communication

Museum world “communication” is a synonym for “education”. Museum communication takes place through displays, lectures, demonstrations, publications and answers to queries. Public galleries exhibits remain open to all. Museums have both permanent and temporary exhibits. Most museums are associated in some way with formal education systems in their areas. Hence the educational institutions have their educational tours to the museums. In most of the museums, libraries exist. To name a few are: National museum, Bharat Kala Bhawan, Salarjung museum, Maharaj Sawai Mansingh II museum, Prince of Wales museum, Odisha state museum, and so on. A museum library supplements and complements the functions of a modern museum as a living centre of education and research.

Converging LAM (Library, Archive and Museum)

Libraries, Archives and Museums have existed since antiquity. LAM is an acronym for the three components mentioned earlier. When these three institutions are treated together as LAM, it shows that, these three have something in common. When amalgamated together, it is essential to design the role of the staff matching the institutional missions and programs.

“Libraries, Archives are Museums are places, where we learn about ourselves, the world around us, and what came before us. They inspire us to make a better future by helping us to remember and understand the past. As cultural heritage institutions, LAM share common goals to acquire, preserve and make accessible to the artifacts and evidences of the world’s social, intellectual, artistic and even spiritual achievements.”⁽⁸⁾ As LAMs possess many common concerns and convergence may be crucial to their relevance and survival.

“While LAMs have taken separate paths to professionalization, the digital environment along

with its many opportunities for collaboration is bringing their institutions together. It is described that LAMs and preservation agencies are fields uniting in the information domain and joined in the stewardship of the cultural record. The impressive taxonomy of LAM collaboration describes multiple levels of closeness within each of the three categories. There can be two types of collaborative programs i.e., community and heritage programs.”⁽¹⁹⁾ The need for integration also arises from a need to save money. This is what some advocates of collaborations have called “the economies of scale” argument. Ruth Hedegaard has explained. “Most of our users don’t care where they find their information, whether it is in a book or leaflets in the library, from a description of an artifact in the museum or from an organizations protocol in the archives as long as they find it.”⁽¹⁹⁾

Usually, it is seen that, students find it easier to Google than to go to the library. Scholars look to the specialized internet portals, which they find more convenient than traveling to and sitting in the archive. Members of the general public may ignore museum even if audio- visual attractions and opportunity for interaction is available there. But converging LAM may act as a transformation in the knowledge sector. The convergence would be helpful in attracting public attention. It would be helping the research scholars to access the research material on record, on historical record and on artifacts in the place and intending to save money. Besides when there is integration of digital technology, LAM will have power to create a “nation of learners” to “world of learners” & “Education” to Enterprise”, that lasts life time. LAM can extend experiences. Experience of learning, rare, touching, extraordinary, amazing, stimulating, proactiveness will be borne from one place to the other giving rise to global phenomenon. Convergence of LAM would give rise to a common standard for describing data. However, the description of metadata and keywords is the job of the library professionals. Exhibits are central to museums but ancillary elements of the libraries and archive. They are not normally “let loose in the stacks” types. Convergence of LAM may give rise to a “sink or swim” situation, when the core idea is merging. Even if co-operation/ collaboration is the central point for the existence of LAM, partnering in the creation of exhibits and displaying as LAM in libraries & archives would be preferable. Existence of LAM would mark a return to tradition and prove the epistemological link between the libraries,

archives and museums, as all three have a common institutional goals.

“Most famous libraries of the Greek world was the one established in connection with the Alexandrian museum. The Museum and library together formed a literary research institution. It was established in the third century B.C. The museum attracted a band of scholars, writers and editors of outstanding ability, who have a place in Greek learning.”⁽¹⁵⁾ “LAM helps in gathering knowledge and objects of all kinds together. When libraries, archives and museums combine their collections and physically merge, we can create a “broad information context” and a dynamic interdisciplinary environment. Through LAM, one reads the past, gets today’s information and access the world’s cultural heritage.”⁽¹⁹⁾

Creation of Knowledge through LAM

Research is above learning and a researcher is a learner. Learning is defined by new shorter Oxford English Dictionary as “education... Knowledge acquired by systematic study, the possession of such knowledge.” The verb “Learn” is defined as to “acquire knowledge of (a subject) or skill (an art etc.), as a result of study, experience, or instruction, acquire or develop an ability to do”. Both definitions stipulate that, learning is the process of acquiring knowledge. “We believe that, learner is also situated, i.e., it takes place in a particular context, that foster learning. The situated nature of learning suggests that, learning is profoundly shaped by cultural, historical and political contexts and all knowledge is context-bound.” From qualitative research point of view LAM would help in creating knowledge. Working together and sharing strengthens our learning. Reading is the best way to gain knowledge that we take the help from the library resources. The archival resources/records help in knowing the past. The museum items help us to visualize, get information, and help in memorizing. Therefore, the togetherness of LAM plays a vital role in the knowledge economy. Showcasing Indian knowledge system needs tools. The efficient tool can be LAM. India has a glorious past in Medicine, Science, Astrology as well as technology, when we talk about Charaka, Sushruta, Aryabhatta, and Barahmihira; the epics like Vedas, Upanishads, and Srimad Bhagavat Gita are the unique documents.

India is playing a leading role in NAM, SAARC, ASEAN, BRICS, G4, G20, IBSA, SCO, and QUAD in different time periods on different issues. The nation’s commitment to 5S approach- Samman,

Samvad, Sahyog, Shanti, Samridhi- promote multiculturalism, inclusiveness, peace, growth and international security. One Earth, One family, One future, i.e, *Vasudhaiva Kutumbakam* has impact globally. But, many people are ignorant about these vocabularies. Indian traditional knowledge system include: (1) Shipping and ship building : Vasco-da-Gama’s ships were captured by a Gujarati sailor and Europe’s navigation in the Indian Ocean, (2) Water harvesting: Scientists estimate that, 1.3 million man-made water lakes and ponds across India are there to preserve water for the coming year, (3) Forest Management, (4) Farming technique, (5) Traditional medicine i.e Ayurveda, (6) Mathematics, Logic and linguistics, (Advanced Mathematics including the concept of zero and the base - ten decimal systems) Panini is acknowledged as the founder of Linguistics. Brahmagupta developed the concept of zero in 627 CE, (7) Folk Sciences, (8) Yoga, (9) Niti Sastras, (10) Arthasastra, (11) Element of Indian Calendar- “Panchanga” (12) Knowledge of astronomy, (13) Mining and ore extraction, (14) Art & Architecture and so on. The concept of LAM would be very useful in exploring knowledge on Indian knowledge system along with the world of knowledge.

Think Global, Act Local

“The LAM solutions world -wide at Princeton University, Smithsonian institution, University of Edinburg, the Victoria and Albert Museum & Yale university focussd on collaboration.”⁽²⁶⁾ The collaboration started from home. They worked together because they had the same employer. Large institutions - may be universities or Institute of National Importance – are having the same mission. They can collaborate as they have the same mission and work under the same institutional culture. “When ideas, data and services flow freely, new solutions emerge, and new knowledge is created. In the sphere of local solutions, we currently see activities such as cross-collection search, shared digitization and digital asset management along with shared conservation facilities.”⁽²⁶⁾ Contemplating collaboration within the boundaries is self-limiting. We may collaborate across the border, with our own constituents, if we require fulfilling the aspirations. Group solution is possible with common interest. “However, group collaborations around common interest have a high management overhead for setting and managing expectations.”⁽²⁷⁾ Different institutional cultures may affect the ambition and may pose serious threats

like stock verification and other administrative and financial issues. But we have also to think that, things work in scale because the community subscribes to the same values. In local and group collaboration, institutions and their interests are at the fore-front. Collaboration with the objective of common values produces a notable paradigm shift. The institutions never see the expectations/need of the members of its institution but the expectations of the audience and accordingly deliver products. “The sphere of common values includes standards, policies for copyright and data aggregation, the common and open data movements and the vision of linked data.”⁽²⁶⁾ When the institution has global presence and international collaboration, then while planning for LAM, we should develop the plan in such a way that, we think globally and act locally. However, in order to sustain and provide a global presence, collaboration needs a continuous process keeping in mind the law of the land and prioritizing contact, cooperation and collaboration.

LAM for NCERT: A Plan

When we come across the newspaper, we find various articles. Similarly, on 10th August, 2024, there was an article on “Knowing the early Mughals @ Humayun Museum in Delhi” – there was a mention of the museum, “manifesting to act as a bridge between the cultural, historical and the spiritual influences that exist in and around the 16th century Humayun’s Tomb. It’s a museum mentioning Humayun’s life, travels, interests in astrology, architecture and more.” The museum helps people understand Humayun’s

legacy. 700 artifacts and relics are on display. The museum will help people understand the world heritage site. Through museum, we enhance visitor’s heritage experience, so that people know about the significant area.

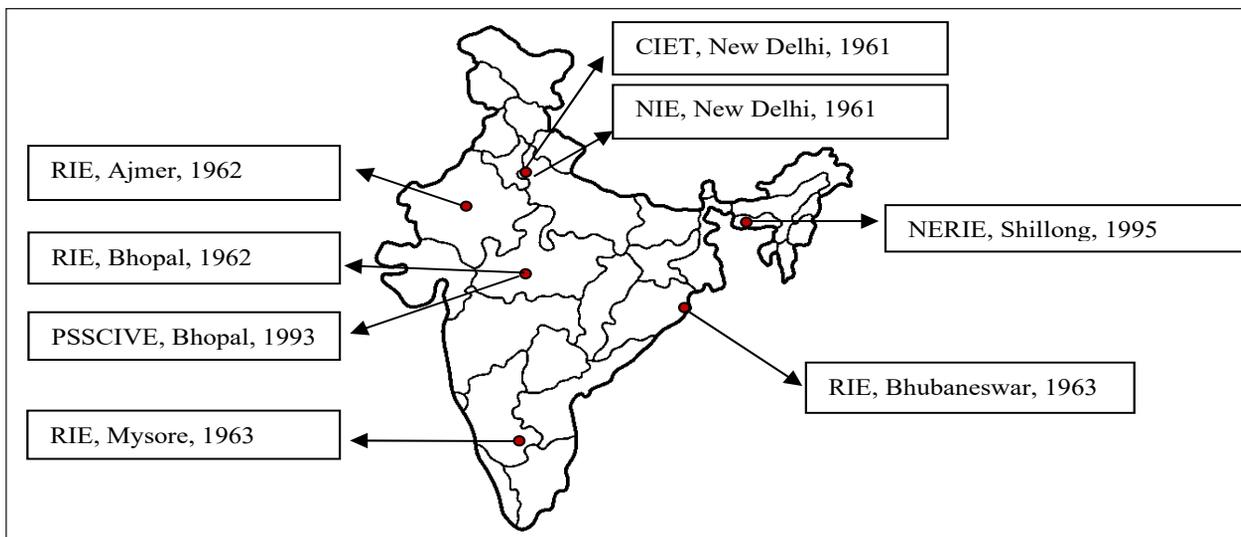
Similarly, when we talk about the education system in India and particularly the school education system, we know NCERT plays a major role. Under the umbrella of NCERT, besides NIE, there are seven constituent units which are reflected on the following map (Fig 2). All the RIEs have demonstration Multipurpose Schools except NERIE, and Shillong.

The primary task of any library is to collect, process, maintain and provides access to its users. Due to integration of ICT, the resources include e-resources besides print materials. We are moving from holding to access. Knowledge is represented in different formats like Books, Journals, Newspapers, A/V CDS, pictorials, music, photographs and films including KITS. At NCERT, we develop textbooks since the date of inception of NCERT as per different NCFs developed from time to time. i.e 1975, 1988, 2000, 2005, 2022, (NCF-FS) and 2023 (NCF-SE).

Role of NCERT in Leading the Change in School Education

NCERT was established on 1st September 1961. The six decades of institution mirrors the change and development of school education. The council came into existence after merging of seven institutions namely: “(1) CIE (Central Institute of Education) – 1947, (2) Central Bureau of Textbook

Fig 2: Constituent Units (NCERT)



Research – 1954, (3) Central Bureau of Educational and Vocational guidance – 1954,(4) Directorate of Extension Programme for secondary education – 1958, (5) National Institute of Basic Education – 1956, (6) National Fundamental Education Centre, (7) National institute of Audio-visual education – 1959.”⁽¹⁷⁾

NCERT aims at making school education a child-centric and child - friendly system. The council contributes to a qualitative improvement in school education all over the country. Improvement of course of studies, textual materials, support and ancillary materials for enrichment of instruction are the areas directly related to the task. Now, through new educational technology we have been able to bridge the distances. The radio, television, communication satellite, and internet have brought the schools to limelight, located in remote forest lands in populated desert area and even those across the sea. In the absence of well-equipped laboratories in the every school, NCERT has introduced science kits, which help teachers in demonstrating the principles of Science through selective and expensive models or mechanical devices that are easy to handle. The council aims at development of the child’s personality. “Simultaneous development of head, heart and hand is important even pedagogically.”⁽¹⁷⁾ Council has been advocating all along the concept of comprehensive evaluation. Effort towards vocational education and working with the states has been critical test of the council’s success. Council’s national character stands prominently. “The crest of the NCERT shows Hansa, the swan, a symbol of pursuit of knowledge. The three intertwined swans symbolize the three major aspects of the council. Research & Development; Training; Extension. The motto of NCERT is “Life eternal through Learning.”⁽¹⁷⁾

The development of bridge courses, condensed curricula and more efficient instructional material is the aim of NCERT. Stepping into the mainstream by tribes add to the diversity and richness of Indian cultural heritage. The International Year of the Disabled has inspired the council to integrate physically handicapped students into the common schools. Promoting early childhood education takes place with the help of child psychology. Equity with excellence is the key aim of the council. Nurturing talent with handsome scholarship, work and education go hand in hand. The interface between work and education reaches a meaningful stage at the secondary/ senior secondary stage. Education

prepares the students at this stage for the world of work.

The council’s responsibility is to have a critical look at the state syllabus from time to time. This is done through detailed surveys, analyzing their formats, rationale, if any. Base-line survey in population education is one of the achievements. Promotion of international understanding, value orientation of education, computer literacy instructional materials for teachers, and development of “Teaching history of our freedom struggle” is another landmark. The establishment of psychological test library at DEPF library is an important step. Objective-based evaluation is one of the approaches advocated by the council. Teachers are the soul of the system. So, professional growth of teachers through different online programs is very important. Becoming lifelong learners is the ultimate goal of education. When education is placed in a learning society, teachers cannot be escaped. “Charity begins at home.” They themselves became the learners. In- service teacher training program play a big role in strengthening the faculty members of DIETS and SCERTs. All these are possible because of the constituents located in different parts of the country. Bringing education closer to the community is very important for which Adult Education came into force. It is creating benchmarks through the development of textbooks, setting standards developing manuals for teacher educators, riding the wave through different program, vocational education for hand and heart, development of “Prashasth” App for the physically challenged, development of “ULLAS” app and many more. With the advent of DPEP (District Primary Education Programme), part of SSA (Sarva Shiksha Abhiyan) a network of institutions at cluster, block and district levels have been created. NCERT has been associated with setting up the structures, defining the scope and helping the states in implementing a dynamic programme of in-service teacher education across the country. The regional colleges of Education now known a Regional institution of Education are established to run innovative pre-service teacher education programs on an experimental basis. Innovation means the integration of content and pedagogy in teaching. The Demonstration multipurpose schools (DMS) are set up along with the RIEs to function as test bench for various ideas and formulations in Education. Students of the RIEs use the DMs as their laboratory.

Photo Shots



“E-JAADUI PITARA” at CIET



“E-JAADUI PITARA” at CIET



“BAL VATIKA” at Zakir Hussain Block, NCERT



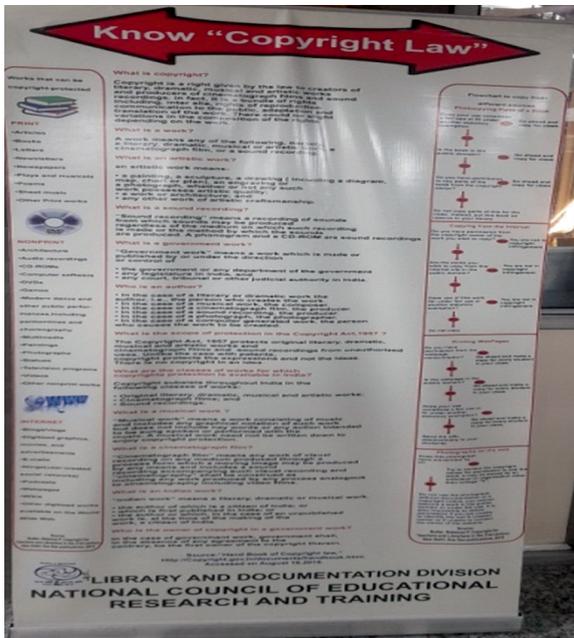
School kits at DEK, NCERT



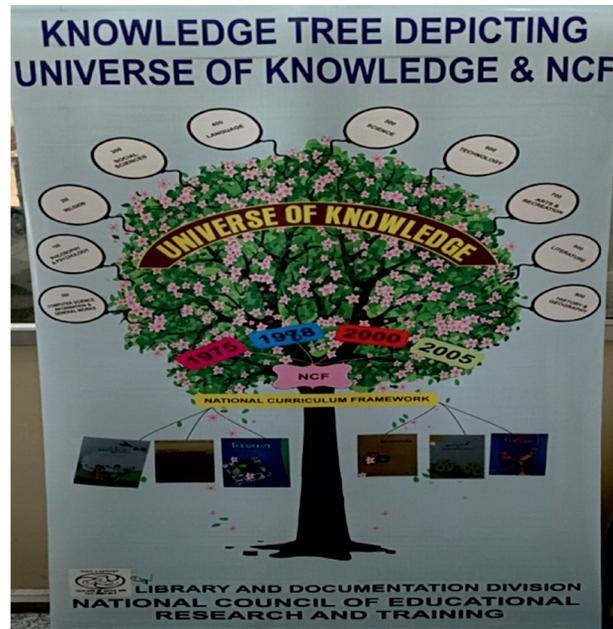
School kits at DEK, NCERT



School kits at DEK, NCERT



Know "Copy Right law" at ldd



Knowledge Tree Depicting "Universe of Knowledge & NCF" at LDD, NCERT



"JAADUI PITARA" at DEE, NCERT

International Collaboration

“NCERT also learnt from national and international organization like UNESCO, UNICEF, Colombo Plan, Ford Foundation and USAID in development of educational research in the past. Various other international agencies including UNDP, the British council, UK, USSR (Erstwhile) GDR (German Development Republic) (Erstwhile), have contributed toward school education in India. In 1960, the Colombo plan enabled NCERT to obtain science films. The council was designated as the secretariat of the National Development Group under the Asian Centre for Educational Innovations for development in 1979. Training programmes and courses have been organised and visits have been facilitated for

educators, students and teachers from the Maldives, Nepal, Sri Lanka, Ghana and Afghanistan. Since 1958, the Diploma course in Guidance and Counseling for preparing trained personnel to plan and implement guidance and counseling services at the school level has emerged as a flagship program.”⁽¹⁷⁾

“The six-month course aimed at the teacher’s special role as “teacher as counsellor”. The first such course was offered to students – teachers from Maldives, Sri Lanka and Zambia. In subsequent years enrollments from Bhutan, Fiji and from across India got enrolled. Now it is collaborated with CoL (Commonwealth of Learning) and is offered as distance-cum-online mode.”⁽¹⁷⁾

Right of children to free and compulsory Education gave rise to RTE Act- 2009. “Education for All” attempts to bring all, those, who remain untouched. The design and development of instructional materials, books, journals, electronic offerings, research in education, monitoring and evaluation, administration and management of school system by NCERT shows how it is wired with school education to meet its mission.

The online version of the textbook for students and teachers, data and information from the different sources carried out, training materials, research documents and journals, online course, and a diverse range of audio-visual, materials are examples of success story of NCERT in the field of school education.

NEP-2020 is the first education policy of the 21st century. It aims to address SDG4. The national policy envisions on education systems rooted in Indian ethos that contributes directly to transforming India. The pedagogical structure is changed from 10+2 to 5+3+3+4 covering ages 3-18 years. Experiential learning is the core of the learning system. Flexibility in course choice is the beauty of the policy. The power of language enhances the use of mother tongue. NCERT works in depth to meet the vision of the policy. In order to showcase the activities of the NCERT, the artifacts displayed at DEE is “*Jaadui Pitara*”; at Zakir Husain building is “*Bal Vatika*”; NCERT school kits at DEK (Department of Educational Kits); “*Rashtriya Vidya Samiksha Kendra*” at CIET; “*Diksha*” at CIET; “*E-Jaadui Pitara*” exhibiting toys and Puppets at CIET; “know copy right law” and knowledge tree depicting “universe of knowledge and NCF” at LDD attract the readers.

