

Rs. 30.00
ISSN-0566-2257



UNIVERSITY NEWS

A Weekly Journal of Higher Education

Association of Indian Universities

Vol. 61 • No. 14 • April 03-09, 2023

Sudheer Sudhakaran and Anjali A

Internship: The Starter Culture for Students, B-Schools and Industry to Create Summer Wine!

Priya Johry and Aayush Kumar

An Overview of the All-India Survey on Higher Education-2020-21

Pintu Modak

Sports Engineering: Need of the Hour for Sports in India

Tanushree S. Bhargava

The Modern Teacher's Competencies in 21st Century

Nitin Gadkari

Architect of Innovations

– Convocation Address

#Let's Create Atmanirbhar Bharat Together

ASSOCIATION OF INDIAN UNIVERSITIES

ADVERTISEMENT TARIFF : UNIVERSITY NEWS JOURNAL

W.E.F. APRIL 01, 2017

GST AT PRESENT RATE OF 5% IS PAYABLE FOR PUBLICATION OF ALL TYPES OF ADVERTISEMENTS IN ADDITION TO THE PAYABLE CHARGE AS MENTIONED BELOW EFFECTIVE APRIL 01, 2020

A. FOR EDUCATIONAL INSTITUTIONS, GOVT. ORGANIZATIONS, PUBLISHERS, BOOK SELLERS & DISTRIBUTORS DISPLAY

(Amount in Rupee)

Categories of Advertisement	1 Insertion	4 Insertions	8 Insertions	12 Insertions
Full Page	15000	45000	85000	120000
Half Page	8000	28000	50000	68000
Quarter Page	5000	16000	28000	40000
Cover (Inside)	16000	55000	100000	144000
Cover (Back)	20000	65000	120000	165000

B. TARIFF FOR SPECIAL NATURE OF MATTERS/ITEMS (DOUBLE THE RATES)

TARIFF FOR SUPPLIERS OF COMPUTERS, COMPUTER STATIONERY & PERIPHERALS, SCIENTIFIC & SURGICAL INSTRUMENTS, SPORTS GOODS AND OTHERS (*NOT COVERED IN ANY FORM OF THE TARIFF*) WILL BE AT DOUBLE THE RATES AND TARIFF CAN BE HAD ON REQUEST.

C. CONCESSIONAL TARIFF (For Publishers/Book Distributors- Exclusively for Books)

Per Square Cm (Display)	1 Insertion	4 Insertions	8 Insertions	12 Insertions
	30.00	28.00	26.00	24.00

MECHANICAL DATA OF JOURNAL

Size of Page 21 cms x 27 cms

PRINT AREA

Full Page 23 cms (Height) x 16.5 cms (Width)

Half Page 12 cms (Height) x 16.5 cms (Width)

Quarter Page 11 cms (Height) x 8 cms (Width)

The Art Work/CRC IN PDF in High Resolution as per above Print Area (in BLACK & WHITE ONLY) or as an OPEN FILE in MS WORD may be sent positively at E-Mail IDs as shown below. **MATTER FOR ADVERTISEMENT MUST REACH SEVEN (07) DAYS IN ADVANCE FROM THE DATE OF PUBLICATION OF A PARTICULAR ISSUE OF UNIVERSITY NEWS, WHICH IS PUBLISHED EVERY MONDAY.**

ADVERTISEMENT AGENCIES (INS ACCREDITED) ARE ALLOWED 15% DISCOUNT.

Full advance payment must be sent directly to AIU Account using any of the Digital modes (i.e. NEFT/ RTGS/Net Banking/BHIM/G-Pay/UPI, AIU Payment Web portal, etc.). The details of AIU Account are available in AIU Website (www.aiu.ac.in). The required data can be provided by mail on request.