Conclusion

NCERT has led the changes in school education. As discussed above, NIE and its constituents have contributed towards different aspects of school education. It may be proposed for their collaboration towards the implementation of LAM in School education. All the constituents may contribute and collaborate to share this over-arching vision. It has to be decided to which Department/Division the activity has to be officially given. Once the vision is clear comes the mandate. Without a mandate, such an ambitious project may not achieve its goal. Such a collaborative Project needs to be supported through monetary incentives and public recognition after assessing the staff contribution through evaluation. Vision, mandate, and incentives lead to the search for a change agent. The change agent is none but the leader in this direction. Collaboration can benefit from the presence of a ‘change agent’. The change agent has to be identified by the authority, who can keep the effort alive and inject ideas, technology and staff. Sometimes the change agent monopolizes. Therefore, administrative mooring is required. Administrative mooring helps in doing things in a new way. This transforming activity will put the Library, Archives, and Museum in a position as ‘LAM on School education’, which is the need of the hour. The library Archive and Museum when converge together one as LAM, will help in a big way in promoting research; diffusing and disseminating Knowledge;

fostering learning, and advancing education. The Vision, Mandate, Incentive, Change Agent, and Administrative Mooring are the four Parameters for the success of LAM in a particular subject area. The togetherness of ‘LAM on School education’ is the need of the hour to boost the education system amongst the community, parents, teachers, and children.

References and Readings

1. Annual Report of the Board of Trustees of the Public Museum of the City of Milwaukee. (n.d.). GoogleBooks. https://books.google.co.in/books/about/Annual_Report_of_the_Board_of_Trustees_o.html?id=MYsYAAAAYAAJ&hl=en&output=html_text&redir_esc=y (Huxley)
2. Brichford, M. (1980). Academic Archives: Uberlieferungsbildung, *Society of American Archivists*, 43(4), 449–460.
3. Brown, W. ,E., and Yakei, E. (1996). Redefining the Role of College and University Archives in the Information Age. *Society of American Archivists*, 59(3), 272–287.
4. *Categories of Information Sources*. (n.d.). egyptankoh. <https://egyankosh.ac.in/bitstream/123456789/59867/1/Categories%20of%20Information%20Sources.pdf>
5. Conn, S. (2016). Do Universities Need Museums/Do Museums Need Universities? *Antioch Review Inc.*, 74(2.), 309–323.
6. Davis, G. (1977). Museums in Higher Education, *University of Illinois Press*, 11(1), 111–114.
7. Devarajan, G. (2011). *Prolegomena to research methodology*, Ess Ess Publications.
8. Dupont, C. (2007). *Libraries, Archives, and Museums in the Twenty-First Century: Intersecting Missions, Converging Future?* 13–19. <https://doi.org/10.5860/rbm.8.1.271>
9. Evans, F. B. (1987). Promoting Archives and Research: A Study in International Cooperation, *Society of American Archivists*, 50(1), 48–65.
10. Guha, B. (1978). *Documentation and Information*, World Press Pvt. Ltd.
11. Gupta, B., M., and Khuller, S., K. (1986). *Handbook of Libraries, Archives & Information Centres in India* (Vol. 2). Information Industry Publications.
12. Hayden, W. (2015). Gift of the Archive: A Pedagogy for Undergraduate Research, *National Council of Teachers of English*, 66(3), 402–426.
13. Hedstrom, M. (1996). On the LAM: Library, Archive, and Museum Collections in the Creation and Maintenance of Knowledge Communities, *Star and Ruhleder*.
14. *India 2022 (English) (POP) (2022)*, (2022). Publication Division.

15. Kent, A., and Lancour, H. (1968). *Encyclopaedia of Library and Information Science. 1.* <https://doi.org/10.7560/Ic49105>
16. Krishan, B. (1985). Museum Libraries in India, *Information Industry Publications*, 163–173.
17. *Leading the Change...50 Year of NCERT* (2011). NCERT.
18. Marcum, D. (2014). Archives, Libraries, Museums: Coming Back Together? *University of Texas Press*, 49(1), 74–86. <https://doi.org/10.7560/Ic49105>
19. Marcum, D. (2014). Archives, Libraries, Museums: Coming Back Together? *University of Texas Press*, 49.(1.), 74–89.
20. Parakh, B., S., and Dev, I., A. (1986). *25 Years of the NCERT* (Vol. 2).
21. Ranganathan, S., R. (1963). *The Five Laws of Library Science* (2nd ed., Vol. 12). Asia Publishing House.
22. Riches, Tanya N., O. P. (2017). Togetherness, Teamwork and Challenges: “Reflections on Building an Inclusive Research Network,” *John Wiley & Sons Ltd*, 274–281. <https://doi.org/10.1111/bl.12199>
23. Rossman, G., B. (2012). *An Introduction to Qualitative Research: Learning in the Field*. Sage.
24. Samantaray, M. (2023). Parameters for Collection Development Policy: NCERT Experience, *Library Herald*, 61(2), 76–8. <https://doi.org/10.5958/0976-2469.2023.00015.5>
25. Shushl, Wu. (2006). *Cooperation on Local History an the Concept of Network Building between Libraries, Museums and Archives in China*, Asia Publishing House.
26. Waibel, G. (2010). *Collaboration Contexts: Framing Local, Group and Global Solutions*, OCLC.
27. Waibel, G., and Erway, R. (2009). Think Global, Act Local- Library, Archive and Museum Collaboration, *Museum Management and Curatorship*, 1–13.
28. *Ashmolean Museum*. (2024). <https://www.ashmolean.org/>
29. *National Archive of India* (2024). <https://nationalarchives.nic.in/>
30. NCERT (2015). *Annual Report*. <https://ncert.nic.in/annual-report.php>



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Use of Legal Databases for Research Scholars and Students: An Overview

Vuppala Lingaiah* and Likitha Sri Meka**

Legal research is at the heart of university life as well as in practice, offering the soundest of legal reasoning and practice. In today's quickly changing world, where technology advances every day, the methods and tools used to conduct legal research are entirely different. It was a much more laborious process, with printed texts, such as statutes, case law, and legal commentaries, being much more fully searched. This often required vast physical resources and a lot of time for the research. Much has changed with the advent of electronic databases; legal research is now more efficient and accessible. Today, students, practitioners, and researchers can get access to huge amounts of legal information through various online sources, thus conducting in-depth research with minimal clicks. This shift democratizes legal information, allows a wider audience to be engaged with the law, and improves on the speed and accuracy of legal research.

This paper seeks to investigate the role played by legal databases, which are an assistant to students and researchers in their legal research work. The emphasis here lies on popular databases, more specifically on Westlaw, LexisNexis, and Hein Online, with a view to getting an idea of how these digital tools enhance efficiency, access, and depth of information. This research will probe how those databases help access legal material for the users, streamline researching, and improve understanding of the law. Ultimately, at the core of this study will lie those findings that will highlight the foundational aspects of legal databases in modern legal education and practice, capturing their role as a building block for further research into the law.

History of Legal Research

Old Methods of Legal Research

Legal research was pretty tiring before the digital age. In fact, besides some basic statutory material, law libraries contained most of the available

sources such as books, case reporters, digests, and legal journals. It took hours to sort through them in searching for applicable statutes, case law, and legal commentary. The reporters of cases were particularly indispensable, for they published all judicial decisions. This gave a written record of the growth of case law. Digests consisted of summary reports and almost presented all the cases arranged under subject headings, allowing the ready location of matters with greater ease in the vast body of law. Journals furnished articles and commentaries on scholarly but remote access was possible only to those who visited libraries. This reliance on material resources not only utilized vast amounts of time and money but also created accessibility issues because most rural or underfunded schools did not have fully legal libraries.

Electronic Legal Databases

Electronic legal databases emerged towards the end of the 20th and at the very start of the 21st century and brought about a significant disruption in legal research. Efficiency, accessibility, and completeness gave birth to services such as Westlaw and LexisNexis, which began the process of digitalizing huge legal information bases. This kind of database allowed the users to search case law and statutes, as well as articles, from any place where there was access to the Internet, thereby minimizing research time. Something like keyword search and elaborate filtering options revolutionized the way research was being done and enabled results in a fraction of the time it had taken. When lawyers and academics realized the potential of these tools, digital databases soon became indispensable in modern legal research. This paved the grounds for new and exciting ways of conducting legal scholarship as well as practice.

Invention of Legal Education

Advances in legal research tools have greatly impacted legal education and training. More and more law schools have started to embrace these technologies in their curricula to allow the graduating students to have available, at their fingertips, fundamental skills for accessing and

*Library In-charge, Symbiosis Law School, Hyderabad, Telangana-509217. E-mail: lingaiahphd@gmail.com

**Student (BBA-LLB), Symbiosis Law School, Hyderabad, Telangana-509217. E-mail: likithameka5@gmail.com

navigating digital databases that characterize the professional practice of law today. More importantly, the legal resources available through these online forums have made legal education even more open to students with varied experiences since one can access legal literature from these online databases. Digital databases have streamlined workflows, ensured precision in research, and even improved collaboration among legal professionals in legal practice. This, in essence, has changed the face of legal education and practice as a whole and has driven greater efficiency, accessibility, and dynamism in legal research.

Overview of Popular Legal Databases

The revolution of legal research owes its origin to the existence of numerous databases, which allow access to legal materials. In this chapter, some of the most popular legal databases have been discussed with their features, advantages, and relevance for law students and researchers.

SCC Online

SCC Online offers full access to Indian case law, statutes, and secondary sources like commentaries and legal journals through its high-quality legal research database. It is the most popular, on-demand online service, especially among law students and legal professionals in India for their research. SCC Online provides one with voluminous Indian legal content, including landmark judgments, statutory provisions, and commentaries on the law, to ensure that users exhaustively analyze each case. Its interface is easy to use in order to facilitate smooth navigation through vast information storage and retrieval processes. Additionally, its proper legal citation guarantee ensures the users that the material accessed is authentic and relevant. Summarily, SCC Online is a very fundamental resource tool for students of law who conduct deep legal research and analysis thus uncovering real knowledge of Indian law.

Manupatra

Manupatra is another popular database of law that enables users to access Indian as well as international case law and statutes, legal news, and articles. It has very comprehensive search functions, which make it ideal for students researching contemporary legal developments and a practicing lawyer constantly requiring updates on the latest

legal changes. The main strength of Manupatra is in the updates in regular frequency and coverage of legal news that keep users briefed about significant changes in the legal landscape. This makes it even more valuable to those doing work in high-speed areas of law in which staying current is critical. Finally, the database provides analytical tools and resources that enrich the research experience and allow users to move beyond superficial handling of legal issues into a more sophisticated understanding of the law.

Westlaw

Westlaw is one of the large legal research platforms maintaining a very large repository of case laws, statutes, law journals, and various sources and commentaries, and it gives a preference to U.S. materials but, at the same time, also features international materials. The usual users of Westlaw platforms range from students who study common law in the United States, United Kingdom, and Canada for intense legal research and academic assignments. Advanced search tools help to sift queries to produce pinpointed, targeted results consistent with the research question. Citators such as Westlaw's KeyCite further assist researchers with tracking the status of cases to be assured that their sources are current. With its rich secondary source material, Westlaw is an ultimate tool for students who want to critically search and analyze the case law and will publish work.

LexisNexis

LexisNexis is one of the largest and most comprehensive legal research databases that include case law, legislation, and all types of legal journals from every corner of the world. Its vast database is used by law students for researching domestic as well as international legal issues, writing in legal themes, and analysis on cases. LexisNexis is full of the richness of legal materials, and users can easily explore the wide range of juris dicta and their systems. The website is actually designed to guide the user. It is absolutely all right for people who have received and are still receiving legal education and training. Further, LexisNexis provides citation tools that can help students and researchers properly attribute their work, thus showing respect for academic integrity. Its flexibility and richness of materials make LexisNexis a basic device in legal education and practice.

HeinOnline

HeinOnline is a top-notch legal research portal focused on historical and government documents, as well as law review articles. It is the minimum standard for research at the academic level, especially for the students writing their dissertations, theses, and historical legal research. This is another kind of database, which connects and gives powerful links in numerous ways. At its core, it provides an unrivaled collection of law journals, which presents an extensive list of scholarly articles culled from decades of legal thought and analysis. It also allows access to US government documents and international treaties, making it an invaluable research tool, allowing researchers access to discovering connections between law, history, and policy. What makes Hein Online's historical legal materials stand out is the proprietary approach to researching that makes the experience richer for students and scholars.

Advantages of Using Legal Databases for Students and Researchers

Legal databases have revolutionized the way law students and researchers go about conducting legal research. A whole host of benefits leads them to perform better in their work with enhanced efficiency and effectiveness. Some of the big benefits surrounding the use of these databases, including accessibility, efficiency, coverage, currency of information, and analytical tools are discussed here.

Accessibility

The most prominent advantage of legal databases is one of complete access. For law students, these websites mean huge amounts of legal information in cyberspace that can be accessed at any time and place. To a student studying in a remote place where physical libraries may not be easily reached, online legal databases fill the gap by bringing a comprehensive repository of legal resources right at their fingertips. This convenience allows students to research in-depth without any constraints of location or library time. Additionally, most of the databases have mobile applications and therefore research becomes possible outside the physical environment. This way, students will enjoy more leeway on the legal materials and learn with greater efficiency and thereby promoting greater academic independence.

Efficiency and Time-saving

Legal databases make legal research substantially more efficient and less time-consuming than what is the case using the traditional methods. Like such sites, the advanced search filters, case citators, and keyword search assist in making these researches easy and time-saving. A particular student may rely on specific juristic, date, or document type filters to narrow down results, thereby making otherwise barely relevant materials very quickly accessible. It will save a lot of time by conducting keyword searches across vast collections of case law and statutes. Unlike this, traditional research methods are usually time-consuming and laborious in doing manual searches through physical books and case reporters. Through legal databases, the analysis and synthesis of the information found is all that will be given focus, and the process becomes much more productive and efficient.

Comprehensive Coverage

The other critical advantage of legal databases is their comprehensive coverage of legal materials. These databases include plenty of resources in the forms of statutes, case law, regulations, and journals on the law and also carry secondary sources like commentaries on the law and legal treatises. This broad coverage is actually very helpful for students and researchers who prepare assignments, moot court memorials, or dissertations. The availability of various material from one portal only allows students to search for alternative views on legal matters and work up a robust argument. Moreover, detailed coverage gives researchers the ability to locate authoritative sources of information for their claims, and this brings about stronger and more reliable legal writing.

Current Updates

Most law students and researchers require the use of legal databases to keep track of updates regarding laws in place, and this is where legal databases do wonders. These sites update their collections regularly to reflect changes in legislation, case law, and legal commentary, so users have all of the most current information. For a student preparing classes, exams, or writing papers, this is essential in keeping up with the accuracy and relevance of your work. What's more, most legal databases also offer functionalities to automatically identify recent

decisions or legislative changes so that an individual can easily notice and act on the relevant developments of interest.

Analytical Tools and Citators

Legal databases also offer analytical tools and citators which help students and researchers in determining the relevance and strength of case law. For example, there are tools like KeyCite on Westlaw and Shepard's on LexisNexis that inform the users of the status of a case and related by-products like overturned, cited, distinguished or applied in subsequent judgments. That way, the researcher can determine whether some of the authorities he depends on are valid enough and what to cite in his paper. Such tools also considerably contribute not only to advancement of quality in legal research but also to a more critical approach in considering legal precedents. For example, in effective legal writing and argumentation, among other things such analytical tools inform a user to consider or evaluate the authority as well as applicability of case law.

Challenges and Limitations

Whereas law libraries provide numerous benefits to students and researchers, they pose many challenges and drawbacks for the full utilization. This section covers a few of the major issues encompassing cost barriers, information overload, overreliance on digital tools, and technical barriers.

Cost and Subscription Barriers

The primary disadvantage associated with law libraries is that of prohibitively expensive subscription cost. The most widely available ones are Westlaw, LexisNexis, and Manupatra, which are mostly chargeable, so a heavy fee is charged for using these platforms, therefore making it totally inaccessible to most law students and researchers especially those students studying in institutions that do not have institutional access. This therefore creates huge inequality in accessing basic legal resources as some students are bound to rely on the university libraries having fewer materials or limited free online resources. The inability to gain full access to legal databases can hinder the quality of their research and the legal skills they develop. For those who are impoverished or denied institutional access, this might place them at an academic disadvantage. That can have a trickle-down effect on

the educational experience at large as well as future career prospects.

Information Overload

Yet another problem the use of legal databases presents is information overload. With so much legal information available at users' fingertips, students are likely to be overwhelmed by sheer overabundance of materials, which can confuse them and distort their judgment about appropriate sources and means of research. Overabundance, as stated earlier, may subsequently be linked to problems with distinguishing the appropriate sources and means of research from the wrong ones and may therefore jeopardize the quality of the students' research. When there is too much information to sift through, the student will often have a hard time posing focused research questions, which will then mean that the investigation will then be randomly rather than purposefully focused. This sifting process through numerous cases, statutes, and commentaries could also cause frustration, reducing students' motivation or interest in their research projects. The flood of information can prevent the stimulation of critical thinking and analytical skills conducive to efficient legal practice.

Over-Reliance on Electronic Resources

Students find it easier to rely on electronic resources when researching law; they may, therefore, end up being over reliant on these digital tools and forget about traditional legal research techniques. Databases contain many rich resources and sophisticated search capabilities, but reliance on them also keeps students from developing certain critical skills, namely, utilization of the physical library, understanding of print resources, and critical reading. Traditional legal research involves not only finding materials but critically evaluating the content, context, and applicability to particular legal issues. With sole emphasis on digital research, students may even miss the very skills they will need when working in law. A dependence on digital tools creates a narrow perception of the legal research process as a whole and limits their adaptability with regard to a variety of research environments.

Technical Hurdles

Technical hurdles are another challenge that users of legal databases face. This will be impossible for some students because they will not get to access

these facilities due to poor internet connection or due to limited technical skills. For instance, users in remote or in the rural areas may have poor and unreliable internet connection, and therefore are likely to be unable to access crucial legal resources. The students might also lack proper training to achieve efficacy in managing the advanced digital research tools, thus compelling them to make less utility out of databases. This would leave the student frustrated and less capable of effectively conducting quality legal research. This becomes challenging for these institutions as they should be able to recognize this and thus ensure that all these students are adequately trained and resourceful enough to use legal databases.

Future Trends and Innovation in Legal Databases

Advances in technology are changing the face of legal research. There are several key trends and innovations that will be shaping the futures of legal databases-to make them even more useful to law students and researchers.

AI and Machine Learning in Legal Research

Artificial Intelligence (AI) and machine learning increasingly form part of legal databases, fundamentally transforming the process of conducting legal research. AI tools can scan such humongous volumes of legal information to generate predictive analytics - the forecast outcomes of cases - from historical data and trend lines. Further, they can prepare short summaries for case law and allow the students to understand much important information presented in judgments without wasting their hours scanning huge texts. This streamlining not only increases efficiency but also enables the law student to focus his or her talents on developing analytical skills because the pertinent precedents and the applicable legal principles will immediately jump out concerning any research topic.

Personalized and Bespoke Learning Platforms

Another new phenomenon is the creation of bespoke and personalized learning platforms within legal databases. The systems gave students the ability to save research, annotate cases, and collaborate with peers in these spaces, thus making the learning experience more engaging and personalized. Librarians are empowered to curate research libraries that allow students to track their

own learning and organize resources for specific assignments or projects. With such personalizations and basic elements of collaborative learning, there is increased interaction with legal materials-all a critical component of today's legal education picture.

Blockchain and Data Security

Therefore, it can be expected that the use of blockchain technology will highly improve data security and traceability of legal document databases. Through blockchain technology, legal databases will have the ability to create an immutable record of transactions or revisions made in documents to allow changes and traceability with verifications to be logged. This security level protects sensitive information stored in legal databases as well as openness in legal proceedings. The adoption of blockchain technology could revolutionize the way documents become stored and retrieved because students and practicing lawyers will find greater confidence in the integrity of their research materials.

Conclusion

Legal databases are certainly the heart of modern legal research, providing vast resources that can further extend the research repertoire of students and academics. They provide case law, statutes, secondary sources, and analytical tools-cum-tools, all sorts of necessary informational material, and other instruments to research efficiently and comprehensively. This means that digital platforms could make access possible at any given time and from anywhere, an advantage for people studying in remote areas or by very tight schedules. The change from a traditional research method to database form places a higher step in the legal field because it allows more efficient, quicker, and more precise legal analysis. To this end, these databases have remained an essential element of legal education and practice and, in turn, have shaped legal research widely.