For further information write to :-

Publication & Sales Division

Association of Indian Universities

AIU House, 16, Comrade Indrajit Gupta Marg, New Delhi - 110 002

EPABX : 011-23230059 (Extn. 208/213), FAX : 011-23232131

E-mail IDs : advtn@aiu.ac.in / publicationsales@aiu.ac.in; Website : <http://www.aiu.ac.in>

In This Issue		
ITEMS		PAGE
Articles		
Internship: The Starter Culture for Students, B-Schools and Industry to Create Summer Wine!		1
An Overview of the All-India Survey on Higher Education (AISHE) 2020-21		8
Sports Engineering: Need of the Hour for Sports in India		14
The Modern Teacher's Competencies in 21st Century		16
Convocation Address		
Sri Balaji University, Pune		21
Campus News		
AIU News		29
Theses of the Month		
(Science & Technology)		31
Advertisement		

New Subscription Tariff

(Effective April 01, 2020)

	Inland		Foreign	
	Institutions	Academics/ Students (at residential address only)	Airmail	Surface Mail
	Rs.	Rs.	US\$	US\$
1 year	1250.00	500.00	210.00	170.00
2 years	2200.00	900.00	400.00	300.00

Subscription is payable in advance by Bank Draft/MO only in favour of Association of Indian Universities, New Delhi.

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

Patron:

Prof. Suranjan Das

Editorial Committee Chairperson:

Dr (Ms) Pankaj Mittal

Editorial Committee:

Dr Baljit Singh Sekhon

Dr Amarendra Pani

Dr Youd Vir Singh

Editor:

Dr Sistla Rama Devi Pani

#Let'sBeatCoronaTogether

Internship: The Starter Culture for Students, B-Schools and Industry to Create Summer Wine!

Sudheer Sudhakaran* and Anjali A**

This paper explores the Indian educational ecosystem that sets the context in which student engagement happens. It examines the gap that exists between the expectations of the main stakeholders – the academic institution looking for scholastic rigour from the student and the business fraternity looking for exceptional excellence. For a student hoping to make a crossover from the classroom to the portals of a company, the summer internship is an opportunity to test one's fitness and readiness for initiation into the stream of career opportunities. The article dwells on the vexatious issue of 'the employability' of management students and the metrics adopted by each stakeholder. The way forward to resolve this issue is suggested with the involvement of a partner who plays the linchpin for the primary stakeholders dealing with the intern.

The Academic Ecosystem

In any academic ecosystem, multiple players impact the contours of courses students offer. Each country frames a set of educational guidelines in alignment with its national aspirations. The educational canvas for India is set at the beginning of the National Policy of Education (NPE) 1986 (later modified in 1992) where it declares: 'Every country develops its system of education to express and promote its unique socio-cultural identity and also to meet the challenges of the times' (National Council of Educational Research and Training [NCERT], 1992).

Clause 3.12 of the NPE 1986 announces the players who will paint on this canvas: The institutions which will be strengthened to play an important role in giving shape to the National System of Education are the University Grants Commission(UGC), the All India Council of Technical Education, the Indian Council of Agricultural Research and the Indian Medical Council...together with the National Council of Education Research and Training, the National Institute of Educational Planning and Administration, the National Council of Teacher Education and the National Institute of Adult Education will be involved in implementing the Education Policy (NCERT, 1992).

This paper pays attention to UGC, which was established in 1956 as a statutory body of the Government of India through an Act of Parliament for the coordination, determination and maintenance of the standard of university education in India (Genesis, 2017)'.

*Associate Professor, SCMS Cochin School of Business, Prathap Nagar, Muttom, Aluva, Cochin -683106(Kerala). E-mail: sudheer@scmsgroup.org

**Assistant Professor, SCMS Cochin School of Business, Prathap Nagar, Muttom, Aluva, Cochin -683106 (Kerala).E-mail: anjali@scmsgroup.org

Employability and Industry Disenchantment with Metrics Employed

One major challenge acknowledged by UGC is a disconnect between Higher Educational Institutes and their relevance to industry. In its preamble to UIL (University Industry Inter-linkage Centers), they stress the need for collaboration between higher educational institutes and industries to meet employability issues.

Industry practitioners and educators agree that students should be equipped with industry-relevant skills. ‘Employers believe that students lack the important practical skills such as real-world preparation, experience, negotiation skills, and others’ (Kim, Kim, & Bzullak, 2012). What are these ‘relevant to industry and employability issues?’

The following industry feedback sheds light on existing fault lines: Employers felt b-schools don’t measure student progress and abilities rigorously enough and focus too much on theory and not enough on real-world situations. Executives said that many business schools are better structured for the Industrial Revolution rather than the Information Age. If they do not shape up soon, interviewers threatened to cut back on hiring from those schools. One of the biggest problems executives cited was that schools don’t measure student success with the right metrics (Hult Blogs, 2014).

‘Schools don’t measure student success with the right metrics’ is a clarion call for B-Schools. The authors crystalize the right metrics as consensually agreed performance scales for rating internship-related competencies.

The Cross of Academic Respectability at the Altar of Actuality

Should not educators look for internal fault lines? Wren, Atherton, and Michaelsen (1978) corroborate the view that the lack of experience of faculty members is due to the ‘drive for “academic respectability” through research and theory rather than applications and practice’. This has led to the situation of today’s business ‘faculties have the least first-hand knowledge of business (S.Heikimian, 2017).’ ‘During the past several decades ... B-schools have quietly adopted an inappropriate, self-defeating model of academic excellence. Instead of measuring themselves in terms of the competence of their graduates, or by how well their faculties understand important drivers of business

performance, they measure themselves almost solely by the rigour of their scientific research’ (Bennis & Toole, 2005).

‘The configuration of an internship program is an important factor in providing high-quality and productive internship experiences (Kim et.al., 2012).’ ‘The corporate interaction can also help the B-School to get access to experienced managers who can provide valuable insights into corporate life to the students (Coco, 2000).’

In continuation of ‘academic respectability’, it follows that the management professor who guides the student is more wired to ensure that students engage in problem-solving and modelling that are aligned with classroom engagement. ‘Some of the best-known b-schools have become virtual closed systems in which professors with little interest in the reality of organizational life teach inexperienced students the theories of mathematics, economics, and psychology as ends in themselves (Mintzberg, 1976).

According to O’Hara and Shaffer (as cited in Saxena, 2008), ‘internship provides students with major benefits that include the opportunity to integrate learning in the classroom with professional practice, and the injection of reality into abstract theoretical concepts.’ Martinez states that ‘the internship also enables students to experience an enriched learning environment so that classroom materials are viewed from different perspectives (as cited in Saxena, 2008).’ If the academic institutional focus is on research, rather than application and practice, then resolving the issue to satisfaction becomes systemic. Educators need to reflect on paradigms and priorities to benefit the industry and students.

Internship with a Midas Touch – Illusion or Reality?

Ambitious management students aspire to set shop or chase their dreams through orchestrated career moves. The internship offers a realistic job preview leading them to understand their personal interests, compatibility and career ambitions. How can educators ensure that students are industry-ready?

Historically, classroom sessions are tailored to suit the requirements of student engagement and course delivery. There exists sufficient literature on pedagogical tools and assessment to ensure ‘assurance of learning’ as per AACSB (Association to Advance Collegiate Schools of Business). While assessment

templates are available, they do not satisfy the requirement of 'getting it right' for the industry.

Making the students ready to transition from the classroom to the boardroom requires active learning and knowledge-transfer perspectives. ACBSP (Accreditation Council for Business Schools and Programs) states that 'active learning' refers to interactive instructional techniques that engage students in higher-order thinking tasks such as analysis, synthesis, and evaluation.'

The internship is one way by which active learning can be demonstrated. Wynd's study (as cited in Saxena, 2008) found that 'as students are required to learn directly from experience, internship engages students as active mediators of their own learning.' According to Coleman (as cited in Saxena, 2008), 'such experiential methods increase the motivation of the learner, lead to a greater sense of achievement and self-efficacy.' According to Templeton, Updyke, and Bennett (2012): internships are an effective, active learning tool in the business disciplines. In addition to the practical experience, internships provide an opportunity to incorporate academic assignments in which students connect their internships to their classroom business curriculum. This linking of theory and work experience enhances the total business education for students helping to ensure that students see the relevance of classroom learning.

According to Narayanan (2010), 'Literature on business school internships is scant, lacks a dominant theoretical perspective, and is largely descriptive in most empirical studies. In addition, although internships involve complex relationships among three actors—student, faculty or school, and company—most research on internships has typically focused on a small part of the overall process.'

The authors in this paper have conceptualized internship as a knowledge transfer perspective. This makes students 'industry ready' - the ability to engage without reality shock upon commencement of tasks related to their specific job role.