References and Readings

1. Reuters, Thomson (n.d.) (2024). Westlaw. Retrieved October 16, from <https://legal.thomsonreuters.com/en/westlaw>
2. LexisNexis. (n.d.)(2024). LexisNexis Legal Research. Retrieved October 16 from <https://legal.thomsonreuters.com/en/westlaw>

3. SCC Online. (n.d.)(2024). SCC Online. Retrieved October 16, from <https://www.sconline.com>
4. Manupatra. (n.d.)(2024). Manupatra legal research. Retrieved October 16 from <https://www.manupatrafast.com>
5. HeinOnline. (n.d.) (2024). HeinOnline. Retrieved October 16 from <https://home.heinonline.org>
6. Berring, R., C., and Edinger, E., J. (2005). Finding the Law (12th ed.). Thomson/West.
7. Sloan, A. (2018). Basic Legal Research: Tools and Strategies (7th ed.), Wolters Kluwer Law & Business.
8. Lentz, D., C., and Williams, C., J. (2013). Legal Research: A Practical Guide to the Study of Law, Legal Reference Services Quarterly, 32(1), 1-19. <https://doi.org/10.1080/0270319X.2013.757749>
9. Lathrop, A. (2010). A Guide to Legal Research in the Digital Age, University of North Texas Law Review, 15(2), 87-102. <https://doi.org/10.2139/ssrn.1570270>
10. Harvard Law Review. (n.d.). Harvard Law Review. Retrieved October 16, 2024, from <https://harvardlawreview.org/>
11. Neumann, L., R., and Neumann, A., A. (2017). Legal research and writing (6th ed.). Wolters Kluwer Law & Business.
12. Huth, B., A., and Ainsworth, J., C. (2019). Research Methods for Lawyers, Routledge.
13. Smith, S. D., and Jones, R. A. (2012). The Role of Legal Research in Effective Advocacy, The Advocate, 35(2), 45-56. <https://doi.org/10.2139/ssrn.2208765>
14. Johnson, K. R. (2014). The Evolving Landscape of Legal Research: Adapting to Change, *Law Library Journal*, 106(4), 441-459. <https://doi.org/10.2139/ssrn.2386224>
15. McAuliffe, R. (2016). Effective Legal Research: Strategies for Success, ABA Publishing.
16. Schwartz, R., M. (2018). Legal Research in the Digital Age: Strategies for Success, *Legal Reference Services Quarterly*, 37(2), 133-150. <https://doi.org/10.1080/0270319X.2018.1457696>
17. Pomerantz, E. (2019). Understanding Case Law: The Role of Research in the Legal Process. Routledge.
18. Dodd, A., R., and Kelly, D. (2020). Researching the Law: A Guide for Students and Practitioners, Cambridge University Press. □

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Awareness among Higher Education Students towards Plagiarism: A Quest for Academic Integrity

Debashis Kayal* and Sudeshna Lahiri**

The National Education Policy 2020 envisions a far-reaching way to deal with changing the quality and quantity of research in India. This policy has given more accentuation on transparent research outlook and knowledge creation. In this regard, an essential cause to take plagiarism significantly and to counteract it is the truth that today, the criticality of research is more than ever before, for the monetary, scholarly, societal, environmental, and innovative well-being and development of a country and the institutional reputation depends upon its perceived integrity. The standards for the research undertaken by students are maintained to bring the recognition of a global platform and generate high-quality research within the country.

The framed regulations of University Grants Commission (UGC) (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions Regulations 2018), in India, focus on the role of Higher Educational Institutions (HEI) in curbing plagiarism and strict guidelines for punishment in case of the occurrence. The UGC indicated that “every HEI should establish the mechanism as prescribed in these regulations, to enhance awareness about responsible conduct of research and academic activities, to promote academic integrity and to prevent plagiarism” (p. 9). The question arises, as to whether the framing of guidelines can exterminate plagiarism among students. Hence, the foremost responsibility of academia is to raise awareness among the students who are required to conduct research projects for the fulfillment of their academic degree.

Plagiarism is a research misconduct and intellectual theft as it involves stealing of intellectual property of someone else. It is the demonstration of replicating the thoughts, sentences, words, or some portion of another person’s exploration work or research work without giving appropriate credit to the unique work. There are various forms of plagiarism such as replicating thoughts, duplicating

words, sentences, and passages, paraphrasing, inappropriate citation, self-plagiarism, collusion, and so on (Kumar & Mohindra, 2019). Regarding the act, Fish and Hura (2013) stated that “Plagiarism is representing another author’s ideas or words as your own in course documents or electronic postings. This would include submitting an entire document by another author as well as using a portion of text or ideas from another author’s work and not citing the source. This would include information obtained from the internet, from other students, and published and unpublished documents” (p. 35). Plagiarism is a serious issue and concern for higher education where students are engaged either intentionally or unintentionally in the act of plagiarism. Hence, it is very important to understand student awareness of plagiarism in higher education when they are involved in research activities as well as in their writing.

Plagiarism as a Concept

The term “plagiarism” has a prolonged history. The Latin ‘plagiarius’ (motivated from the Greek word ‘*plagion*’ meaning kidnapper of kids or slaves) became first used in the first century AD by way of the Roman author Martial in his epigram I.52 to castigate another poet who was purloining his poems. The word was not utilized again for over thirteen centuries. In 1471, this term was used in Latin by Lorenzo Valla in a published book an imitation of ‘Martial’ poems (Fitzgerald, 2007). Ben Jonson introduced the word ‘plagiary’ in English firstly in his play ‘The Poetaster’ (1601) and in 1755 obtained appreciation by its insertion in Samuel Johnson’s Dictionary (Sandar, n.d. ; Mohammed et. al., 2015 ; Bakhtiyari et. al., 2014).

A mere probe by the 7th edition of the American Psychological Association (APA, 2024) manuals elucidates the term plagiarism as “the act of presenting the words, ideas, or images of another as your own; it denies authors or creators of content the credit they are due”. Further, Clarke (2006) recognizes four elements of plagiarism (as cited in Sandor, n.d.):

1. **Publication:** plagiarizing includes the public character of the new work;

*Research Scholar, Department of Education, University of Calcutta, Kolkata-700 073. E-mail: debashis500.kayal@gmail.com

**Professor, Department of Education, University of Calcutta, Kolkata-700 073. E-mail: sledu@caluniv.ac.in

2. **Content:** some content of the new work ought to be procured from another creator's past work;
3. **Appropriation:** the demonstration of someone else's work as his one's own (On account of self-plagiarism the case ought to be: a show of past work as new and unique);
4. **Lack of credit given:** the source of the exposition is not as expected referenced.

In essence, Plagiarism is an act of stealing or reflecting someone else's work, text, language, ideas, or thoughts without the permission of the author or not referencing the ideas. The acts are the contemplation of the author as well as denying the creator the right of ownership or without acknowledging the authorship further on than what is appraised to be general knowledge (Ismail, 2013; Bakhtiyari et. al., 2014; Anney & Mosha, 2015; Arthi & Bohra, 2014). It is misconduct reviewed to be unethical and dishonest no matter who executes it (Shahabuddin, 2009). Hence, Plagiarism is not only a challenge to academic integrity but also has a deep root in the values and morality of an individual.

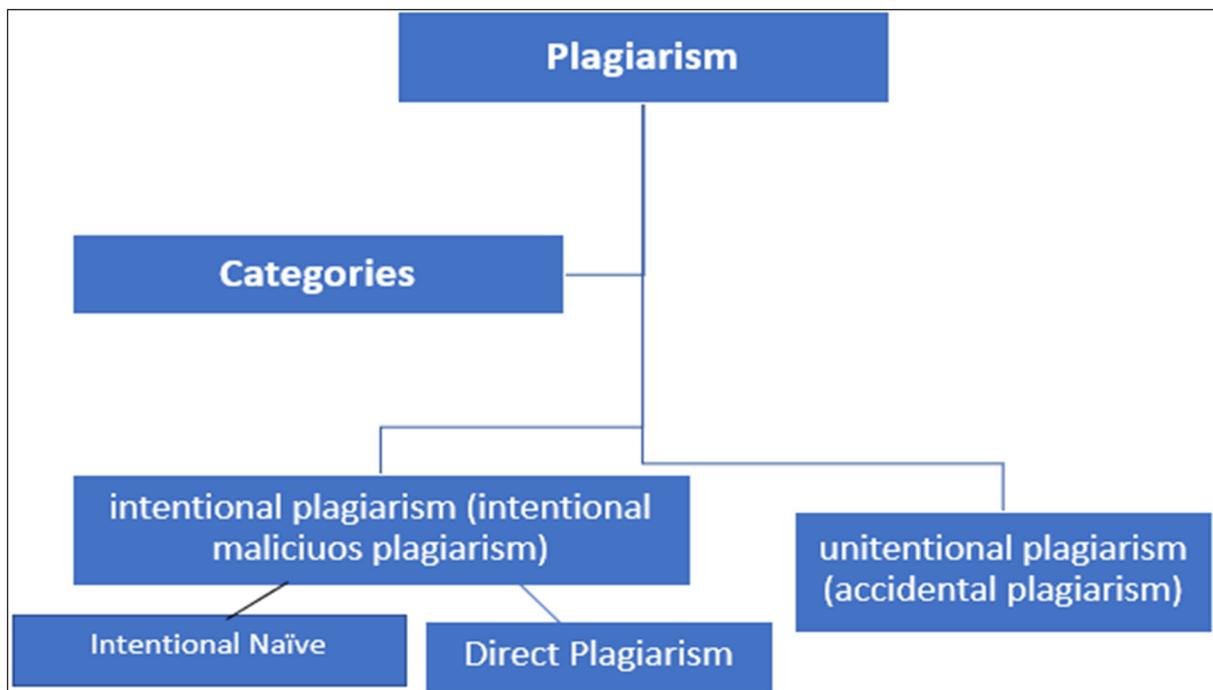
The concept of plagiarism may be understood by its categories and types. Plagiarism may be categorised (Arthi & Bohra, 2014) broadly into Intentional plagiarism and Unintentional plagiarism (Figure 1).

While Figure 1 describes the categories, Intentional plagiarism or intentional malicious plagiarism involves stealing, duplicity, deception, misconduct, and fraud. This may be further categorized into Intentional Naive and Direct Plagiarism.

- i. **Intentional Naive.** It may occur when a writer intentionally, yet naively, duplicates huge blocks of text, or takes thoughts, without referring to the source. The writer misconstrues the right referring to strategies or has fostered an unfortunate way to deal with academic or professional writing (Wicker, 2007).
- ii. **Direct Plagiarism.** It is done when an author gets others' creations for paper functions as one's creation, gathering and replicating information. The lift of content may be from the web without legitimate consent of the authority even copyright information. In addition, it shows clubbing a few research works and making another work without legitimate intimation from authority. It is also making another sentence from a previously existing sentence by somewhat changing the equivalents of a couple of words in the sentence (Arthi & Bohra, 2014).

Similarly, Figure 1 shows that Unintentional plagiarism involves unintentional or accidental

Figure 1 : Categories of the Plagiarism



duplication of a couple of sentences or a short passage, or neglect to reference a direct quotation. The plagiarizer takes their composition and utilizes it without reference (Wicker, 2007). It may occur when an individual unexpectedly or unintentionally summarizes the information by the same gathering of words in succession or a comparative type of grouping or comparable type of construction without attribution. Moreover, Unintentional plagiarism may demonstrate manipulating the place of commas, quotes and changing the pattern of content by joining information from different references (Arthi & Bohra, 2014).

Type of Plagiarism

While discussing types of plagiarism, Streefkerk (2020) exhibited some of the common types of plagiarism as in Table 1.

Table 1: Type of Plagiarism

Type of Plagiarism	Definition	Severity
Global Plagiarism	Presenting an entire text by someone else as your work.	Severe
Paraphrasing plagiarism	Rephrasing someone else's ideas without citation.	Serious
Verbatim plagiarism	Directly copying a passage of text without citation.	Serious
Mosaic plagiarism	Combining text and ideas from different sources without citation.	Serious
Self-plagiarism	Reusing passages and ideas from your own previously submitted work.	Moderate
Incorrect citation	Failing to give all the necessary information in your source citation.	Moderate

Source: Raimo Streefkerk "Types of plagiarism" Published on January 17, 2018 by Raimo Streefkerk. Revised on January 14, 2020 available at <https://www.scribbr.com/plagiarism/types-of-plagiarism>

As given in Table 1, every plagiarism has a definition and extent of severity. In this regard, the offense done may be evaluated and the consequences to be met should be dependent on the extent of the severity of plagiarism committed. In the year 2012, Turnitin-the Plagiarism Spectrum identified 10 types

of plagiarism (Table 2) based on outcomes from a worldwide survey of nearly 900 secondary and higher education instructors (Turnitin, 2012).

Table 2: Type of Plagiarism Identified by Turnitin - The Plagiarism Spectrum

Type of Plagiarism	Nature
CLONE	Submitting another's work, word-for-word, as one's own.
CTRL+C	Contains significant portions of text from a single source without alterations.
FIND - REPLACE	Changing key words and phrases but retaining the essential content of the source.
REMIX	Paraphrases from multiple sources, made to fit together.
RECYCLE	Borrowing generously from one's own previous work without citation.
HYBRID	Combines perfectly cited sources with copied passages without citation.
MASHUP	Mixes copied material from multiple sources
404 ERROR	Includes citations to non-existent or inaccurate information about sources.
AGGREGATOR	Includes proper citation to sources but the paper contains almost no original work.
RE - TWEET	Includes proper citation, but relies too closely on the text's original wording and/or structure

Source: Turnitin-The Plagiarism Spectrum. <https://www.turnitin.com/static/plagiarism-spectrum/>

Turnitin recognizes ten types of plagiarism acts ordered from most to least severe which is presented in Table 2. Hence, it is felt pertinent to educate students to gain attitudes, values, mentalities, qualities, and practices that assist with forestalling plagiarism.

Status of Awareness towards Plagiarism in Higher Education

Plagiarism is an odious academic crime that negates the main objective of research and disregards its generator to discover new facts and expand the frontiers of knowledge. Madray (2007) observed that most students need to finish their research assignments genuinely yet think that it is troublesome,

just because they are confused about the best way to achieve it. Students find it difficult and confusing to understand how to interpret and apply the rules of plagiarism - that is, how to incorporate information from multiple sources into one's research writing. It was uncovered that recent high school graduates - freshmen entering college - were unaware and unready for higher education. When it comes to simple tasks like citing book sources, many students - those without the ability to paraphrase and analyze - are having trouble. It was alarming that 73% of the participants of the study (post-test) were unsuccessful in correctly answering the question, "Does copying from a book without crediting the source constitute plagiarism?" Where the study of Eva et. al. (2018) explored gender differences in students' awareness of plagiarism that were statistically significant; particularly, women had much more negative attitudes toward plagiarism than men. Regarding awareness, students could be divided into three groups: (1) students who are aware of plagiarism but do not think about it wrong or unethical, (2) students who are unaware of plagiarism, and (3) students who are aware of plagiarism but proceed with plagiarise despite knowing it to be wrong. Again, Razera (2011) unearthed those students and teachers were not entirely clear about plagiarism. Students and teachers from both groups (code and text plagiarism) had similar viewpoints on numerous subjects, for instance, the one regarding having clear information about what was allowed and not allowed, but in some other topics, their perspectives veered enormously.

A more inquest by Idiegbeyan-ose et. al. (2016) revealed the average level of awareness of plagiarism among postgraduate students. If awareness increases, the positive view of plagiarism will likewise get to the next level. They also uncovered a significant difference in perception of plagiarism which exposed that what postgraduate students perceived as plagiarism differs across the variety of institutions. Later, Oyewole et. al. (2018) manifested that the vast majority of the respondents had a high level of awareness of the different acts that comprise plagiarism. A greater part of the distance students (89.6%) had a negative perception of plagiarism as they considered it as a crime. A more investigation by Sarair et. al. (2019) exposed that more than over seventy percent of the students understand properly what paraphrasing and plagiarism are. They still had to figure out how to avoid plagiarism in their writing, though.

What's more, they identified student's awareness of plagiarism in paraphrasing English text was very low. In this regard, Muhammad et. al. (2022) unfolded that more than 4/5 of the interns were aware of plagiarism (86.8%), fabrication (94.3%), and falsification (86.6%) of results in research. Nigerian interns demonstrated a significant awareness of research misconduct in this instance. Again, Dearth (2004) unmasked that student responses indicate a shift in students' comprehension of plagiarism and ways to avoid it. The students expressed that they are as yet going to plagiarize material since they don't feel that they will be caught or punished. A while later, Curtis et. al. (2013) identified that both students' awareness of plagiarism and their perception of the seriousness of plagiarism expanded significantly from before to after finishing the online academic integrity training. In their research work, Alnajjar & Hashish (2021) exposed that nursing students displayed moderate academic ethical awareness and moral responsiveness. Nursing students were aware that cheating on exams and disrespecting patients' respect or confidentiality were unethical actions. O'Donnell (2011) observed that students can and will learn referencing if they recognize it as necessary, even though additional technical improvement was required in the majority of cases. In their investigation, Cho & Hwang (2019) unearthed that academic ethical awareness was the most elevated in regards to ways of behaving abusing the regard or secrecy of patients, and cheating on exams, while it was the least for improper ways of behaving in class. Further, students identified the following as unethical behavior, according to Boskovic et. al. (2013) - plagiarism, falsification, distortion, research subject insolence, biased methodology and research results representation, research sabotage, concealment of conflict of interest, unfair author designation, and author's awkward public appearance. When contrasted with the list of 15 significant research misconduct forms from the international research misconduct guidelines, the students failed to acknowledge as research misconduct. Through the experimental investigation of Malik et. al. (2021), they sighted that a large portion of the 267 online university students had poor awareness and understanding of plagiarism. Significant explanations behind students' plagiarism ended up being an absence of a proactive way to deal with awareness, an exclusion of citation conventions from course content, untrained

teachers, an absence of severe punishments and their legitimate execution, poor time management, anxiety toward disappointment and failure, an absence of confidence, lethargy, and a culture of plagiarism. At the same time, Ahmad et. al. (2022) revealed that there were no significant differences between genders in awareness and attitudes toward plagiarism. According to the findings of the research, gender may have an association with awareness of plagiarism or attitudes toward plagiarism.

The essence of the outcome regarding the Status of Awareness towards Plagiarism in Indian Higher Education (Table 3) which is based on the review has indicated a clear picture of the drift and direction of awareness towards plagiarism.

Table 3: Status of Awareness Towards Plagiarism in Higher Education in India

Researcher	Year	Outcome
Arthi, C. I., & Bohra, D.	2014	The lack of awareness of plagiarism is the crucial reason behind the act of plagiarism. There is a need for an effective plagiarism detection system that may be able to trace plagiarism by manipulating duplicates of words and sentences in academic writing.
Ahmadi, A., & Sonkar, S. K.	2015	The majority of researchers are aware of plagiarism and they use anti-plagiarism tools to keep away from plagiarism. The researchers have very little knowledge about fair utilization of copyrighted material.
Kumar, A., & Mohindra, R.	2019	Research scholars were aware about plagiarism issues in scholarly world. The scholars were familiar about the provision of consequences for unique ranges of plagiarism as endorsed by the University Grant Commission (UGC).
Raj et. al.	2021	Students needed sufficient information on the most proficient method to stay away from plagiarism.
Kattimani et. al	2022	Inadequate knowledge of the students is the utmost crucial reason for plagiarism.

Source: Researcher made based on the Review

As presented in Table 3, the status of awareness has been reflected significantly. In a nutshell, the awareness of plagiarism in higher education of India has explored effectively which may help to understand and evaluate the degree of awareness towards plagiarism.

Recommendations for Awareness of Plagiarism in Higher Education

The research indicates that early mediation could assist with easing plagiarism. During high school, the importance of research paper writing should be recognized and emphasized. Colleges offer a wide assortment of remedial programmes for students with a lack in reading, comprehension, and writing. Students ought to be offered the abilities important to explore the social climate of college as well as the academic and research culture. Another idea is to teach freshmen information literacy, research methods, citation formatting, and extensive discussions on plagiarism in a two-credit core course spread out over a semester. This could give students the foundation from which to work and assist them with feeling more confident about their scholastic yearnings (Madray, 2007). Moreover, Idiegbeyan-ose et. al. (2016) suggested the heightening of awareness and sensitization programmes on plagiarism by different organizations and the introduction of information ethics as an obligatory course of concentration in tertiary organizations. Implementing a plagiarism policy within academic institutions, imposing severe penalties for plagiarism, instructing students on how to avoid plagiarism, and, finally, establishing a national program to promote academic integrity are among the recommendations made by the researcher (Eva et al., 2018). An educational plan in research ethics ought to be created for university faculty and that further subjective examination ought to investigate the premise of a few of the mentalities regarding practices in research ethics (Kandeel et. al., 2011). A plagiarism policy should be developed by the university's management of distance learning and distributed to all students (Oyewole et. al., 2018). Student awareness of and attitudes toward plagiarism may improve as a result of the use of academic integrity mastery tests. In this regard, online academic integrity mastery modules are successful in expanding both student understanding of plagiarism and the degree to which they see plagiarism to be a difficult issue

Table 4 : Recommendations for Awareness of Plagiarism in Higher Education in India

Researcher	Year	Recommendations
Arthi, C. I., & Bohra, D.	2014	Increasing awareness of plagiarism and the efficiency of the plagiarism detection system should be improved.
Ahmadi, A., & Sonkar, S. K.	2015	There should be some awareness programme about fair use of copyright.
Kumar, A., & Mohindra, R.	2019	Work out a strong action plan and its implementation to combat prevalent academic plagiarism and related issues.
Raj et. al.	2021	Proposed a requirement for a revamp in the medical education curriculum in India by consolidating research and publication ethics.
Kattimani et. al	2022	Expanding awareness among students, and giving sufficient time for research assignments might diminish the occurrences of plagiarism. Administering and leading scientific writing workshops is one suitable method to address the same.

Source: Researcher made based on the Review

(Curtis et. al., 2013). There may be a proposal to improve student understanding of research ethics through: (a) further improvement of the Doctoral programme with ‘Ethics in Research’; (b) updating the guidelines for the ethical behavior of researchers; and (c) increasing the commitment and engagement providing key information about research misconduct to Doctoral students (Boskovic, 2013). Besides this, the research put forward the Awareness, Support, and Prevention model (AS&P model) to resolve this issue in higher education institutions (Malik et. al., 2021). Additionally, lecturers and educational institutions need to empower peer detailing of a wide range of academic deceitfulness among students through clear and firm regulations; for instance, by stressing the obligation of observers to report and by giving a protected and satisfactory revealing channel (Rangkuti, 2022). Very recently, Chokoraia (2023) revealed that Universities of Georgian higher educational institutions have expanded awareness of plagiarism. The Turnitin programme

was implemented, syllabi were modified with the assistance of foreign partners, and additional services supporting academic writing skills were introduced at universities.

The quintessence of recommendations for Awareness of Plagiarism in Higher Education in India which is based on the review has been exhibited (Table 4) hereafter.

As reflected in Table 4, the recommendations for Awareness of Plagiarism in Higher Education in India indicate various pathways for combating plagiarism.

Conclusion

Research ethics thrives on trust and honesty as core values for scientific research ethics. However, plagiarism shakes these values and creates an atmosphere of mistrust to hamper scientific advancement. The awareness of plagiarism should be generated from the very beginning when students start their research venture in Undergraduate and graduate (or Postgraduate) programmes. Creating awareness at the foundation will prevent this problem from deteriorating is expanding awareness about the menace. This study will help the students, teachers, teacher educators, administrators, and institutions to get an overview of the present scenario regarding student’s awareness of plagiarism in higher education. The educational institution should voluntarily take significant steps to spread awareness about plagiarism organizing various seminars, conferences, and workshops for students understanding of research ethics in preventing plagiarism.

References and Readings

1. Ahmad, T., S., A., S., et. al. (2022). Awareness and Attitudes of Undergraduate Students towards Plagiarism: Are There any Differences between Genders? *Asian Journal of University Education (AJUE)*, 18(3), 597-605. <https://doi.org/10.24191/ajue.v18i3.18947>
2. Ahmadi, A., and Sonkar, S., K. (2015). Awareness Regarding Plagiarism and Fair Use of Copyrighted Work: A Survey Amongst Doctoral Students of Babasaheb Bhimrao Ambedkar University, Lucknow, *Journal of Information Management*, 2(2), 98-110. <http://eprints.rclis.org/31107/1/Journal-11.pdf>
3. Alnajjar, H., A., and Hashish, E., A., A. (2021). Academic Ethical Awareness and Moral Sensitivity of Undergraduate Nursing Students: Assessment and

- Influencing Factors, *SAGE Open Nursing*, 7, 1-9. DOI: 10.1177/23779608211026715
4. American Psychological Association. (2024, March 11). *Plagiarism*. <https://apastyle.apa.org/style-grammar-guidelines/citations/plagiarism>
 5. Anney, V., N., and Mosha, M., A. (2015). Student's Plagiarisms in Higher Learning Institutions in the Era of Improved Internet Access: Case Study of Developing Countries, *Journal of Education and Practice*, 6(13), 203-216. www.iiste.org
 6. Arthi, C., I., and Bohra, D. (2014). Awareness of Plagiarism: Marching Approaches and Renovations-A Survey, *International Journal of Computer Science and Information Technologies*, 5(4), 5412-5414. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.643.9326&rep=rep1&type=p>
 7. Bakhtiyari, K., et. al. (2014). Ethical and Unethical Methods of Plagiarism Prevention in Academic Writing, *International Education Studies*, 7(7), 52-62. <http://dx.doi.org/10.5539/ies.v7n7p52>
 8. Boskovic, M., et. al. (2013). Ph.D. Students' Awareness of Research Misconduct, *Journal of Empirical Research on Human Research Ethics*, 8(2), 163-164. DOI: 10.1525/jer.2013.8.2.163
 9. Cho, O., H., and Hwang, K., H. (2019). Academic Ethical Awareness among Undergraduate Nursing Students, *Nursing Ethics*, 26(3), 833-844. DOI: 10.1177/0969733017727155
 10. Chokoraia, T. (2023). The Problem of Plagiarism in the Process of Establishing Academic Integrity Culture at Georgian Higher Educational Institutions, *Quality in Higher Education*, 29(1), <https://doi.org/10.1080/13538322.2022.2100619>
 11. Clarke, R. (2006). Plagiarism by Academics: More Complex Than It Seems, *Journal of the Association for Information Systems*, 7(2), 91-121. DOI:10.17705/1jais.00080
 12. Curtis, G. J., et. al. (2013). Online Academic-integrity Mastery Training May Improve Students' Awareness of, and Attitudes toward, Plagiarism, *Psychology Learning and Teaching*, 12(3), 282-289. <http://dx.doi.org/10.2304/plat.2013.12.3.282>
 13. Dearth, M., M. (2004). *Increasing Student Awareness and Knowledge of Plagiarism* [Master's thesis, Defiance College], Defiance College. https://etd.ohiolink.edu/!etd.send_file?accession=def1281547263&disposition=inline
 14. Eva, J., Marko, U., Janja, J., and Polona, S. (2018). Gender Differences and the Awareness of Plagiarism in Higher Education, *Social Psychology of Education: An International Journal*, 21(2), 409-426. <http://dx.doi.org/10.1007/s11218-017-9421-y>
 15. Elshafei, H., A., and Jahangir, T., M. (2020). Factors Affecting Plagiarism among Students at Jazan University, *Bull Natl Res Cent*, 44, 71. <https://doi.org/10.1186/s42269-020-00313-z>
 16. Fish, R., and Hura, G. (2013). Students' Perceptions of Plagiarism, *Journal of the Scholarship of Teaching and Learning*, 13(5), 33-45. <https://files.eric.ed.gov/fulltext/EJ1017029.pdf>
 17. Fitzgerald, W. (2007). *Martial: The World of the Epigram*, University of Chicago Press.
 18. Idiegbeyan-ose, J., Nkiko, C., and Osinulu, I. (2016). Awareness and Perception of Plagiarism of Postgraduate Students in Selected Universities in Ogun State, Nigeria, *Library Philosophy and Practice (e-journal)*, 1322. <http://digitalcommons.unl.edu/libphilprac/1322>
 19. Ismail, M. (2013). Plagiarism: More than Meets the Eye. *Advances in Language and Literary Studies*, 4(2), 147-151. <http://dx.doi.org/10.7575/aiac.all.v.4n.2p.148>
 20. Kandeel, N., et. al. (2011). A Multicenter Study of the Awareness and Attitudes of Egyptian Faculty Towards Research Ethics: A Pilot Study, *Journal of Empirical Research on Human Research Ethics*, 99-108. DOI: 10.1525/jer.2011.6.4.99
 21. Kattimani, S., Kujur, A., Nagarajan, P., and Zayabalaradjane, Z. (2022). Attitude toward Plagiarism among Postgraduate Students of a Medical Institute in South India, *Journal of Psychiatry Spectrum*, 1(2), 106-110. https://doi.org/10.4103/jopsys.jopsys_35_22
 22. Kayal, D. (2021). *Attitude towards Plagiarism among the Students Pursuing M.Ed. Programme in West Bengal* [Unpublished M.Phil Dissertation], University of Calcutta.
 23. Kumar, A., and Mohindra, R. (2019). Exploring Awareness and Attitude on Plagiarism among Research Scholars: A Case Study of Panjab University, Chandigarh (India), *Library Philosophy and Practice (e-journal)*. <https://digitalcommons.unl.edu/libphilprac/2551>
 24. Madray, A. (2007). Developing Students' Awareness of Plagiarism: Crisis and Opportunities. *Library Philosophy and Practice (e-journal)*. <http://digitalcommons.unl.edu/libphilprac/134>
 25. Malik, M. A., Mahroof, A., and Ashraf, M. A. (2021). Online University Students' Perceptions on the Awareness

- of, Reasons for, and Solutions to Plagiarism in Higher Education: The Development of the AS&P Model to Combat Plagiarism, *Applied sciences*, 11, 12055. <https://doi.org/10.3390/app112412055>
26. Ministry of Human Resource Development (2020). *National Education Policy 2020*, Government of India, New Delhi, 1- 66. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
 27. Mohammed, R., A., A., et. al. (2015). Plagiarism in Medical Scientific Research, *Journal of Taibah University Medical Sciences*, 10(1), 6-11. <http://dx.doi.org/10.1016/j.jtumed.2015.01.007>
 28. Muhammad, D., et. al. (2022). Assessment of Awareness of Research Misconduct among Interns in Nigeria, *Future of Medical Education Journal*, 12(2), 9-14. doi: 10.22038/fmej.2022.59791.1425
 29. O'Donnell, K. (2011). Linking Multimodal Communication and Feedback Loops to Reinforce Plagiarism Awareness. *Business Communication Quarterly*, 74(2), 216-220. DOI: 10.1177/1080569911404404
 30. Oyewole, O., Rasheed, A., A., and Ogunsina, S., T. (2018). Awareness, Perception and Attitude towards Plagiarism by Distance Learners in University of Ibadan, Nigeria, *International Journal of Academic Library and Information Science*, 6(4), 101-113. DOI: 10.14662/IJALIS2018.032
 31. Raj, J., P., et. al. (2021). Extent of Awareness and Attitudes on Plagiarism among Postgraduate Resident Doctors and Junior Medical Faculty in India: A Cross-sectional, Multicentric Study, *BMJ Open*, 11:e046904. doi:10.1136/bmjopen-2020-046904
 32. Rangkuti, A., A., Royanto, L. R. ,M., and Santoso, G., A. (2022). Ethical Awareness and Peer Reporting Intention of Exam Cheating and Plagiarism: Mediation Role of Ethical Judgment, *Issues in Educational Research*, 32(3), 1111-1130. <http://www.iier.org.au/iier32/rangkuti.pdf>
 33. Razera, D. (2011). *Awareness, Attitude and Perception of Plagiarism among Students and Teachers at Stockholm University* [Master's thesis, Stockholm University], Stockholm University/ KTH. <http://www.diva-portal.org/smash/get/diva2:432681/FULLTEXT01.pdf>
 34. Reinhardt, W., Mletzko, C., Sloep, P., B., and Drachler, H. (2012). Understanding the Meaning of Awareness in Research Networks, *ResearchGate*. https://www.researchgate.net/publication/230640624_Understanding_the_Meaning_of_Awareness_in_Research_Networks
 35. Sandor, S., D. (n.d.). Plagiarism in the Academia, *Academia*. https://www.academia.edu/5146291/Plagiarism_in_the_academia?auto=download
 36. Sarair., Astila, I., and Yuniarti. (2019). Students Awareness of Plagiarism in Paraphrasing English Text, *Getsempena English Education Journal*, 6(2), 258-266. <https://geej.stkipgetsempena.ac.id/?journal=home&page=article&op=view&path%5B%5D=199&path%5B%5D=122>
 37. Shahabuddin, S. (2009). Plagiarism in Academia, *International Journal of Teaching and Learning in Higher Education*, 21(3), 353-359. <http://www.isetl.org/ijtlhe/>
 38. Streefkerk, R. (2020, January 14). *Types of Plagiarism*, Scribbr. <https://www.scribbr.com/plagiarism/types-of-plagiarism>
 39. Turnitin (2012). *The Plagiarism Spectrum: Instructor Insights into the 10 Types of Plagiarism*. <https://www.turnitin.com/static/plagiarism-spectrum/>
 40. University Grants Commission (2018, July). *University Grants Commission (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018*. https://www.ugc.gov.in/pdfnews/7771545_academic-integrity-Regulation2018.pdf
 41. Wicker, P. (2007). Plagiarism: Understanding and Management, *Journal of Perioperative Practice*, 17(8), 372-382. <https://doi.org/10.1177/175045890701700802> □

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Impact of Indira Gandhi National Open University on Learners of Chhattisgarh: A Study

Bijaya Kumar Sahoo*

Indira Gandhi National Open University (IGNOU) is a Central University established by an act of Parliament in 1985. It offers Ph.D, Master, Bachelor, Post Graduate Diploma, Diploma, Post Graduate Certificate, and Certificate programmes in both January and July Academic sessions in a year. The purpose of the University is to democratize higher education not only in the urban areas but also in the interior pockets of the country, particularly in the inaccessible places where higher education has not stepped in. The university is also extending its hand at increasing the country's Gross Enrolment Ratio (GER). The university has been recognized as the second-largest university in the world because of its largest network, student enrollment, and support services through different parameters and digital strength. The University's main strength is its high-quality self-learning study materials which replace the face-to-face classroom situation. The mandate of the university to reach the unreached places has been fulfilled by its open and flexible approach and movement for the heterogeneous groups of learners in different parts of the country. The University has reached the inaccessible and remotest places through its digital and mobile learning. Now, when the Government of India is insisting upon implementing the New National Education Policy---2020, IGNOU is trying to meet the Policy objectives by providing multi-skilled and need-based programmes along with employment provision through campus placement drives in the headquarters and the Regional centres across the country. IGNOU has adopted both inter-disciplinary and trans-disciplinary approaches. With the help of skilled and need-based programmes the University has generated efficiency among the students' community for getting jobs in the country.

The university has heterogeneous groups of learners which include women, especially housewives, college dropouts, retired persons, fresh young students, army personnel, professionals from different segments, disadvantaged sections comprising of Muslim and Christian women, and

*Assistant Regional Director (Selection Grade), Indira Gandhi National Open University (IGNOU), Regional Centre Raipur-492014, Chhattisgarh. E-mail: bksahoo@ignou.ac.in

differently abled persons. The distance learners are of different age groups including students of 18 to 90 years. In this way, there is no age bar in distance education and students of any age group can be a student of IGNOU. The approach is flexible especially since the students can progress at their own pace and choice of selecting programmes that help them acquire knowledge and enrich their potential and wisdom. IGNOU has been able to assert its position in the country because of its expansion and outreach programmes. It has won the hearts of millions of students and brings laughter to their faces through its quality education. It has created new milestones when the university is accredited with A ++ by the National Assessment and Accreditation Council in 2020.

In 2020-2021 the university played a pivotal and significant role during the COVID-19 lockdown. The university with strong determination and its multi-faceted network disseminated open and distance education in the country. The students could acquire education by completing their degrees and diplomas sitting at home.

In 2020, IGNOU was assigned the herculean task of creating awareness about NEP---2020 among the teaching fraternity in the universities and colleges in the country. With the help of an online platform, the University was able to impart training to about 1.5 lakh teachers about NEP-2020. Within a short period, the University has achieved the milestones because of its largest networking and digital platform.

At present IGNOU has signed an MOU with the Government of Kenya for strengthening open and Distance learning in Kenya. Similarly, IGNOU has an MOU with Nepal and Srilanka for the enhancement of Higher Education through ODL format. IGNOU is gaining popularity in the Commonwealth of Nations because of the quality of Education especially the study materials, evaluation process, certification, and delivery of teaching and learning mechanisms.

IGNOU is at present offering programmes through online mode and the certificate on its completion is valid and recognized by UGC.

IGNOU is successfully delivering its pedagogy through different mechanisms like e-Gyan Kosh the largest digital depository, Radio Counseling through Gyanvani channels, live interaction through Gyandarshan channels, teleconferencing, video conferencing, online platform, etc. Through its network, IGNOU successfully reaches the doorstep of the learners.

Both Digital and non-digital self-instructional study materials replace the classroom situation and help the students to comprehend the courses included in the programme. The programme comprises courses and each course again ramifies into blocks, Units, and sub-units. The most interesting matter is that the learners can feel the presence of the teachers while going through the study materials and feel that he or she is guided and supervised by the teachers with manifold examples followed by checking their progress with key answers and glossary and references of books for further study. Students can also assess themselves through self-assessment procedure and can find their mistakes while answering the questions. In the self-instructional study materials check your progress including the multiple, short, and long answer questions that the learner tries to answer then check the answer with the key answer appended at the end of the Units or sub-units. This is the significant character of the study materials provided by IGNOU to its students.

Besides that IGNOU has designed both face-to-face and online counseling classes for the learners. The learners' support centres work as the facilitators to the learners providing counseling classes. In the counseling classes, the learners prepare and attend the counseling session as well as participate in the discussion and clarify the doubts that he or she faces while going through the study materials provided by IGNOU. Counseling is a broad spectrum where the teacher acts as a counselor and counsels the learners by initiating group discussion, interaction debate, etc which prompts the learners to resolve the academic issues that he or she encounters while pursuing the programmes. This is generally the learner-centric approach that the counselors adopt in the counseling classes. In Open and Distance Education, the counseling class helps the learners to solve his or her academic issues.

Another important component is the writing of the assignment responses by the learners. There are two types of assignments the students have to

write and submit at the Learners' support centre for evaluation. They are tutor-marked and computer-marked assignments. The assignment is a set of questions that the learner has to write the answer to after going through the questions appended in the assignments. The students are instructed to write the answer in his or her own words after understanding the questions properly. The questions are generally tricky and asked to know the understanding level of the students. The counselors evaluate the assignments and give marginal comments on the side of each page and answer. Finally, the counsellors give global comments or overall comments on the assignments to encourage the learners to do better in the forthcoming term end Examination. The purpose of the assignment is to bridge the gap between the learners and the counselors act as communication between them and fulfill the purpose of interaction between the counselors and the learners. With the help of the assignments the learners are encouraged to excel in the Examination, in general, the counselors encourage the learners through positive comments which are given in the assignments. In assignments, the weightage is 30 percent and the calculation in the grade card is made taking the assignment marks into account. In this way, the assignments help the students to fulfill their academic needs.

In Open and Distance learning the learner support centres conduct practicals, project viva voce, counseling classes, supervision of practicum and internship, etc. The study centre conducts them through face to face. The learners' spare time in the study center and attend the practical and practical Examination. The programmes like BSC, MSCDFS, MAPC, BAPC, PGDFSQ, MSCDFSQ are generally highly professional and practical-based. The study centres conduct the practical through face-to-face mode and allow the students to experiment in the laboratory of the study centre in the colleges and universities to provide support services to the learners.

IGNOU conducts the term-end examination twice a year namely in June and December. The learners are guided by the Regional centre or study centre to fill up the Examination form online by paying the requisite fees. There is an option left to the learners to attempt the number of courses as per his or her wishes. The University is student-friendly and encourages the student to complete the programme at his or her own pace so that he or she

will not be over-stressed to complete the programme. The most interesting thing is that the University published the results of the learners within 40 days after the completion of the Examination schedule. The tentative schedule is published on the University website for the information of the learners. The students are given the opportunity to reassess the answer scripts and can apply for a photocopy of the answer scripts to know their performance. There is also a provision for the early declaration of the results of the students on certain conditions. Then final grade cards and provisional certificates are sent to the students at their address.