The community of educators, business school management and the participating internship companies has no shared vision or process regarding the right internship metrics. The lack of agreed metrics at the internship phase mirrors companies' disquiet, resonating with their belief that B Schools do not have the right mensuration in place. There is scope for ample

research regarding process agreement in designing and assessing the internship. Is there a litmus test for the b-school, the company and the intern to determine that all three have beneficial stakes in an internship?

Jeanne Radigan (2009) has discussed parameters related to, "Value to the Student (Working alongside a seasoned professional allows students to take on meaningful tasks with real responsibility.), Value to the University (Internships provide the university with a powerful marketing tool) and Value to the Industry (Work ethic, technical competence and attitudes can be more easily assessed over a semester or summer as compared to a one-hour interview).

It is critical that the learning goals of the internship are specified and measurable outcomes are identified. Internships can be the tipping point of an educational programme provided the goals of the student; b-school and employer are identified, matched, and aligned. Where is the scope for a shared vision if the professor happens to belong to 'low contact with real business experience'? Unless there is an agency that liaises and monitors independently, the student cannot leverage an internship to the mutual satisfaction of all stakeholders.

Elsewhere, an internship can offer a stipend. There are legal compliances to be observed. In the United States Fact Sheet #71: Internship Programs under the Fair Labor Standards Act provide guidelines on terms and conditions for interns (Wage and Hour Division (WHD), 2017). India has no similar legislation. Apart from the legal compliances that are mandatory, can companies proactively reduce internal fault lines?

Employers also can benefit from B-school internships. 'Companies could have a 'risk-free' method of evaluating prospective hires and motivated employees that is less expensive than hiring full-time employees' (Coco, 2000).' In addition, 'students returning after internships can help the company's recruiting effort by 'spreading the favourable word' to other students about a particular organization (Pianko, as cited in Kim, Kim, & Bzullak, 2012).'

From the company's perspective, paying a stipend would enhance its image - employer of choice! The authors' experiences in dealing with students who have taken both formats are narrated here. In India, companies that agree to pay a stipend are serious about paying attention to the student right from the time

of reporting. The company sets higher benchmarks for quality assessment. High-frequency monitoring happens and sometimes the reporting officer's targets are cascaded as a deliverable for the student. In other words, there is a hierarchy to the achievement of objectives.

Companies without stipend payments are relaxed in their attitude toward goal achievement. The student is often treated as an irritant by the company guide. In most cases, mundane tasks are thrust upon them.

Student Conundrum

The student faces a Catch-22 situation – should she/he fulfil the short-term expectations of his/her internship company guide at the risk of falling foul of academic rigor? The assessment parameters of the company guide are often in stark contrast with the academic deliverables. Tacit internship knowledge invariably is not assessed on campus where the emphasis is on explicit knowledge.

Consolidation of the system can happen when all stakeholders arrive at an agreement by designing mutually acceptable goals and metrics. In the absence of an agreement between the institution and the company, the student is orphaned. Research Methodology is one area where there is no convergence between academics and industry. The industry focus is on actionable findings where change and improvement can happen immediately. For academics, the rationale for using a tool needs to be substantiated as part of 'academic respectability'.

Student dilemmas cover a gamut of issues that range from ethical concerns to cultural issues; long working hours and task deadlines; from dress codes to sexual harassment issues.

Alumni - Midas Mediators

This paper suggests that Alumni need to play a proactive role in ensuring that a convergence of interests fructifies. Alumni are the brand ambassadors of the institution from they graduate. An alumnus who has worked in a company for over a decade and who stays in touch with the school is ideal to make the connection happen.

She/he can identify with the needs of a student readily along with constraints imposed on the student by both institutions. She/he is also part of the participating organization where she/he can relate to the value systems of the company and judge what personality

traits would be required for a particular internship in her/his own organization. B-Schools need to realize how a strong, positive relationship with their alumni can benefit the current students during their internship. B-Schools and corporates should leverage this as alumni can play an active role in mentoring students in their areas of expertise. The alumni also can align his/her intern to achieve business goals in a time-bound manner.

From our experience with 200 interns, some of the problems identified are a lack of internship perspective, lack of agreed metrics, and conflicting interests of different stakeholders. The lack of internship perspective is acute when we look at how different companies and institutions view it. Narayanan & Olk (2010) have worked on 'the knowledge transfer perspective and there is a promise for all three principal actors to transfer knowledge resulting in a win-win for all.'

Role of Management Bodies

It would be fruitful if national/regional management bodies can support alumni for their effort. They need to draft an agreement among stakeholders along with a token payment and position for alumni services rendered to participating companies and committed academic institutions willing to associate. These Management Associations need to lobby with central and state educational government bodies to develop policies for funding alumni involvement in brokering internship agreements that meet the twin tests of 'academic respectability and actionable findings. For alumni to actively participate companies need to first acknowledge internships as a testing ground and government bodies can recognize the contribution of their efforts.

If a win-win-win situation could be envisioned and institutionalized then student employability can be enhanced to meet the challenges of the times and ensure triple value propositions have been delivered. The principal actors would be UGC, management bodies, alumni, educators and companies.

Top Management Commitment

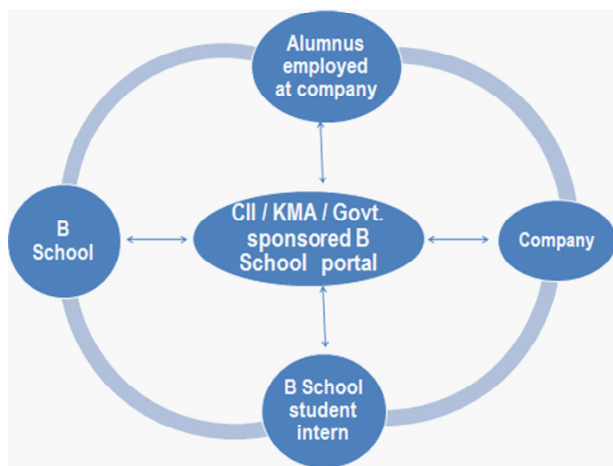
If an internship is to be effective top management from the industry and B-schools need to meet and agree on the modus operandi of an internship. Otherwise, internships run the risk of being marginalized. The role of alumni is to be a mentor when the student joins

before handing it over to the department under whom the project needs to be done.

Stakeholder Inclusion and Support

The authors propose a model (Figure 1) that focuses on bringing government, alumni, industry and B- School under one umbrella as it lets the alumni, students, industry, and b-schools collaborate within a single platform with a single goal. A pilot study could gauge the effectiveness of the transfer of knowledge and industry readiness that has been the elusive Holy Grail for the B-School sector.

Figure 1: An Ecosystem for Summer Internship Denouement (Source – Authors)



There are internship portals run by government/private institutions. The disadvantages of the existing portals are that these are all designed from a third-party perspective and so are not customized as per the needs of students, the B-School and industry. If B-Schools start an internship portal it will help the institution to bring their alumni who could play the role of a mediator to understand the requirement of the industry as well as help students to make their internship effective.

Thus alumni, through this portal, can smoothen out the transition of students from B- School to the corporate world. The educators also can understand what is relevant to the industry and understand the employability issues. With these collective insights, educators could measure student success with the right metrics. This portal could also help B School to build an alumni network as well as corporate networks. We believe that a new ecosystem like this is required for a win-win-win situation to emerge.