IGNOU exempts fees for the students of SC/ST categories for admission to some specific programmes based on their annual income. The fee exemption is applicable for some specific programmes announced by the university for the benefit of the marginalized section to boost their higher education. The University promotes scholarships to the students of SC/ST who do not avail fees exemption and get the all India Post Matric Scholarship.

The University has created a pool of Academic counselors from various Colleges and Universities. Any teacher from college or University can apply online for the empanelment of the Academic counselors. With the support of the Academic counselors, the university provides academic support to the students for the completion of their Master's, Bachelor, Post Graduate Diploma, Diploma, and Certificate programmes. The main strength of Open and Distance learning is the Academic counselors.

Given its multifarious benefits, the Author conducted a Study to bring out a comprehensive study of IGNOU and its impact on the state of Chhattisgarh. The objective of the study is to find out how far IGNOU and its ODL have impacted various age groups of learners. The study has a huge scope for further research for young researchers in the state of Chhattisgarh. However, the study is limited to the state of Chhattisgarh and the analysis of data can be made on the data of the students of Chhattisgarh only. A questionnaire was prepared for collecting data and analysis will be made based on the data. Confidentiality will be adopted in this research paper for the sake of respondents.

A Purposive sample of students was taken as samples from different disciplines of Master's degree. The students from Chhattisgarh have

enrolled themselves in different programmes offered by IGNOU. The admission sessions are of two types January and July which include fresh and Re-Registration. The detailed data from 2015 to 2023 is given in Table-1.

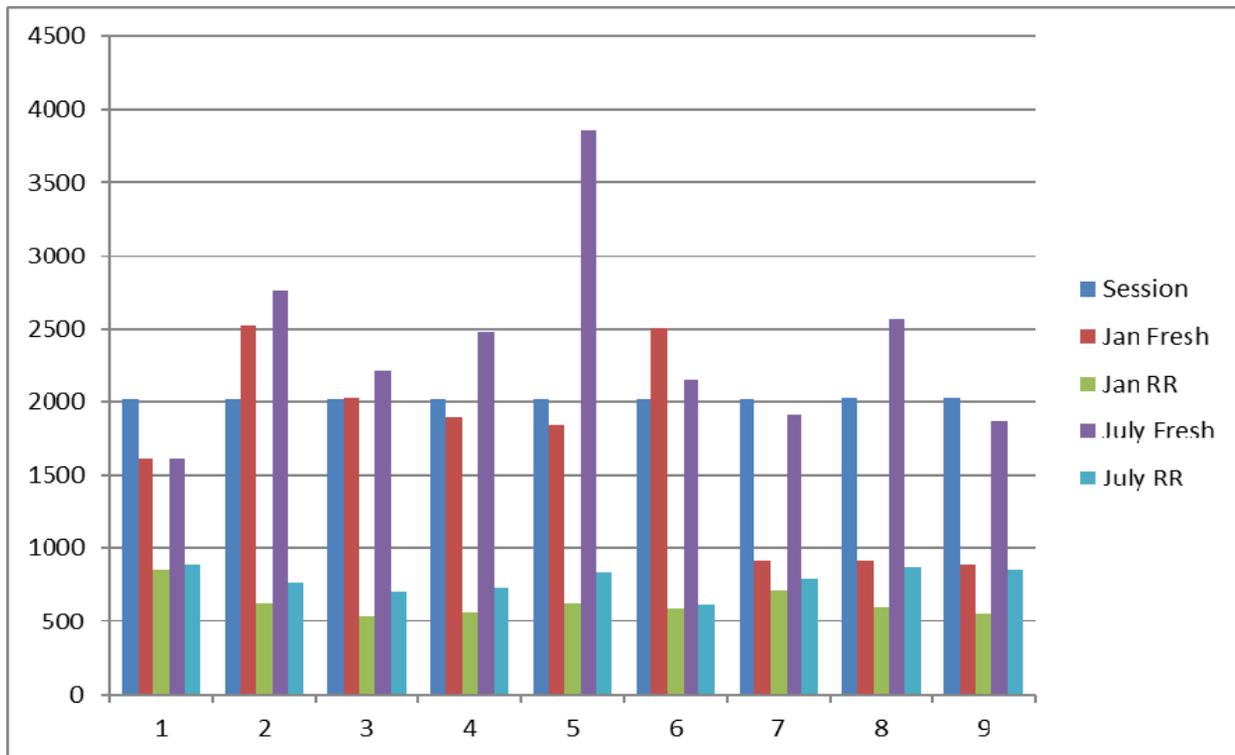
Table 1: Student Data of IGNOU from 2015 to 2023

Session	Jan		July	
	Fresh	RR	Fresh	RR
2015	1611	857	1613	887
2016	2523	625	2767	763
2017	2025	541	2215	701
2018	1900	561	2478	730
2019	1843	625	3857	842
2020	2505	589	2155	620
2021	913	712	1914	786
2022	916	599	2570	876
2023	891	556	1867	860

The questionnaire with Rating Scale was administered to the students of Master of Arts In Political Science, Master of Arts in History, Master of Arts in Public Administration, Master of Arts in Social Work, Master of Arts in Rural Development, Master of Science in Foods and Dietetics Management, Post Graduate Diploma in Rural Development, Bachelor Arts in History Honours, Bachelor of Arts in Political Honours, Bachelor of Arts in Social works, Diploma in Nutrition and Health Education, Certificate programme in food and nutrition, certificate programme in Guidance, Certificate Programme Nutrition and Child care. The respondents were assured that their responses through the questionnaire would be kept confidential and used in the research work only for drawing the conclusion from the respondents. The respondents participated and responded very actively. Whenever they had any doubts, they were instructed to ask the administrator to clear their doubts. 100 questionnaires were distributed in printed format to each programme opted by the students of the University. Response to the questionnaire with the following Rating Scale is depicted in Table 2 and Fig 2:

1. Agree with the above-mentioned statement that IGNOU has fulfilled the academic needs of the students in Chattisgarh
2. Completely agree with the above-mentioned

Fig-1: Table-1: Student Data of IGNOU from 2015 to 2023



- statement that IGNOU has fulfilled the academic needs of the students in Chattisgarh
3. Disagree with the above-mentioned statement that IGNOU has fulfilled the academic needs of the students in Chhattisgarh
 4. Completely disagree with the above-mentioned statement that IGNOU has fulfilled the academic needs of the students in Chattisgarh
 5. Did not respond or remain neutral.

Table 2: Response to the Study

Type of respondents	Agree	Completely agree	Disagree	Completely disagree	Neutral/not responded
MA in History	12	78	03	02	05
MA in Political Science	08	72	10	07	03
MA in Public Administration	02	75	13	05	05
MA in Social Work	14	71	10	02	03
MA in Rural Development	12	72	11	03	02
MSC in Dietetics and Food Services Management	02	80	14	01	03
Bachelor of Arts in History	11	75	04	03	07
Bachelor of Arts in Political Science	10	70	10	06	04
Bachelor in Social Work	08	74	08	07	03
Post Graduate Diploma in Rural Development	04	76	15	02	03
Diploma in Nutrition and Health Education	03	72	10	08	07
Certificate in Food and Nutrition	07	73	14	02	04
Certificate in Nutrition and Child Care	12	74	12	01	01
Certificate in Guidance	15	75	04	02	04

Fig 2: Diagrammatical Representation of Response

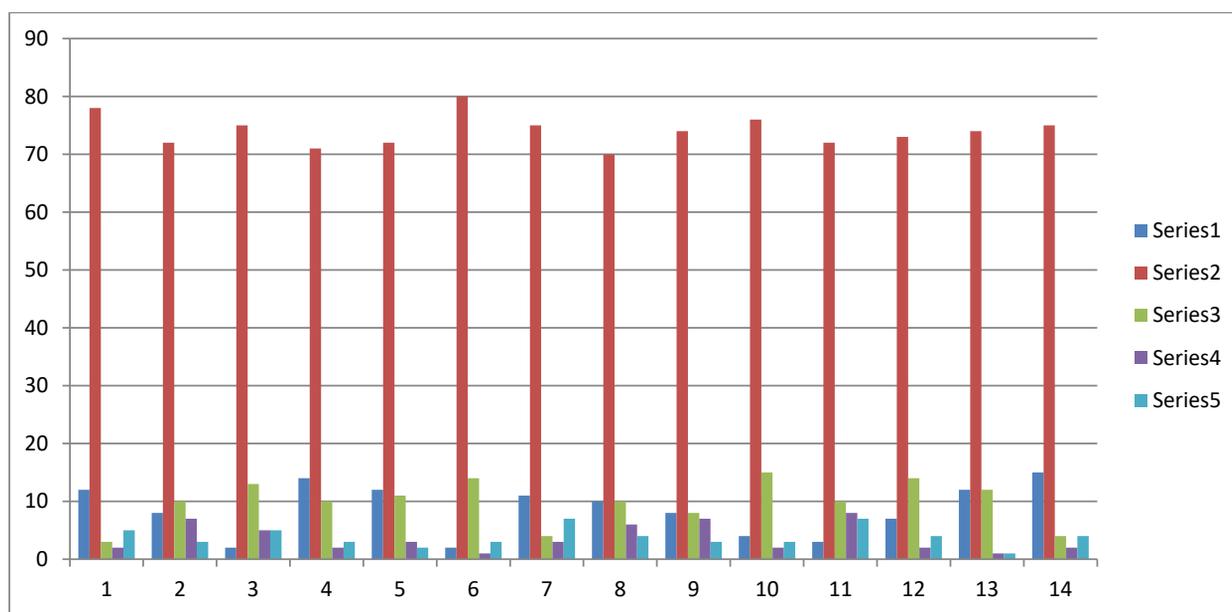


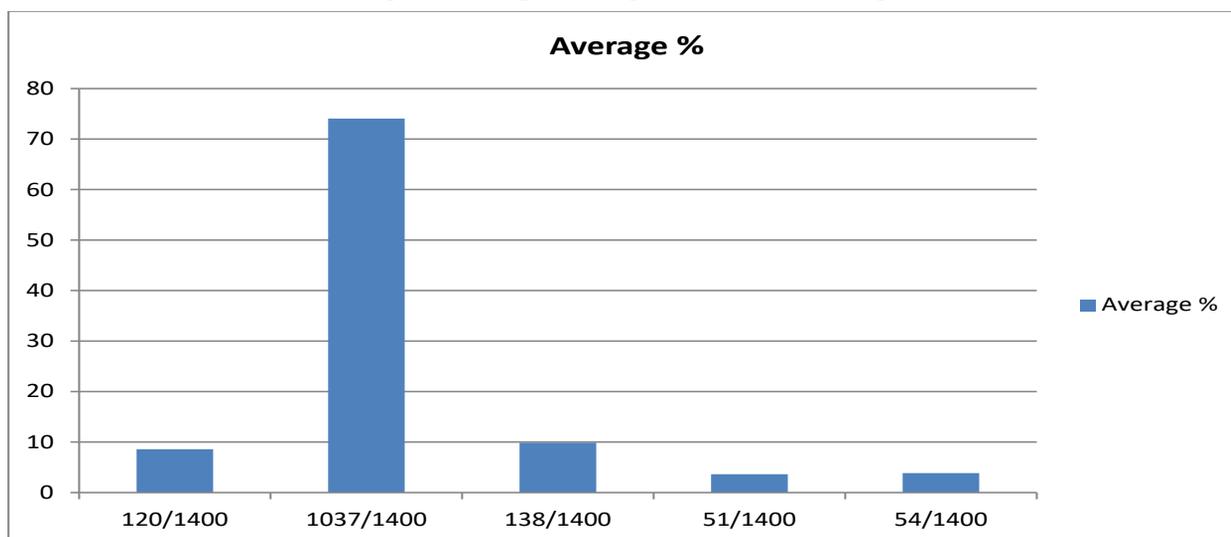
Table –3: Rating Scale as Per Type of Students

Type of respondents from different programmes	Agree %	Completely Agree %	Disagree %	Completely Disagree %	Not Responded
MA in History	12	78	03	02	05
MA in Political Science	08	72	10	07	03
MA in Public Administration	02	75	13	05	05
MA in Social Work	14	71	10	02	03
MA in Rural Development	12	72	11	03	02
MSC in Dietetics and Food Services Management	02	80	14	01	03
Bachelor of Arts in History	11	75	04	03	07
Bachelor of Arts in Political Science	10	70	10	06	04
Bachelor in Social Work	08	74	08	07	03
Post Graduate Diploma in Rural Development	04	76	15	02	03
Diploma in Nutrition and Health Education	03	72	10	08	07
Certificate in Food and Nutrition	07	73	14	02	04
Certificate in Nutrition and child care	12	74	12	01	01
Certificate in Guidance	15	75	04	02	04
Total	120/1400	1037/1400	138/1400	51/1400	54/1400
Average %	8.57	74.07	9.85	3.64	3.85

On the basis of the data collected from the respondents from different programmes, analysis has been made. Accordingly, the percentage was drawn

from the responses category-wise. Then the total percent for all the programmes category-wise was divided by maximum marks of 1400.

Figure-3: Graphical Representation of Rating Scale



Findings and Conclusion

1. After finding out the average percentage it was found that 8.57% of respondents agreed that IGNOU in fact has fulfilled the academic needs of the students.
2. 74.07 % of students have completely agreed that IGNOU in fact has fulfilled the academic needs of the students.
3. 9.85% of students expressed their dissatisfaction from different grounds regarding IGNOU and its delivery mechanism.
4. 3.64% of students completely disagreed with the statement that IGNOU has fulfilled their academic needs. Therefore, further special action can be initiated towards this category to know their dissatisfaction and special arrangements can be made to resolve their academic issues of any kind. Further research is required to understand their grievances and resolve their issues instantly so that the students' percentage towards IGNOU can increase without any doubt.
5. 3.85 % of students did not respond and tried to remain neutral. So it indicates that knowingly or unknowingly they tried to remain silent on various issues and did not want to divulge their problems before the researcher.

After thorough analysis it can be drawn that 82.64 % of students have accepted that IGNOU has fulfilled the academic needs of the students in the state of Chhattisgarh. Through the questionnaire, the researcher tried to bring the opinions of the students and proper analysis has been made, taking all precautions in mind. Generally, it can be said that IGNOU Regional Centre, Raipur has provided

Academic support services to learners of different age groups and created a conducive environment for the students to learn and fulfill their academic needs. Regional centres across India are providing Academic support services to the students of IGNOU and it is an example for other educational institutions in India. It was quite successful in its right spirit and approach to cater to the needs of the students

References and Readings

1. <http://www.ignou.ac.in/ignou/aboutignou/icc/ssc>.
2. <http://www.ignou.ac.in/ignou/aboutignou/icc/ssc/introduction#>:
3. https://www.researchgate.net/publication/336128443_Learner_Support_Services_in_Open_Distance_Learning_System_Case_Study_on_IGNOU
4. [http://www.ignou.ac.in/userfiles/Handbook%209%20PDF\(1\).pdf](http://www.ignou.ac.in/userfiles/Handbook%209%20PDF(1).pdf)
5. https://www.ignoustudentcorner.com/users/IGNOU_display_menu_sl/ignou-student-support-service-corner
6. https://www.researchgate.net/publication/311945137_Effectiveness_of_Student_Support_Services_Provided_by_Indira_Gandhi_National_Open_University_IGNOU
7. <http://www.ignou.ac.in/ignou/aboutignou/division/rsd/guidelines>
8. <http://www.ignou.ac.in/ignou/aboutignou/division/rsd/notification>
9. <https://egyankosh.ac.in/bitstream/123456789/46233/1/Unit-12.pdf>
10. https://www.academia.edu/31114206/Learner_Support_Services_in_Open_Distance_Learning_System_Case_Study_on_IGNOU
11. <http://www.ignou.ac.in/ignou/aboutignou/division/rsd/notification>
12. <http://www.ignou.ac.in/ignou/aboutignou/division/rsd/guidelines>
13. http://www.ignou.ac.in/ignou/aboutignou/icc/sschttps://www.academia.edu/31114206/Learner_Support_Services_in_Open_Distance_Learning_System_Case_Study_on_IGNOU □

Justice as a Service: Empowering Society through Wisdom and Action

Her Royal Highness Princess Sonam Dechan Wangchuck delivered the Convocation Address at the 31st Convocation Ceremony at the National Law School of India University, Bengaluru on August 26, 2023. She said, “As you begin your journey into the complex world, remember that these three qualities are not solitary virtues, but interconnected values that support and reinforce one another. When your actions are guided by these principles, you will find true purpose, meaning, and fulfillment in your lives.” Excerpts

It is with profound honour and gratitude that I stand amongst you today. I am filled with great joy to be addressing this August gathering and be a part of this momentous celebration.

Allow me to extend my heartfelt congratulations to the exceptional Class of 2023. Today, we are gathered here to bear witness to the culmination of your remarkable journey, and the successful completion of a special milestone in your lives. It is indeed a moment of pride to be graduating from NLSIU- an institution that has consistently been the torchbearer of modern legal education over the last three decades.

As I contemplate the significance of this event, I am reminded of the profound connection between India and Bhutan. India, our cherished neighbour, has always been an unwavering friend to Bhutan, fostering not only diplomatic relations but also the growth of our finest leaders, especially judges and lawyers- a few of whom have graduated from this very institution!

In approaching this address, I have been most mindful of the distinguished speakers who have preceded me at NLSIU’s Convocations. Speakers, who I realize, may be more familiar and relatable to you, and well-celebrated in their respective fields. They have had inspiring stories to share about themselves- stories of their struggles, failures, and successes. Though I may not fit the mould, or have inspiring stories to share today, I hope to instead take this opportunity to talk to you as a friend and remind you of the three important and profound qualities of Justice, Service, and Wisdom, as you venture into the real world as bright and capable young legal professionals.

Justice, Service and Wisdom

Shri Nandan Nilekani, Chairman and Co-Founder Infosys, who was your Chief Guest at the last

Convocation, had remarked that he was fascinated by the fact that Professor Madhava Menon founded NLUs with an objective to create “social engineers.” Like Shri Nandan-ji, I share the same fascination, and like Professor Menon, I share the similar belief that each one of us has the potential to become a “social engineer.” Provided, we are willing to discover and hone the essential qualities of justice, service, and wisdom—three important pillars that underpin purposeful lives, shape harmonious societies, and drive positive change.

Justice : The Foundation of a Just Society/Rule of Law

Justice is the cornerstone of a functional society which upholds and respects the rule of law. Simply put, justice is treating all with equal respect despite the growing inequalities in societies and the world. In this rapidly evolving world, injustice continues to take myriad forms, from technological and knowledge divide to environmental inequalities.

As aspiring social engineers, we must find solutions and forge a brighter future based on inclusive decision-making, empathetic action, and equal opportunities. As legal professionals, we are empowered to champion justice through actions as simple as not overcharging fees or by uplifting those marginalized and voiceless through pro bono services. We do not need to know complicated theories of justice to be a just person or to do justice.

As rightly said by Honourable Chief Justice Chandrachud in one of his recent conversations, “Justice is an essential service we provide to our citizens, and it is not just a sovereign function.”

Service : The Essence of Humanity

To become advocates of a just society, we must first embrace our roles as members of a larger

societal framework. Selfless service, grounded in compassion and interdependence, is the bedrock upon which prosperous communities are built. In a world obsessed with individualistic pursuits, service resounds as a beacon of unity and harmony.

Service transcends and connects us to our shared humanity. It enriches lives, fosters tolerance, and promotes collective well-being. As lawyers, you are bestowed with the remarkable power to serve not only the privileged but also those who lack a voice or representation. In this service, you will find purpose that extends beyond the self, resonating in the lives of those you touch.

Wisdom: Navigating the Complex World with Grace

Becoming agents of change requires wisdom—insight born of curiosity, critical thinking, and open-mindedness. In a world of unprecedented complexity, wisdom equips us to make informed and intelligent decisions, unravel intricate challenges, and envision holistic solutions. It arises not just from academic learning but from the continuous pursuit of knowledge, embracing diverse perspectives, and engaging in constructive dialogues.

Your time at NLSIU has undoubtedly nurtured your academic excellence, yet the quest for learning beyond the confines of the classroom allows wisdom to flourish through real-world experiences. There is knowledge to be gained in the interconnectedness of our actions, and in leading lives intertwined with justice and service.