Bibliography

1. Hult Blogs. (2014). Retrieved March 17, 2020, from Hult International Business School: <https://www.hult.edu/blog/business-schools-flunk-when-ceos-grade-the-test-the-wall-street-journal/>
2. Genesis. (2017). Retrieved September 20, 2017, from University Grants Commission, January 12. <https://www.ugc.ac.in/page/Genesis.aspx>
3. Wage and Hour Division (WHD). (2017). Retrieved September 11, 2017, from United States Department of Labor, December 20.: <https://www.dol.gov/whd/regs/compliance/whdfs71.htm>
4. Wren, A. et.al. (1978). The Managerial Experience of Management Professors: Are the Blind Leading the Blind? *SMA Journal of Management*, 4(1), 75-83.
5. Bennis, W., and Toole, J., O. (2005). How Business Schools Lost Their Way. *Harvard Business Review*.
6. Coco, M. (2000). Internships: A Try Before you Buy Arrangement. *SAM Advanced Management Journal*, 65(5).
7. Joseph, L. (2003). Making Internships Work. *Canadian HR Reporter*, 7-10.
8. Kim, E., Kim, K., and Bzullak, M. (2012). A Survey of Internship Programs for Management Undergraduates in AACSB- accredited Institutions. *The International Journal of Educational Management*, 696-709.
9. Mintzberg, H. (1976). Planning on the Left Side and Managing on the Right. *Harvard Business Review*.
10. Narayanan, V., and Olk, M., P. (2010). Determinanats of Internship Effectiveness: An Exploratory Model. *Academy of Management Learning & Education*, 9(1), 62-70.
11. NCERT. (1992). *National Poilcy on Education*. Retrieved March 3, 2020, from NCERT, May 7. http://www.ncert.nic.in/oth_anoun/npe86.pdf
12. Wynd, W., R. (1989). An Experiential Approach to Marketing Education. *Journal of Marketing Education*, 11(2), 64-71.
13. Radigan, J. (2009). The Role of Internships in Higher Education. *American Society for Engineering Education*.
14. S.Heikimian, J. (2017). The Growing Split between Management Theory and Practice. *Academy of Management Proceedings*, 115-116, August.
15. Paulson, S., K. and Baker, H., E. (1999). An Experiential Approach to Facilitate Anticipatory Socialization. *The International Jour-nal of Organizational Analysis*, 7, 365-378.
16. Templeton, W., Updyke, K., and Bennett, R., B. (2012). Internships and the Assessment of Student Learning. *Business Education and Accreditation*, 4(2), 28-30.

□

An Overview of the All-India Survey on Higher Education 2020-21

Priya Johry* and Aayush Kumar**

The Department of Higher Education, Ministry of Education presents the All-India Survey on Higher Education (AISHE) annually. This survey provides comprehensive information on Higher Education Statistics, containing valuable data on many different aspects gathered from higher education institutions in the country. This survey covers a variety of facets and has provided many new insights into the growth of the higher education sector in the country. In this paper, an attempt has been made to analyze the data available in the AISHE to help us understand the direction of development of higher education in India and identify specific sectors of higher education which require greater attention.

The Indian higher education system is one of the largest in the world, with more than 1100 universities and more than 50,000 colleges and other kinds of Higher Education Institutions. (HEIs) which offers a wide range of courses and programmes. The Indian higher education system faces several challenges including issues related to quality, access, and affordability. Despite many universities and colleges, the quality of education has been a cause for concern, with many institutions lacking adequate infrastructure, faculty, and research facilities. The government is taking steps to address these issues and improve the quality, access, and affordability of higher education in the country. The New Education Policy 2020 envisions a complete overhaul and re-energizing of the higher education system to overcome these challenges and thereby deliver high-quality higher education, with equity and inclusion. As we know when making an education policy, policymakers always consider ways to reduce the difficulties of the education system. The AISHE (All-India Survey on Higher Education) 2020-21 survey is highly used by the central, state, and UT governments for policy formulation. AISHE contains very useful information on various aspects of higher education in India and provides reliable data for evidence-based decision-making and planning. To

improve the quality of education, AISHE reports help identify regions and institutions that need more funding and resources. As a result of the AISHE reports, higher education institutions can be monitored and evaluated, and areas requiring improvement can be identified.

Because of the immense use of the survey in providing comprehensive data, AISHE surveys have continued annually over the years from 2010-11. AISHE survey data are collected on various parameters such as teachers, student numbers, programmes, examination results, education funding, infrastructure, etc., and education development indicators such as facility density, gross enrollment ratio, student-teacher ratio, gender parity index, etc. All data are collected and calculated under AISHE. These are useful for making informed policy decisions in the field of higher education.

A total of 1,113 Universities, 43,796 Colleges, and 11,296 Stand Alone Institutions were registered in AISHE 2020-21. Of them, 1,099 Universities, 41,600 colleges, and 10,307 Stand Alone Institutions have filled and verified their responses. Entire data was collected through an online platform - Web Data Capture Format (Web DCF) developed by the Department of Higher Education and the National Informatics Centre (NIC). The survey was launched on 1st December 2021 and continued till 30th April 2022. As the web DCF has been used for the first time, large-scale scrutiny on various parameters such as enrolment (Gender-wise, social category-wise, foreign students, NCC, NSS., etc.), teaching/nonteaching staff, pass out/outer, etc., have been conducted.

The All-India Survey on Higher Education (AISHE) survey for 2020- 2021 was recently released, providing insights into the state of higher education in India. This survey is significant as it provides a comprehensive picture of the state of higher education in the country, including statistics on enrollment, faculty, and infrastructure. Additionally, it sheds light on the progress made by the country in terms of implementing the New Education Policy of India (NEP) 2020. The NEP 2020 is a landmark policy that seeks to overhaul the Indian education system and

***PhD, Junior Project Fellow, NCERT, New Delhi, India*

***Research Scholar, The University of Queensland-Indian Institute of Technology Delhi Academy of Research (UQIDAR), IIT Delhi, India*

bring it in line with the needs of the 21st century. It aims to provide access to quality education to all students, regardless of their socio-economic background, and create a system that promotes creativity, innovation, and critical thinking. The policy also emphasizes the need to promote research and innovation and encourages the development of new, multidisciplinary programs that prepare students for the changing job market. The AISHE provides insights into the progress made in implementing the NEP---2020.

ANALYSIS OF DATA: AISHE 2022

Based on the information provided above, this paper analyzes a survey that covered various areas related to higher education in India. Some of the key areas that were explored include the status of different types of institutions in higher education, colleges in different states, enrolment in different courses, availability of infrastructure, student enrolment, discipline, and subject-wise enrolment, representation of foreign students, and teaching positions. The analysis of these areas can provide valuable insights into the current state of higher education in India and help identify areas where improvements may be needed. Overall, the analysis of the survey in these areas can provide a picture of the state of higher education in India and help the policy decisions aimed at improving the quality and accessibility of education for all students.

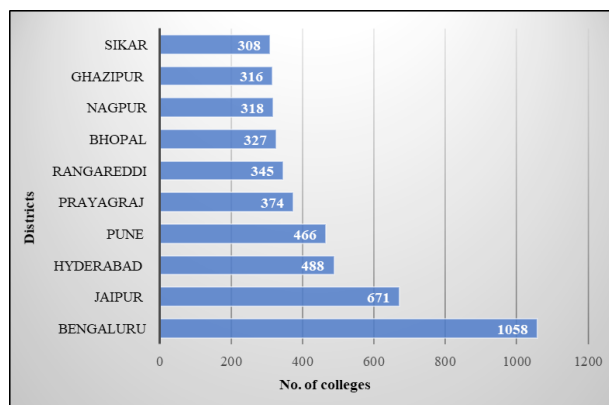
Status of Different Types of Institutions in Higher Education

During 2020-21, 1113 Universities were listed on the AISHE Portal. Of these, 235 belonged to Central Government, 422 belonged to State Government, 10 were Government Aided Deemed Universities, and 446 were Privately Managed (unaided). Out of the 1113 universities, there are 16 Open Universities, with One Central Open University, 14 State Open Universities, and 1 State Private Open University. In all, there are 314 Universities which are having affiliated colleges. According to the report among 1099 responding universities, 475 Universities are located in rural areas. So, the numbers of rural universities show that still most of the country's universities are established in urban areas. Another astonishing finding is that in Union Territories namely Andaman and Nicobar Islands, Dadra and Nagar Haveli, Daman and Diu, and Lakshadweep, no University is existent.

Status of Colleges in Different Districts in India

There are wide variations in the number of colleges per district. The top 10 districts and the number of colleges in those districts are shown in Figure 1. 10.7% of the total colleges are registered in these 10 districts.

Fig. 1. Status of Colleges in different Districts of India



Source: AISHE 2022

State-wise, in Uttar Pradesh, there are 8114 Colleges and for every one lakh population, there are 32 Colleges. Most of the Colleges run only Undergraduate level programmes. Only 2.9% of colleges run PhD level programmes and 55.2% of colleges run postgraduate level programmes. As we know, recently the Government of India introduced the New Education Policy 2020. The vision of the policy is to make higher education institutions more multidisciplinary. The data which we found in this report clearly shows that most colleges in India prefer to run their colleges with one or two courses. Report data also mentioned that 35.8% of colleges, run only a single programme, out of which 82.2% are privately managed. Among these, 30.9% of colleges run B.Ed. Courses only. More number of B.Ed. colleges have opened in India, this is a kind of question mark on the quality of Teacher Education Institutes, often such colleges only give degrees.