Conclusion

Pioneers of a Brighter Tomorrow

Before I conclude, I would like to share and draw inspiration from Bhutan’s remarkable journey. We have had the good fortune of being blessed with

our successive monarchs who have brought social justice and transformation by practising compassion, equality, and truth. His Majesty the Fourth King believed that “as people need good doctors when they are sick, they need justice when they are wronged.” To ensure a just, equitable and sustainable society, he introduced the visionary framework of Gross National Happiness or GNH. The GNH framework assesses the quality of laws and policies we adopt, to ensure good and just governance—as a means to enable the people to pursue happiness. Guided by GNH, our Majesties the Kings have demonstrated that justice, service and wisdom are not mere ideals but pillars that sustain a harmonious nation. Their profound wisdom, selfless service and commitment to justice is what makes them the true “social engineers” of Bhutan.

When I was tasked with the responsibility of establishing Bhutan’s first law school by His Majesty the Fifth King, the path was very clear for us. We drew our inspiration from their Majesties, and adopted our core values as “Justice, Service, and Wisdom”. And today, we have committed ourselves to instilling and honing these three qualities in our graduates.

As you begin your journey into the complex world, remember that these three qualities are not solitary virtues, but interconnected values that support and reinforce one another. When your actions are guided by these principles, you will find true purpose, meaning, and fulfillment in your lives.

Class of 2023, your time here at NLSIU has equipped you with the tools; now it is time for you to wield them for the greater good. I wish each and every one of you a bright and fulfilling future ahead. I am certain each of you will make a positive impact in the paths you choose.

I would like to thank you for listening to me today. □

CAMPUS NEWS

International Conference on Innovations in Agriculture and Outreach Programmes

A two-day International Conference-*VAKSANA- 2024* on 'Innovations in Agriculture and Outreach Programmes: Challenges and Opportunities' was organised by the Shri Vaishnav Vidyapeeth Vishwavidyalaya (SVVV), Indore, Madhya Pradesh on September 19-20, 2024 through online mode. The event was inaugurated by traditional lamp lighting as a tribute to Saraswati Mata, the Goddess of Knowledge by the dignitaries; Shri. Kamal Narayan Ji Bhuradiya, Secretary, Shri Vaishnav Vidyapeeth Trust, Indore, Dr. K N Guruprasad, Dean, Faculty of Agriculture, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Prof. Vinod Dhar, Coordinator, Shri Vaishnav Institute of Agriculture, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore and Coordinators of the event, Dr. Suhas Mane and Dr. Narayan Gurav.

The Guest of Honour, Dr C D Mayee felicitated by Dr. K N Guruprasad, virtually. In the Welcome Address, Dr K N Guruprasad threw light on the funding policy for research and education in agriculture should be 2 per cent of GDP as per the recommendation of the World Bank, however presently, India has spent only 0.7 per cent of GDP on research and education in agriculture including extension. Dr. Guruprasad also underlined the need to maintain the proper ratio of extension workers and number of farmers for effective transfer of technologies. He also emphasized that there is a need to provide agriculture education in regional language. The Book and Souvenir of *Vaksana-2024* was released virtually by Shri. Kamal Narayan ji Bhuradiya and Dr. K N Guruprasad.

The session was continued with a brief introduction of Guest of Honour, Dr C D Mayee by Dr. Yuvraj Shinde followed by his deliberation on 'Indian Agriculture: Innovations to Meet the Emerging Challenges' through pre-recorded video.

Dr. Mayee began with the importance of Agriculture in the Indian economy and the strengths of Indian agriculture with lots of statistical data about export, import, and change in production levels over the period. He spoke about the transformation of Indian Agriculture and Agriculture vibrant sectors

like Horticulture and Fisheries. He also mentioned major challenges such as population, malnutrition, water scarcity, climate change, yield gap, and size of farm holding, etc. He also pointed out the need for policy reforms to address challenges like waste to wealth, sustainable development, and startups. He also mentioned that there is a need for genome editing in India instead of genome modification in crops.

The session was concluded with a Vote of Thanks to all the dignitaries proposed by Shri Kamal Narayan ji Bhuradiya followed by the national anthem. The session was moderated by Dr Anu Naruka and Dr Kishor Muthal was the rapporteur for the inaugural session.

The Technical Session was chaired by Dr. Santosh Dhar, Rector, Shri Vaishnav Vidyapeeth Vishwavidyalaya and Dean, Faculty of Doctoral Studies and Research, Dean, Faculty of Management, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore. Dr. Chhavi Tiwari and Rajni Solanki were moderators for the session and introduced the dignitaries with profile presentations. Dr. Hiral Gundaniya was the rapporteur of the session.

Dr. Santosh Dhar felicitated the Guest Speaker, Dr. Pramod Sawant, Former Professor, Extension Education, Dr. Babasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli. Maharashtra. In initial remarks, Dr. Dhar said that social media helps to develop community, and it plays a very crucial role in the transfer of agricultural technologies from researchers to the farmers, but there are some challenges because 75% population living in rural areas where farmers are facing availability and connectivity of internet.

Dr. Sawant enlightened the participants with his profound knowledge about the role of social media in the transfer of agricultural technologies. He began with the concept of social media and different platforms like Facebook, YouTube, WhatsApp, etc. He explained the benefits of social media in the transfer of technologies over traditional methods. Dr Sawant also commented on challenges in the use of social media along with possible solutions for better use of social media. The session was continued with various oral presentations. Participants from different states of India presented their research papers, showcasing

a wealth of innovative ideas and findings. Dr Rajni Solanki proposed the Vote of Thanks to dignitaries and the session was concluded.

Dr. Namit Gupta, Dean, Faculty of Engineering and Architecture, Director, Shri Vaishnav Institute of Technology and Science, Professor, Electronics and Communication, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore was the chairperson of the next session. Dr. Milind Ahire, Professor, Department of Agricultural Extension Education, Mahatma Phule Krishi Vidyapeeth, Rahuri Maharashtra was the invited guest speaker who delivered a lecture on the topic 'Carbon Footprint and Carbon Sequestration in Agriculture'. The session was resumed with poster presentations by 17 different researchers. Dr Babasaheb Walunjkar was the session moderator and Dr Megha Vishwakarma was the rapporteur for the session. Dr. V R Sampath, Director, Shri Vaishnav Institute of Textile Technology, SVVV chaired the technical session. Dr Tirunima Patle was the moderator and Prof Satish Patidar was the rapporteur for the session.

During Valedictory Session. Both the guests, Dr Narendra Singh Rathore, Former DDG, ICAR, New Delhi and Dr Rattan Lal, Distinguished University Professor, Ohio State University, Columbus, USA felicitated by the Chairperson, Dr K N Guruprasad virtually followed by a report presentation by Dr Narayan Gurav. Dr Narendra Singh Rathore deliberated on the topic 'Agriculture: Past, Present and Future' whereas Dr Rattan Lal delivered a lecture on 'Transforming Agriculture for Adaptation and Mitigation of Climate Change'. Both the guests highlighted the present status of Indian agriculture, and the strategies needed to face the existing as well as future challenges. Dr Rattan Lal stressed more on the issue of soil health mentioning its importance for human health. He suggested some points for a better-quality education that would be helpful for the teachers. Dr H M Patil, Mr Amar Dixit and Ms Anoosha Reddy gave feedback about the event. Dr. K N Guruprasad presented the concluding remarks. The Vote of Thanks was proposed by Prof Vinod Dhar.

National Conference on Psychology in a Globalized World

A two-day National Conference on 'Psychology in a Globalized World' is being organized by the Department of Psychology, Jamia Milia Islamia, New Delhi from February 04-05, 2025.

Globalization has connected cultures and societies, encouraging multiculturalism and diverse cultural exchanges, characterized by global movements of people goods, services, capital, technology, and cultural practices. However, this interconnectedness has also introduced challenges such as identity conflicts, socio-political tensions, mental health disparities, and environmental concerns exposure to multiple cultures can emphasize differences, leading to identity confusion and the rise of selective cultural affiliations. Events like the COVID-19 pandemic and international conflicts highlight the global impact of local issues, while nationalist movements resist globalization. Addressing these challenges requires dialogues on psychology's role in understanding global dynamics. The event aims to provide a platform for experts to discuss themes like identity, mental health, technology, and sustainable development, fostering cross-cultural knowledge exchange and new frameworks to address psychological challenges in a globalized world. The Subthemes of the event are:

- Identity, Migration, and Belongingness.
- Mind, Culture, and Society.
- Challenges to and Promotion of Physical and Mental Health.
- Culture, Work, and Organizations.
- Media, Technology, and Communication.
- Decolonization and Indigenization.
- Existential Threats (Misuse of AI, Pandemics, and Climate Change).
- Sustainable Development.
- Psychology of War.

For further details contact the Organizing Secretary, Dr. Meena Osmany, Department of Psychology, Jamia Millia Islamia, Jamia Nagar, New Delhi-110025, Phone No: (011) 26981717/26984617/ 26984658/26988044/26987183/26980229, E-mail: globalpsychologyjmi@gmail.com. For updates, log on to: www.jmi.ac.in

International Conference on Advancements in Material Science for Sustainable Development

A three-day International Conference on 'Advancements in Material Science for Sustainable Development' is being organized by the Department of Physics and Astrophysics, Central University of Haryana, Mahendergarh, Haryana from February 13-15, 2025. The event stands as a pivotal platform

for scholars, researchers, and industry professionals to converge and explore the latest advancements in materials science with a focus on sustainable development. This academic forum catalyses the exchange of innovative ideas, research findings, and collaborative initiatives aimed at addressing contemporary challenges. Attendees will have the opportunity to network with leading experts and gain insights into cutting-edge research. The major topics of the event are:

- Nanoscience and Nanotechnology.
- Smart and Functional Materials.
- Energy and Environmental Applications.
- Optical Materials, Nanophosphors, and Photonics.
- Sustainable and Green Technology.
- Sensors and Actuators.
- Nano Electronics and Nano Catalysis.

- Nuclear Materials.
- Polymers and Composites.
- Thin Films.
- Magnetic and Ferroelectric Materials.
- Semiconductor and Optoelectronics.
- Nonlinear Analysis and Applications.
- Computational Physics and Materials Science.
- Ion Beam Induced Modification in Materials.
- Materials for Food Technology and Packaging.
- Interdisciplinary Research for Sustainability.

For further details, contact the Organising Secretary, Department of Physics and Astrophysics, Central University of Haryana, Jant-Pali, Mahendergarh, Haryana-123031, Mobile No: 07217783644, 09811514070, and 09650122015, E-mail: aims2025.physics@cuh.ac.in. For updates, log on to: www.aims2025.cuh.ac.in/events/

AIU News

Capacity Building Training Programme in Social Sciences Research

The eight-day Capacity Building Training Programme in Social Sciences Research was organized by the Association of Indian Universities (AIU)-Academic and Administrative Development Center (AADC), Apex Professional University (APU), Pasighat, Arunachal Pradesh from November 20-27, 2024 through hybrid mode. The Welcome Address was delivered by Prof. N A Khan, Vice Chancellor, Apex Professional University. Ms Ranjana Parihar, Joint Secretary, AIU, New Delhi joined the event virtually and gave the opening remarks. The Coordinator, Dr. Tayek Talom, Director, School of Liberal Studies delivered the inaugural address. The session continued for about half an hour with the gracious presence of the participants, Registrar, Apex Professional University, Mr. Vijay Kumar Tilak, and Controller of Examinations, Dr. Urbashi Kachari. The event was concluded with a Vote of Thanks by Prof. S N Jha, Dean, Institute of Research and Innovations, APU.

Prof. S N Jha spoke during the session on 'Research Design: Formulating Research Questions and Hypotheses'. He discussed the Formulating

Research Question and Hypothesis. He started with the introduction of the term research. He also elaborated on the distinction and the relation between research and innovation. Prof. Jha mentioned that not all research leads to innovations. He enlightened the participant with the term 'Research Methodology'. He also educated the participants on the process of research, explaining the various objectives of research. Further, he explained the Research Design covering all the aspects of the topic i.e. observation, analysis and generalization in research. While explaining the Research Design, he mentioned the hypothesis. he covered various types of sampling and tools of data collection. He explained the importance of the pilot study and added the topic of coding, processing, and tabulating before analysing the collected data in the research. In the last part of his presentation, he explained the features of good research.

Dr. Pankaj Singh, Assistant Professor, Faculty of Education, Banaras Hindu University, Varanasi deliberated on the topic 'Digital Tools in Social Science Research: Social Media as a Data Source, Online Platforms for Surveys and Use of Different Prevalent Software'. Dr. Singh discussed the digital tools in social science research, social media as a

data source, online platforms for surveys, and the use of different prevalent software in social science research. He gave an illustration regarding the interrelationship of the research and statistics. He emphasized digital tools for data collection and surveys, data analysis and visualization, quantitative research tools, collaboration and project management, and bibliographic and reference management, and discussed machine learning and AI for social science research. He explained online platforms like Survey Monkey, Qualtrics, and Google Forms, mobile data collection apps like Open Data Kit (ODK) and Survey CTO, and social media data mining tools like RavenPack or Netlytic. For data analysis, he presented statistical software like SPSS, SAS, R, and Stata. The programming languages like R and Python, text analysis tools like NVivo, MAXQDA, network analysis tools like Gephi, UNINET and Pajek, and geospatial analysis tools like ArcGIS and QGIS were also well explained by the respected resource person of the session. The data sharing and open science are discussed clearly along with the ethical considerations and data security. The respected resource person of the session discussed the specialized tools for social science fields. He presented the key benefits of social media as a data source and also explained the methods for collecting social media data. The analytical techniques used for data collection were discussed clearly along with the ethical considerations related to such data. The tools for survey, data collection, and analysis were well explained by the respected resource person of the session. In the last part of his presentation, he demonstrated the use of SPSS and other data analysis and survey platforms very effectively.

Dr. A K Pandey, Associate Professor, Faculty of Education and Information Science, Apex Professional University, Pasighat spoke during the session on 'Quantitative Research: Survey Design and Sampling'. Beginning with the meaning of research, the resource person explained the types of research and research methodologies. He also discussed survey design, highlighting its advantages, disadvantages, and ethical concerns. Furthermore, he elaborated on sampling techniques and their various types.

Dr. Jyotsna Raj, Dean, Faculty of Law and Forensic Sciences, Apex Professional University, Pasighat spoke on the topic 'Proposal Writing for Research Grants in Social Sciences'. Dr. Raj highlighted the importance, objectives, scope, how

to select a grant, general tips for selecting a grant, the structure of development, anticipated findings, and their significance with suitable examples.

Dr. Lalengkima, Assistant Professor, Department of Economics, Mizoram University spoke during the next sessions on 'SPSS Benefits and Basics' and 'Application of SPSS in Social Sciences Research'. He highlighted in his session the concept and overview of SPSS file extension, rules for variable naming, opening process of SPSS, data management, sorting cases, basic analysis and output of the data with appropriate examples.

Dr. Akash Kumar Bhoi, Adjunct Research Faculty, Directorate of Research, Sikkim Manipal University, Sikkim spoke on 'Mastering Research Foundations: Systematic and Comprehensive Literature Reviews with an Introduction to Meta-Analysis'. Dr. Bhoi, unraveling the secrets of mastering systematic and comprehensive literature reviews. He said, "Every researcher must understand the importance of a good literature review. It's not just about summarizing papers but finding gaps, avoiding duplication, and building a strong foundation for your work." He explained a systematic review was like solving a mystery. In contrast, a comprehensive review was a broader exploration, offering an overall understanding of the topic. To avoid bias and maintain clarity, Dr. Bhoi emphasized the PRISMA 2020 guidelines, a researcher's roadmap for defining inclusion and exclusion criteria. It ensures that the literature review remains transparent and objective. The conversation then shifted to meta-analysis, where statistical techniques combine data from multiple studies to conclude a body of research. But he warned of challenges—misleading results could arise if studies were too dissimilar. As he wrapped up, he demonstrated how tools like Google Scholar, Semantic Scholar, Consensus, Scispace, Opentex, etc., help to filter studies by year and save resources in a library. These AI tools help in finding the research gap, citing data, paraphrasing, etc. 'Stay up-to-date', he urged. "The last 4-5 years are your window into current research trends", he said. By the end, attendees left with a clear roadmap for literature reviews and meta-analysis. Toward the end of the session, the speaker provided a clear demonstration of these AI tools and how to use them while doing the research. He concluded the session by reminding everyone that research is not just a task but an art of discovery.

Prof. Giribabu M, Department of Economics, Mizoram University, Aizawl, Mizoram delivered on 'Data Collections Methods and Research Design in Social Science Research'. The resource person spoke about Data Collection Methods in Social Sciences which include Questionnaire/ Interview Schedules, Surveys and Observations.

The highlight of the session was the statement, 'Data collection is the basic things, how you are going to start your projects or research'. He spoke about the importance of data collection in research and also highlighted research tools that can be used to collect data, things included under data sources, and the selection of methods of data collection. The resource person also talked about methods and tools of data collection comprising interview method, questionnaire method, observation method, survey method with characteristics, types, and process, advantages and disadvantages of each method of data collection. The resource person also highlighted the importance of the concept of Research Design by explaining the steps for preparation of research design, its types and methods which can be used in selecting an appropriate research design. The Expert concluded his session by saying that a good Research Design helps a researcher at every stage of research by keeping the research on the right track and finding the solutions to the research problem in the most logical, effective, and efficient way. He also added that before choosing a particular design, a researcher is advised to explore all possible designs catering to the needs of the research in question and then select the best amongst these based on the research problem paradigm, research approach applicable, training and experience and audience of the research. The intensive technical sessions raised a lot of curiosity among the audience and were followed by an interactive session where participants got the opportunity to clarify their doubts and exchange opinions and observations. The most relevant question raised was about the difference between structured, unstructured and in-depth methods, the meaning of semi-structured information, various challenges faced in the collection of data for research, etc.

Prof. Anga Padu, Department of Education, Rajiv Gandhi University, Arunachal Pradesh spoke on 'Foundations of Social Science Research: Disciplines, Scope and Key Research Paradigms'. Starting with the definition of social science and its classification, the resource person spoke about the diverse scopes of social sciences, for instance, the scope related to understanding human relationships, social environment, education of social life, civic sense, etc. She presented the two most popular paradigms in social sciences research i.e. Positivism and Post-positivism. She explained the assumptions and characteristics of both paradigms.

Dr. A K Mishra, Dean, Faculty of Education and Information Science, Apex Professional University, Pasighat spoke on the topic 'Publication Ethics and Best Practices in Research'. The session started with the introduction of the resource person by the host, Mr. Shankar Barman. The resource person spoke about the ethical importance of publishing a research work. He presented about the conflicts of interest and their types. He cited examples of publication misconduct and types of plagiarism. He presented the guidelines of ICMJE and explained well the ghost author and guest authorship in research publications. The resource person also focused on the predatory publishers and journals. He discussed the penalties for plagiarism.

Prof. C Siva Sankar, Department of Education, Rajiv Gandhi University, Arunachal Pradesh on the topic 'Qualitative Research: Techniques, Tools and Sampling'. He explained the introduction of Qualitative Research and Qualitative forms Phenomenology Ethnology Case Study, Grounded Theory. Further, he explained the Techniques: Triangulation, Type of Triangulation, Tools and techniques, Sampling: Non-Probability, Purposive Sampling, Snowball Sampling, Quota Sampling, and Convenience Sampling. During the Valedictory Session, the participants were provided certificates, and feedback forms were collected through mail. The session was concluded with a Vote of Thanks by the Coordinator, Dr. Tayek Talom, Director, School of Liberal Studies, Apex Professional University, Pasighat, Arunachal Pradesh. □

Opinions expressed in the articles published in the University News are those of the contributors and do not necessarily reflect the views and policies of the Association.

THESES OF THE MONTH

SCIENCE & TECHNOLOGY

A List of doctoral theses accepted by Indian Universities
(Notifications received in AIU during the month of October-November, 2024)

AGRICULTURAL & VETERINARY SCIENCES

Biochemistry

1. Vandna. **Physiological and biochemical analysis of nitrogen use efficiency in wheat.** (Dr. V. K. Gupta and Dr. Ranjan Gupta), Department of Biochemistry, Kurukshetra University, Kurukshetra.

BIOLOGICAL SCIENCES

Biochemistry

1. Tyagi, Shama. **Genetic variants of TSHR and DIO2 genes and their association with thyroid disorders.** (Dr. Ranjan Gupta), Department of Biochemistry, Kurukshetra University, Kurukshetra.

Biotechnology

1. Aarju. **Eco-physiological and molecular studies on sandalwood - host interaction under salt stress.** (Dr. Sulekha Chahal and Dr. Ashwani Kumar), Department of Biotechnology, Kurukshetra University, Kurukshetra.
2. Patwa, Neha. **Molecular analysis of genes associated with wheat grain quality and tolerance under salinity stress.** (Dr. Anita Yadav and Dr. Vanita Pandey), Department of Biotechnology, Kurukshetra University, Kurukshetra.

Life Science

1. Shah, Dhriti Pravin. **Effect of altered glycaemic levels on synaptogenic adhesion molecules mediated insulin secretion.** (Dr. Ameer Nair), Department of Life Sciences, Nirma University, Ahmedabad.
2. Tandel, Nikunjibhai Umedbhai. **Evaluation of CD8+ T cell generation by malaria protein antigen(s) in a mouse model.** (Dr. Sarat Dalai), Department of Life Science, Nirma University, Ahmedabad.
3. Tarun Kumar. **Purification of protein charge variants and determination of their potency.** (Dr. Sriram Seshadri), Department of Life Sciences, Nirma University, Ahmedabad.

Zoology

1. Boora, Vipin. **Assemblages of Wetland Bird Community in Rural Ponds of District Kurukshetra, Haryana (India).** (Dr. Parmesh Kumar), Department of Zoology, Kurukshetra University, Kurukshetra.

2. Hassan, Aamina. **Effect of fat soluble vitamins on growth and hemato-biochemical parameters of common carp, *Cyprinus carpio communis* fingerlings.** (Prof. Gohar Bilal Wani and Dr. Imtiaz Ahmed Khan), Department of Zoology, University of Kashmir, Srinagar.
3. Nissar, Sinan. **Population biology of *Pethia conchonius* (Hamilton) and *Crossocheilus diplochilus* (Heckel) in Dal Lake, Kashmir.** (Dr. Yahya Bakhtiyar and Dr. S M Zuber), Department of Zoology, University of Kashmir, Srinagar.
4. Rathee, Vishavjeet. **Studies on mechanisms of titanium dioxide nanoparticles induced toxicity in testicular germ cells of goat (*Capra hircus*).** (Dr. Jitender Kumar Bhardwaj), Department of Zoology, Kurukshetra University, Kurukshetra.
5. Sapna. **Genotoxic effects of sewage waste water on fish and its biotreatment using autochthonous microorganisms.** (Dr. Anita Bhatnagar), Department of Zoology, Kurukshetra University, Kurukshetra.
6. Sharma, Kritika. **Effect of cinnamon extract on chemotherapy induced skeletal muscle atrophy.** (Dr. Sanjeev Kumar Gupta), Department of Zoology, Kurukshetra University, Kurukshetra.

EARTH SYSTEM SCIENCES

Environmental Science

1. Patel, Divya. **Investigation of groundwater composition in four districts of Gujarat with emphasis on management of uranium and fluoride.** (Prof. P Padmaja Sudhakar), Department of Environmental Science, M S University of Baroda, Vadodara.

Geology

1. Goswami, Abhisikta. **Stable isotope systematics and Geochemistry of Carbonate Rocks, Umra Area, Aravalli Super group, Rajasthan, Western India: implications on the Lomagundi Jatuli and Great oxidation events.** (Prof. S Sarangi), Department of Applied Geology, Indian Institute of Technology, Dhanbad.

Geophysics

1. Akkiraju, Vyasulu Venkata. **Geothermal and meteorological records of climate change in Peninsular India.** (Prof. Shalivahan), Department of Applied Geophysics, Indian Institute of Technology, Dhanbad.

ENGINEERING SCIENCES

Civil Engineering

1. Ajitha, Bollavaram. **A study on the effect of Al_2O_3 nano particles on workability, strength & durability characteristics of high strength concrete.** (Dr. H. Sudarsana Rao), Department of Civil Engineering, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.
2. Abbass, Mahapara. **Properties of rice husk ash and basalt fibre based sustainable geopolymer concrete in rigid pavements.** (Dr. Gyanendra Singh), Department of Civil Engineering, Deenbandhu Chhotu Ram University of Science and Technology, Murthal.
3. Hullur, Uma G. **An experimental investigation on stabilization of black cotton soil using ternary blends.** (Dr. K B Prakash and Dr. S. Krishnaiah), Department of Civil Engineering, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.
4. Mistry, Pranav Bhavinkumar. **Meteorological, hydrological and agricultural drought assessment & forecasting: A case study of North Gujarat Region, India.** (Dr. T M V Suryanarayana), Department of Civil Engineering, M S University of Baroda, Vadodara.
5. Shroff, Kinjal Chintan. **Process optimization for the co-digestion of organic fraction of municipal solid waste and bio flocculated sludge generated in activated sludge process of sewage treatment using anaerobic process.** (Dr. Nirav G Shah), Department of Civil Engineering, M S University of Baroda, Vadodara.

Computer Science & Engineering

1. Bodkhe, Umesh Sakharam. **Secure data dissemination framework for internet of vehicles environment.** (Dr. Sudeep Tanwar), Department of Computer Science and Engineering, Nirma University, Ahmedabad.
2. Hathaliya, Jignaben Jethabhai. **Blockchain-based privacy preservation supply chain framework for healthcare 5.0.** (Dr. Sudeep Tanwar), Department of Computer Science & Engineering, Nirma University, Ahmedabad.
3. John, Sonal. **To optimize the performance of General Purpose Graphics Processing Unit (GPGPU) and its synchronization with CPU.** (Dr. Saurabh Jain), Shri Vaishnav Institute of Computer Applications, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore.
4. Mangala, N. **Four layered architecture for improved response and multi security blockchain for IOT-cloud systems.** (Dr. Venugopal K R and Dr. B Eswara Reddy), Department of Computer Science & Engineering, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

5. Pal, Akansha. **Context based friend recommendation system in social networks.** (Dr. Abhishek Singh Rathore), Shri Vaishnav Institute of Information Technology, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore.
6. Rathod, Tejal Jashubhai. **Resource management for device-to-device communication in heterogeneous network using AI.** (Dr. Sudeep Tanwar), Department of Computer Science & Engineering, Nirma University, Ahmedabad.
7. Thakkar, Riddhiben Sanjaykumar. **Handling multilevel elasticity for distributed stream processing in cloud environment.** (Dr. Madhuri Bhavsar), Department of Computer Science and Engineering, Nirma University, Ahmedabad.

Electrical & Electronics Engineering

1. Subhash Kumar. **Development of WSN for early detection of fire in underground coal mines.** (Prof. Jitendra Kumar), Department of Electronics Engineering, Indian Institute of Technology, Dhanbad.

Electronics & Communication Engineering

1. Sharma, Rachna. **Performance analysis of underwater visible light communications systems.** (Dr. Yogesh Trivedi), Department of Electronics and Communication Engineering, Nirma University, Ahmedabad.
2. Sinha, Khushboo. **Performance of spectrum sensing schemes in cognitive radio for static and dynamic primary users in additive laplacian noise.** (Dr. Yogesh Trivedi), Department of Electronics and Communication Engineering, Nirma University, Ahmedabad.

Fuel & Mineral Engineering

1. Sudhir, Shriprakash. **Studies on the pelletization of goethite ore using rice husk and high temperature behaviours of pellets.** (Prof. Shatrughan Soren), Department of Fuel, Mineral & Metallurgical Engineering, Indian Institute of Technology, Dhanbad.

Mechanical Engineering

1. Bagga, Prashant Jagdishchandra. **Some studies on tool condition monitoring systems using computer vision and artificial intelligence techniques.** (Dr. K M Patel), Department of Mechanical Engineering, Nirma University, Ahmedabad.
2. Bhatt, Anandkumar Ambaprasad. **Experimental investigations on wickless and wicked multi-branch heat pipe in different orientations.** (Dr. R N Patel and Dr. Sanjay V Jain), Department of Mechanical Engineering, Nirma University, Ahmedabad.

3. Ghosh, Gaurab Kumar. **Experimental and mathematical analysis of gear oil based nanolubricants.** (Prof. Subrata Kumar Ghosh, Prof. Niranjana Kumar and Dr. Ankit Kotia), Department of Mechanical Engineering, Indian Institute of Technology, Dhanbad.
4. Makwana, Rudreshkumar Dineshbhai. **Formability analysis of AA5052 alloy for single-point incremental hole flanging process.** (Dr. K M Patel), Department of Mechanical Engineering, Nirma University, Ahmedabad.
5. Mishra, Shraavan Kumar. **Laminar external flow around single and twin in-line objects.** (Prof. Subhankar Sen), Department of Mechanical Engineering, Indian Institute of Technology, Dhanbad.
6. Panda, Santosh Kumar. **Numerical investigation of film flow and CUSP entrainment caused by combined influence of rotational flux and horizontal cross flow.** (Dr. Basanta Kumar Rana), Department of Mechanical Engineering, Kalinga Institute of Industrial Technology, Bhubaneswar.
7. Patel, Anand Somabhai. **Investigations on lean six sigma deployment framework with a focus on Indian SMEs.** (Dr. K M Patel), Department of Mechanical Engineering, Nirma University, Ahmedabad.
8. Patel, Dhaval Vallabhbhai. **Development of condition monitoring approaches for rolling element bearing using singular spectrum analysis.** (Dr. K M Patel), Department of Mechanical Engineering, Nirma University, Ahmedabad.
9. Ramachandran, M. **Development of PLA jute fiber composites modified with compatible filler materials.** (Dr. B A Modi), Department of Mechanical Engineering, Nirma University, Ahmedabad.
10. Rathod, Jigneshsinh Mahendrasinh. **Investigations on the thermal performance of miniature flat heat pipe.** (Dr. V J Lakhera), Department of Mechanical Engineering, Nirma University, Ahmedabad.
11. Saksena, Dipakkumar Parsottambhai. **Numerical investigations on the thermo-hydraulic characteristics of conical spiral tubes.** (Dr. V J Lakhera), Department of Mechanical Engineering, Nirma University, Ahmedabad.
12. Shah, Balkrushna Arvindbhai. **Experimental investigations on pool boiling heat transfer over external micro-finned cylindrical surfaces.** (Dr. V J Lakhera), Department of Mechanical Engineering, Nirma University, Ahmedabad.
13. Shalok, Bharti. **Experimental investigations on hybrid surface composite of AA5083 produced by friction stir processing.** (Dr. Nilesh D Ghetiya), Department of Mechanical Engineering, Nirma University, Ahmedabad.
14. Shruti, Chanakya Bhatt. **Multiphysics simulation and experimental study of microwave based melting of AA6061 alloy.** (Dr. Nilesh D Ghetiya), Department of Mechanical Engineering, Nirma University, Ahmedabad.

Textile & Apparel Design

1. Garg, Saurabh. **Studies on computer aided colour measurement, matching and compatibility of dyes for compound shades production on textiles using natural dyes.** (Prof. D P Chattopadhyay), Department of Textile Chemistry, M S University of Baroda, Vadodara.

MATHEMATICAL SCIENCES

Mathematics

1. Malik, Shabir Ahmad. **On some extremum problems and inclusion of zeros of a polynomial.** (Prof. B A Zargar), Department of Mathematics, University of Kashmir, Srinagar.
2. Munshi, Shivam Rasbihari. **Mathematical study of motion and control of low earth orbit satellites under the effect of Earth's Zonal harmonics and atmospheric drag.** (Dr. B S Ratanpal), Department of Applied Mathematics, M S University of Baroda, Vadodara.

MEDICAL SCIENCES

Ayurveda

1. Chaudhari, Sachin Harishchandra. **Efficacy of padmakadigana siddha ghruta according to Ashtang Hrudya with L-arginine sachet in Garbha shosha with special reference to oligohydramnios.** (Dr. Mehre Seema Chandrakant), Faculty of Ayurved, Maharashtra University of Health Sciences, Nashik.
2. Gandhi, Piyush Krantikumar. **In vitro experimental evaluation of role of Shuddha (Purified) and Ashuddha (Impure) hartala (Orpiment) on glucose metabolism in 3T3 L1 adipocytes.** (Dr Ingole Rajesh Kundlikrao), Faculty of Ayurved, Maharashtra University of Health Sciences, Nashik.
3. Kantharia, Shivaranjani Jagjivanbhai. **A single blind randomized clinical study comparing muskakadi gana ghanvati and navaka guggulu along with lifestyle modification in Sthaulya (Obesity).** (Prof. Manish V Patel), Faculty of Kayachikitsa, Gujarat Ayurved University, Jamnagar.

4. Kulkarni, Prajakta P. **Randomized controlled trial to evaluate efficacy of Aaragwadhadi Lepa followed by patolmooladi kashay orally in dadru w.s.r. to t. corporis.** (Dr. Kulkarni Rajan Balvant), Faculty of Ayurved, Maharashtra University of Health Sciences, Nashik.
5. Mogal, Bhushan Bapusaheb. **Chronic toxicity study of Ras Sindoor in albino rats.** (Dr. Abhay H Patkar), Faculty of Ayurved, Maharashtra University of Health Sciences, Nashik.
6. Nalkande, Mangesh Wasudeo. **Study of efficacy of Guduchi (Tinospora Cordifolia) + Punarnava (Boerhavia diffusa) churna in the management of aavilmutrata in shool madhumehi with special reference to microalbuminuria in type-II DM.** (Dr. S V Bhosle), Faculty of Ayurved, Maharashtra University of Health Sciences, Nashik.
7. Pabitwar, Kiran Ramakantrao. **Effect of Saindhava Lavana (Himalayan pink rock salt) as a dietary alternative to Samudra Lavana (Table salt) in prehypertension.** (Dr. Bansode Ramesh M), Faculty of Ayurved, Maharashtra University of Health Sciences, Nashik.
8. Pawade, Uday Venkatrao. **In vitro and in vivo study of Bilwadi agada w.s.r. to its antioxidant and immunomodulatory activity.** (Dr. Abhay H Patkar), Faculty of Ayurved, Maharashtra University of Health Sciences, Nashik.
9. Pawale, Santosh Dnyanoba. **Comparative study of effect of Yashtimadhu churna and Yashtimadhu ghruta on spatial learning and memory in terms of ache activity in wistar albino rats.** (Dr. Ingole Rajesh Kundlikrao), Faculty of Ayurved, Maharashtra University of Health Sciences, Nashik.

Biochemistry

1. Currim, Fatema Mustafa. **Studying the role of exosomal miRNA's in intercellular communication in Parkinson's Disease.** (Prof. Rajesh Singh), Department of Biochemistry, M S University of Baroda, Vadodara.
2. Shinde, Anjali Yogesh. **Analysis of TNF- α regulated metabolic reprogramming in ER/PR +ve and -ve breast cancer cells.** (Prof. Rajesh Singh), Department of Biochemistry, M S University of Baroda, Vadodara.

Dentistry

1. Kolte, Vrinda. **Mandibular ramus, condyle and glenoid fossa dimensions as predictor of age & gender in Central Indian population – CT based retrospective age cohort study.** (Dr. Sheno Ramkrishna), Faculty of Dental, Maharashtra University of Health Sciences, Nashik.

2. Makade, Chetana Sachin. **Comparative evaluation of sodium hypochlorite, lemongrass oil and basil oil for rapid chairside disinfection of gutta percha cones before obturation- an in-vitro study.** (Dr. Sheno Ramkrishana), Faculty of Dental, Maharashtra University of Health Sciences, Nashik.
3. Manekar, Varsha Sunil. **To evaluate surgical outcome of one stage ridge split with and without buccal bone augmentation in partial edentulism for dental implant surgery.** (Dr. Ramkrishana Sheno), Department of Dentistry, Maharashtra University of Health Sciences, Nashik.

Homeopathy

1. Ghiya, Mahavir Bansilal. **Evaluation of considering thermal state as important feature for cure of patient having dynamic diseases through observational case control study.** (Dr. Desarda Kanchan Shantilal), Department of Homeopathy, Maharashtra University of Health Sciences, Nashik.

Nursing

1. Valsalan, Wilma Stanley. **A sequential mixed method study to explore the quality of life, coping & lived experiences of women with ovarian cancer & their family caregivers in a selected hospital in Maharashtra.** (Dr. Jaya Kuruvilla), Faculty of Allied Health Sciences, Maharashtra University of Health Sciences, Nashik.

Pharmaceutical Science

1. Bana, Arpit Arunkumar. **Comparative analytical characterization of selected biosimilar formulations available in India.** (Dr. Priti Mehta), Department of Pharmacy, Nirma University, Ahmedabad.
2. Chaudhari, Khushbu Ravindra. **Studies towards cocrystal formation, characterization and stability of anti-retroviral agents.** (Dr. Jignasa Savjani), Department of Pharmacy, Nirma University, Ahmedabad.
3. Dattatraya, Garkal Atul. **Design and development of long-acting formulation for the treatment of posterior segment eye diseases.** (Dr. Tejal Mehta), Department of Pharmacy, Nirma University, Ahmedabad.
4. Daude, Rakesh Bhagirath. **Investigation of efficacy of selected drugs on matrix metalloproteinase (MMP-2 and MMP-9) and histone deacetylase 2 Modulation in experimentally induced diabetic nephropathy.** (Dr. Jigna Shah), Department of Pharmacy, Nirma University, Ahmedabad.
5. Padma, Kartik Hariharan. **Formulation, development and evaluation of lipidic nano formulations for local therapy of oral cavity cancer.** (Dr. Tejal Mehta), Department of Pharmacy, Nirma University, Ahmedabad.

6. Patel, Parmi Kirithbhai Meenaxi. **Evaluation of neuroprotective effects of a DNA polymerase inhibitors and selective netraceuticals in Alzheimer's disease models.** (Dr. Jigna Shah), Department of Pharmacy, Nirma University, Ahmedabad.
7. Rawat, Sushama. **Design and synthesis of benzimidazole derivatives as anticancer agents.** (Dr. Manjunath Ghate), Department of Pharmacy, Nirma University, Ahmedabad.
8. Vyas, Gunjan. **Preparation and characterization of BCS Class II drugs to enhance physicochemical attributes via co-crystallization approach.** (Dr. Jigar N. Shah), Department of Pharmacy, Nirma University, Ahmedabad.
9. Yadav, Dattatraya Jalindhar. **Solubility and bioavailability enhancement of poorly water soluble API's for the cost effective formulation.** (Dr. Jignasa Savjani), Department of Pharmacy, Nirma University, Ahmedabad.

PHYSICAL SCIENCES

Chemistry

1. Hirpara, Darshna Bhikhalal. **Association of amphiphilic molecules in various solvent systems.** (Dr. Sanjeev Kumar), Department of Applied Chemistry, M S University of Baroda, Vadodara.
2. Keerti Rani. **Nanoparticles: Synthesis, surface modification, characterization and applications.** (Dr. Ramesh Kumar), Department of Chemistry, Kurukshetra University, Kurukshetra.
3. Lakhani, Pratikkumar Chimanbhai. **Silica-based porous solid supports: towards the development of enantioselective chiral catalysts.** (Dr. Chetan K Modi), Department of Applied Chemistry, M S University of Baroda, Vadodara.
4. Patil, Jayashree Vishvasrao. **Synthesis and applications of oxygen/nitrogen containing five/six membered heterocyclic compounds.** (Prof. Shubhangi S Soman), Department of Chemistry, M S University of Baroda, Vadodara.
5. Thakar, Meetkumar Kalpeshbhai. **Process development and quantification of toxic metals impurities from pharmaceutical and food products.** (Dr. Pankaj Sharma), Department of Applied Chemistry, M S University of Baroda, Vadodara.
6. Travadi, Maitrey Chirantan. **Synthesis, spectral characterization and structural analysis of metal complexes containing acyl pyrazolone ligands and some inner transition metals.** (Dr. R N Jadeja), Department of Chemistry, M S University of Baroda, Vadodara.

Physics

1. Adhiya, Ashaben Narendrakumar. **Study and applications of polarization characteristics of optical media using stokes/mueller matrix polarimetry.** (Dr. Ankur Pandya), Department of Physics, Nirma University, Ahmedabad.
2. Gor, Abhishek Atulbhai. **Synthesis and characterization of M-type hexaferrites and their films for various applications.** (Dr. Chetna Chauhan), Department of Physics, Nirma University, Ahmedabad.
3. Patel, Harsh Dineshbhai. **Synthesis and characterization of glassy and rubbery polymer nanocomposite membranes.** (Dr. Naveen K Acharya), Department of Applied Physics, M S University of Baroda, Vadodara.
4. Tanna, Rakeshkumar Laxmidas. **Experimental studies of confinement improvement, disruption mitigations, and runaway electrons mitigations in ADITYA and ADITYA-U tokamak..** (Dr. Chetna Chauhan), Department of Physics, Nirma University, Ahmedabad. □

BISHOP KURIALACHERRY COLLEGE FOR WOMEN

AMALAGIRI P.O., KOTTAYAM-686561 Ph: 7559097384, 7025842648
E-mail: bkcamala@yahoo.com Website: www.bkcollege.ac.in
NAAC Re-Accredited with 'A+' Grade

WANTED

Assistant Professor

Applications are invited from qualified candidates for appointment to the post of Assistant Professor (Women only) against regular vacancy in the following.

Subject: English (Community Merit)

Age, qualifications etc. are as prescribed by the Government/ UGC/Mahatma Gandhi University. Application form can be had from the College Website and also from the College office on payment of Rs. 1000/- (D.D. Rs. 1050/-). Those who are getting applications through website should send the receipt of the remittance of the fee, the application form and the copies of certificates to prove age, qualification, experience etc. separately to the College Office. Those who have obtained degrees from other Universities should produce equivalency/eligibility certificate from the Mahatma Gandhi University. Applications should be submitted to the College office within one month of publication of this notification.

(Sd/-) Manager



INDIAN INSTITUTE OF TECHNOLOGY DELHI
Hauz Khas, New Delhi 110 016

Advt. No. IITD/EST-1/02/2024

**ADVERTISEMENT FOR THE POST OF
ASSISTANT LIBRARIAN**

Applications are invited from Indian Nationals for appointment to the post of Assistant Librarian in the Central Library of the Institute as follows:-

Name of Post Assistant Librarian
No. of Post 1 post (Unreserved)
Salary Academic Pay Level-10
(Rs. 57,700 - 1,82,400)
Website Link for [advt. details](https://home.iitd.ac.in/jobs-iitd/index.php) **https://home.iitd.ac.in/jobs-iitd/index.php**
Address for correspondence E-mail: **fac_recruit@admin.iitd.ac.in**
Last date for submitting the application 10th January, 2025
Any further query relating to the post may be made through email to **fac_recruit@admin.iitd.ac.in**

**Sd/- Deputy Registrar (E-I)
IIT Delhi**

St. Joseph's College Moolamattom

Arakulam P.O. – 685591

<https://stjosephscollegemoolamattom.ac.in/>

Mobile:7510312043, 8086800083

WANTED

**ASSISTANT PROFESSOR
IN ECONOMICS
(OPEN MERIT – 1 VACANCY)**

Applications are invited from qualified candidates as per UGC/Government of Kerala/Mahatma Gandhi University Norms and Regulations for appointment.

Application form can be downloaded from the college website by remitting Rs.2000/- in Cash or DD in favour of Principal, St. Joseph's College, Moolamattom. Apply to the Manager **within one month** from the date of notification.

Moolamattom
17.12.2024

Sd/-
Manager

VIVEK VARDHINI ADHYAPIKA (B.ED) MAHAVIDYALAYA

Wanted

Applications are invited for the post of Principal to be filled in **Vivek Vardhini Adhyapika (B-Ed) Mahavidyalaya, Nanded (permanent Non-Granted)** run by Marathwada Gramin Shikshan Sanstha's Himayatnagar eligible candidates should submit their application along with necessary document **within Fifteen days** from the date of publication of the Advertisement by registered post only.

Sr.	Name of the post	No. of post	Reservation
1	Principal	01	(unreserved)

Educational Qualification :

1. Academic and professional Qualification will be as prescribed for the post of lecturer. 2. Ph.D. in Education and 3. Ten years teaching experience in a secondary teacher Education institutions

Provided that, in the event of non-availability of eligible and suitable candidates for appointment as Principal/Head as per above eligibility criteria, it would be permissible to appoint retired Professor/Head in Education on contract basis for a period not exceeding one year at a time till such the candidates complete Sixty five years of age.

The term of appointment of the college principal shall be tenure with eligibility for reappointment for one more term only after a similar selection committee process.

Salary and Allowances

Pay scale as per the UGC, State Government & Swami Ramanand Teerth University's rules from time to time (pay scale Rs.37400 - 6700 0+ AGP Rs.10000)

Note:

1. Prescribed Application form is available on University Website: (www.srtmun.ac.in) 2. No TA/DA will be paid to attend the interview. 3. Eligible candidates who are already in service should submit their application through proper channel. 4. All attested Xerox copies of certificates and other relevant documents should be attached to the application form.

Address for correspondence: President/Secretary, Vivek Vardhini Adhyapika (B.ED) Mahavidyalaya, Plot No.8C Industrial Estate, Stedium road, Shivajinagar Nanded.431601.

President/Secretary



**Thakur Educational Trust's (Regd.)
THAKUR SHYAMNARAYAN COLLEGE OF EDUCATION & RESEARCH
NAAC Accredited (Cycle 1)
(B.ED. COLLEGE)**



Regd. Office: Thakur Shyamnarayan High School's Bldg.; Opp. Dream Park, Thakur Village, Kandivali-East,
Mumbai – 400101, Email: tscer@thakureducation.org, Phone: 28462077 / 2885 2269, Fax: 2885 4129

**APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS FROM THE ACADEMIC YEAR 2024-25:
UNAIDED (LINGUISTIC MINORITY - HINDI)**

Sr. No	Cadre	Subject	Total No. of Posts	Posts Reserved for
1	Principal	-----	01	01 OPEN
2	Assistant Professor	(Education in Social Science, Hindi, Mathematics & Economics Methods)	04	04 OPEN

The above posts are open to all, however, candidates from any category can apply for the post.

Reservation for women will be as per University Circular No. BCC/16/74/1998 dated 10th March, 1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/ICC/2019-20/05 dated 05th July, 2019.

Candidates having knowledge of English will be preferred.

“Qualifications, Pay Scales and other requirements are as prescribed by the UGC Notification dated 18th July, 2018, Government of Maharashtra Resolution No.Misc-2018/C.R.56/18/UNI-1, dated 8th March, 2019 and University Circular No. TAAS/(CT)/ICD/2018-19/1241, dated 26th March, 2019 and revised from time to time” The Government Resolution & Circular are available on the **website: mu.ac.in**.

Applicants who are already employed must send their application through proper channel. Applicants are required to account for breaks, if any, in their academic career.

Application with full details should reach **The Founder and Hon. Gen. Secretary, Thakur Shyamnarayan College of Education & Research (B.Ed), Opp, Dream Park, Kandivali-East, Mumbai-400101** within 15 days from the date of publication of this advertisement. This is University approved advertisement.

Sd /-
GEN. SECRETARY

**Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering & Technology, Ashta
Tal.- Walwa, Dist.- Sangli- 416 301 (Maharashtra)**

(Affiliated to Shivaji University, Kolhapur)

(Non Grant)

WANTED

Applications are invited from eligible candidates for the following post:

Sr. No.	Name of Posts	Vacant Post	Unreserved (Open) Post
1	Director	01	Post - 01 (Open to All)

Note: For detailed information about post, qualifications and other terms and conditions please visit University website :www.unishivaji.ac.in.

Place: Ashta
Date: 23-12-24

Secretary
Sant Dnyaneshwar Shikshan Sanstha,
C/o- Annasaheb Dange College of Engineering
& Technology, Ashta. Tal-Walwa

**HYDERABAD (SIND) NATIONAL COLLEGIATE BOARD'S
NARI GURSAHANI LAW COLLEGE
CHM Campus, Near Railway Station, Ulhasnagar - 421 003.**

MINORITY

**APPLICATIONS ARE INVITED FOR THE POST OF
PRINCIPAL**

FROM THE ACADEMIC YEAR 2024-25

UN-AIDED

The above post is open to all, however candidates from any category can apply for the post.

Reservation for women will be as per University Circular No. BCC/16/74/1998 dated 10th March, 1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/ICC/2019-20/05 dated 05th July, 2019.

Candidates having knowledge of Marathi will be preferred.

“Qualifications, Pay Scales and other requirements are as prescribed by the UGC Notification dated 18th July, 2018, Government of Maharashtra Resolution No. Misc- 2018/C.R.56/18/UNI-1, dated 8th March, 2019 and University Circular No. TAAS/(CT)/ICD/2018-19/1241, dated 26th March, 2019 and revised from time to time” The Government Resolution & Circular are available on the **website: mu.ac.in.**

Applicants who are already employed must send their application through proper channel.

Applicants are required to account for breaks, if any, in their academic career.

Application with full details should reach the **Secretary, Hyderabad (Sind) National Collegiate Board, Mistry Bhavan, 122, Dinshaw Wacha Road, Vidyasagar Prin. K.M. Kundnani Chowk, Churchgate, Mumbai - 400 020 within 15 days** from the date of publication of this advertisement. This is University approved advertisement.

Sd/-
Secretary

Recruitment Advertisement No:
NFSU/TEACHING/06/2024

**ROLLING ADVERTISEMENT FOR THE POSITIONS OF PROFESSORS
 IN VARIOUS SCHOOLS IN THE UNIVERSITY**

National Forensic Sciences University, an institution of national importance under the aegis of the Ministry of Home Affairs, which facilitates and promotes studies and research and to achieve excellence in the field of forensic science in conjunction with applied behavioral science studies, law, criminology and other allied areas and technology and other related fields, **invites online application from the eligible candidates through Samarth Portal for the post of Professors.**

The advertisement for the post of Professor is a Rolling Advertisement. The positions with sufficient number of applications received till cutoff date will be processed for further process of recruitment in the first phase. However, the advertisement will remain alive for the candidates who wish to apply. The Applications received after cutoff date will be processed as and when sufficient numbers of applications are received against the vacant post. So, there will be no last date for the advertisement. The information with regard to selection in Rolling Advertisement will be published on the University Website from time to time.

DETAIL OF TEACHING POSITIONS

Name of Post : Professor (7th Pay Matrix Academic level 14A,Entry level minimum basic pay INR 1,59,100/-)

Sr No.	School	Discipline	Professor					Total
			UR	ST	SC	OBC-NCL	EWS	
1	School of Behavioral Forensics	Forensic Psychology	-	-	-	-	1	1
		Neuropsychology	1	-	-	-	-	1
		Clinical Psychology	1	-	1	-	-	2
		Criminology	-	1	-	-	-	1
		Total	2	1	1	-	1	5
2	School of Cyber Security & Digital Forensics	Digital Forensics	1	-	-	2	1	4
		Cyber Security	3	-	1	1	-	5
		Total	4	-	1	3	1	9
3	School of Engineering and Technology	Food Technology	1	-	-	-	-	1
		Total	1	-	-	-	-	1

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(contd. from Prev. pg. 51)

Sr No.	School	Discipline	Professor					
			UR	ST	SC	OBC-NCL	EWS	Total
4	School of Forensic Science	Forensic Science (General)	1	-	2	2	1	6
		Forensic Biology / Biotechnology/DNA	-	-	-	1	-	1
		Forensic Chemistry/ Toxicology /Explosives	-	1	-	-	-	1
		Total	1	1	2	3	1	8
5	School of Law, Forensic Justice and Policy studies	Law	2	-	1	2	-	5
		Total	2	-	1	2	-	5
6	School of Management Studies	Cyber Security	1	-	-	-	-	1
		Accounts and Finance	1	1	-	-	-	2
		General Management	1	-	1	1	-	3
		Total	3	1	1	1	-	6
7	School of Medico Legal Studies	Toxicology	-	-	-	1	-	1
		Total	-	-	-	1	-	1
8	School of Open Learning	Cyber Security / Digital Forensics/ Computer / ICT / IT	-	-	-	-	1	1
		Total	-	-	-	-	1	1
9	School of Pharmacy	Pharmacology / Pharmacy	-	-	-	1	-	1
		Total	-	-	-	1	-	1
10	School of Police Science & Security Studies	Police Administration / Science	1	-	-	1	-	2
		Total	1	-	-	1	-	2
Grand Total			14	3	6	12	4	39

Note

1. The Reservation of PwBD as per Government of India Reservation Rules as amended from time to time.
2. Separate applications are to be made for an individual post.
3. Advertisement may be seen: <https://nfsu.ac.in/career>

Date : 12.12.2024

**Sd/-
Executive Registrar**



गृह मंत्रालय
MINISTRY OF
HOME AFFAIRS

राष्ट्रीय न्यायालयिक विज्ञान विश्वविद्यालय
(राष्ट्रीय महत्त्व का संस्थान, गृह मंत्रालय, भारत सरकार)

National Forensic Sciences University
(An Institution of National Importance under Ministry of Home Affairs,
Government of India)



**Recruitment Advertisement No:
NFSU/TEACHING/07/2024**

**ADVERTISEMENT FOR VARIOUS TEACHING POSITIONS
(ASSOCIATE PROFESSORS & ASSISTANT PROFESSORS)**

National Forensic Sciences University, an institution of national importance under the aegis of the Ministry of Home Affairs, which facilitates and promotes studies and research and to achieve excellence in the field of forensic science in conjunction with applied behavioral science studies, law, criminology and other allied areas and technology and other related fields, **invites online application from the eligible candidates for various teaching posts.**

Important Information:

Date of commencement of Online Application: 12/12/2024, 23:55:00 hrs onwards

Last date for submitting Online Application: 16/01/2025

DETAIL OF TEACHING POSITIONS:

Name of Post : Associate Professors(7th Pay Matrix Academic level 13A2,Entry level minimum basic pay INR 1,39,600/-)

Assistant Professors (7th Pay Matrix Academic level 10)

Sr No.	School	Discipline	Associate Professor						Assistant Professor					
			UR	ST	SC	OBC-NCL	EWS	Total	UR	ST	SC	OBC-NCL	EWS	Total
1	School of Behavioral Forensics	Forensic Psychology	1	-	1	1	-	3	4	-	1	2	-	7
		Neuropsychology	1	-	-	-	-	1	1	-	1	-	-	2
		Clinical Psychology	-	-	1	1	-	2	2	-	1	2	1	6
		Criminology	1	1	-	-	-	2	2	1	1	3	1	8
		Total	3	1	2	2	-	8	9	1	4	7	2	23
2	School of Cyber Security and Digital Forensics	IT/Computer Applications	1	-	1	1	-	3	3	1	1	2	-	7
		IOT/SCADA	-	-	1	-	1	2	1	-	-	1	1	3
		Digital Forensics	2	1	1	1	-	5	3	1	2	3	1	10
		Cyber Security	2	1	1	-	1	5	1	1	2	3	2	9
		Artificial Intelligence	1	-	-	1	-	2	2	-	1	2	-	5
		Semi-Conductor Security	-	-	-	-	-	-	1	-	1	-	-	2
		Mathematics	-	-	-	-	-	-	1	-	-	-	-	1
		Total	6	2	4	3	2	17	12	3	7	11	4	37

(contd. on pg. 54)

(contd. from Prev. pg. 53)

Sr No.	School	Discipline	Associate Professor						Assistant Professor					
			UR	ST	SC	OBC-NCL	EWS	Total	UR	ST	SC	OBC-NCL	EWS	Total
3	School of Engineering and Technology	Food Technology	-	-	-	-	-	-	-	-	-	1	1	2
		Nano Technology	-	-	-	1	-	1	-	-	-	-	1	1
		Structural / Material Science/ Civil / Mechanical Engineering	-	-	-	-	1	1	1	1	-	1	-	3
		Total	-	-	-	1	1	2	1	1	-	2	2	6
4	School of Forensic Science	Forensic Science (General)	-	-	1	2	-	3	3	-	-	1	-	4
		Finger Print Science/ Questioned Document	1	-	-	1	-	2	-	2	2	-	-	4
		Forensic Biology/ Biotechnology/DNA	1	-	-	1	1	3	1	1	1	1	1	5
		Forensic Physics/ Ballistics/Crime scene Management	1	-	1	-	-	2	-	-	1	2	1	4
		Forensic Chemistry/ Toxicology / Explosives	1	1	-	1	-	3	3	-	1	1	-	5
		Multimedia Forensics /Cyber Forensics/ Digital Forensics	1	-	-	1	-	2	1	-	-	1	1	3
		General Biology	-	-	-	1	-	1	1	-	1	-	-	2
		General Chemistry	-	-	1	-	-	1	-	1	-	1	-	2
		General Physics	-	-	-	-	1	1	1	-	-	1	-	2
		Forensic Journalism / Mass Communication	1	-	-	-	-	1	1	-	1	-	-	2
		Total	6	1	3	7	2	19	11	4	7	8	3	33
5	School of Law, Forensic Justice and Policy Studies	Law	5	1	1	-	1	8	5	1	1	3	1	11
		Mathematics/Statistics	-	-	-	-	-	-	-	-	-	1	-	1
		General Computer Applications/IT	-	-	-	-	-	-	1	-	-	1	-	2
		Data Science	-	-	-	1	-	1	-	-	-	-	-	-
		English	-	-	1	-	-	1	-	-	-	-	-	-
		General Management	-	-	-	1	-	1	-	-	-	-	-	-
		Economics	-	-	-	-	-	-	-	-	-	-	1	1
		Accounting	-	-	-	-	-	-	-	-	1	-	-	1
		Taxation/IPR	-	-	-	-	-	-	-	1	-	-	1	2
		Total	5	1	2	2	1	11	6	2	2	5	3	18
6	School of Management Studies	OB/HR	1	-	-	1	-	2	-	1	1	-	-	2
		Data Analytics	-	-	-	1	-	1	-	1	-	-	1	2
		Research Methodology	-	-	1	-	-	1	-	-	-	-	1	1
		Cyber Security Management	-	-	1	-	1	2	1	1	-	-	-	2
		Accounts and Finance	1	-	-	1	-	2	1	-	1	-	1	3
		Hospital Administration	1	-	-	1	-	2	1	-	-	1	-	2

(contd. on pg. 55)

Sr No.	School	Discipline	Associate Professor					Assistant Professor						
			UR	ST	SC	OBC-NCL	EWS	Total	UR	ST	SC	OBC-NCL	EWS	Total
		General Management	2	-	-	-	-	2	1	-	-	2	-	3
		Forensic Accounting	1	1	-	-	-	2	1	-	-	-	1	2
		Foreign Languages	-	-	-	-	-	-	1	-	-	-	-	1
		Total	6	1	2	4	1	14	6	3	2	3	4	18
7	School of Medico Legal Studies	Forensic Nursing	-	-	-	-	1	1	-	-	-	1	-	1
		Forensic Odontology / Dentistry	-	-	-	1	-	1	-	-	-	-	-	-
		Forensic Medicine	1	-	-	-	-	1	-	-	-	-	-	-
		Anthropology / Archeology	-	-	-	-	-	-	-	-	-	-	1	1
		Total	1	-	-	1	1	3	-	-	-	1	1	2
8	School of Open Learning	Cyber Security / Digital Forensics/ Computer / ICT / IT	-	-	-	-	-	-	1	-	-	-	-	1
		Forensic Science	-	-	-	-	-	-	1	-	-	-	-	1
		Total	-	-	-	-	-	-	2	-	-	-	-	2
9	School of Pharmacy	Environmental Sciences	-	-	-	-	-	-	-	-	-	1	-	1
		Chemistry	-	-	-	-	-	-	-	-	1	-	-	1
		Pharmacology / Pharmacy	1	-	-	-	-	1	-	-	-	1	1	2
		Forensic Science – Chemistry	-	-	-	-	-	-	-	-	-	1	-	1
		Regulatory Affairs	-	-	-	-	-	-	-	-	1	-	-	1
		Total	1	-	-	-	-	1	-	-	2	3	1	6
10	School of Police Science & Security Studies	Homeland/Internal Security	-	-	-	1	-	1	1	-	1	-	1	3
		Security Science/ Security Technology	-	1	1	-	-	2	1	-	-	1	-	2
		Police Administration / Science	1	-	-	-	-	1	1	1	-	1	-	3
		Cyber Security	-	-	-	1	-	1	1	-	-	-	-	1
		Total	1	1	1	2	-	5	4	1	1	2	1	9
Grand Total			29	7	14	22	8	80	51	15	25	42	21	154

Note

1. The Reservation of PwBD as per Government of India Reservation Rules as amended from time to time.
2. Separate applications are to be made for an individual post.
3. Advertisement may be seen: <https://nfsu.ac.in/career>

Date: 12.12.2024

Sd/-
Executive Registrar



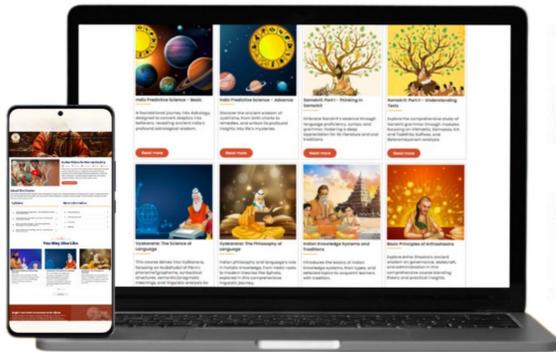
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+91 9384 81 4164