Status of Enrolment in Different Courses

Overall enrolment in professional courses such as B. Tech, M.BA., B.CA, and MCA is more in private institutions than in government institutions both at undergraduate and postgraduate levels. The share of enrolment in professional courses is higher at the postgraduate level than at the undergraduate level in both private and government. In private institutions, the share is much higher. Female participation in professional courses is lower in comparison to academic

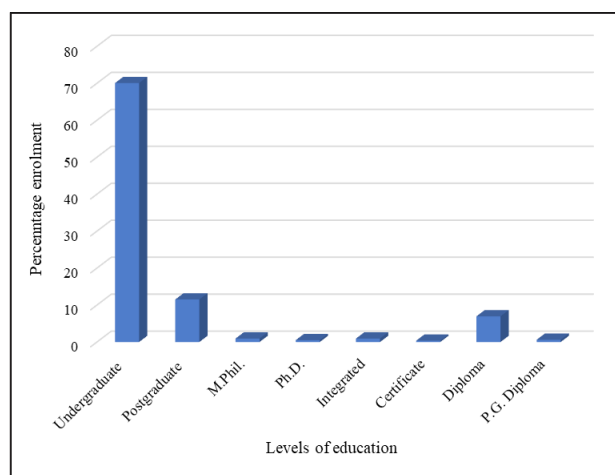
courses, at both undergraduate and postgraduate levels.

It is evident from the data available in the survey that professional courses are more popular in private institutions. The reason for this is that these institutions provide more resources, better infrastructure and good placement services rather than government institutions. The second major findings are that Female participation in professional courses is lower in comparison to academic courses, at both undergraduate and postgraduate levels. The main reason for this is the mentality of our society, many parents of girl students want to study more academic courses. One of the reasons behind girls not studying professional courses is that the fees for these courses are also high. A large part of our society still does not want to spend more on the education of girls.

Status of Level-wise Enrolment

The total Student enrolment is distributed in 8 levels viz – Ph.D., M.Phil., Postgraduate, Undergraduate, PG Diploma, Diploma, Certificate, and Integrated as shown in Figure 2.

Figure 2. Status of Enrolment as Per the Level of Education



Source: AISHE 2022

Out of the total enrolment of 4,13,80,713 students, a vast majority of 3.26 crore students are enrolled at the undergraduate level (78.9%) followed by 11.4% of students enrolled in post-Graduation level (47.16 lakhs). There are 2,255 students enrolled in Integrated Ph.D. in addition to 2.11 lakh students enrolled at Ph.D. Level. There is a small share of 7.2% of students enrolled at the Diploma level i.e., 29.79 lakh students, and out of this majority of students are enrolled in

Technical/ Polytechnic, Nursing, and Teacher Training streams. A small share of 1.55 lakh and 2.57 lakh students are enrolled at Certificate and PG Diploma levels, respectively, constituting 0.38% and 0.62% of the total share.

Programme-wise Enrolment

The highest enrolment among all the programmes is in Bachelor of Arts (B.A.), with 104 lakh students, of which 52% are female and 48% are male. Bachelor of Science (B.Sc.) has 49.12 lakh students enrolled (out of them 52.3% are female). There are 43.22 lakh students enrolled in B.Com. (out of them 48.5% are female). B.Tech. has 23.20 lakh enrolled students out of which 28.7% are female. Bachelor of Engineering (B.E.) has 13.42 lakh students enrolled out of which 28.5% are females.

Over 50% of students enrolled in India's higher education system are pursuing one of three undergraduate programs: Bachelor of Arts (BA), Bachelor of Science (BSc), and Bachelor of Commerce. These programs have a duration of three years, but the syllabus prescribed for them is limited in terms of innovative content. Additionally, only top-tier colleges provide substantial linkages with industry, which can hinder the path from graduation to employment if not properly connected.

Availability of Infrastructure in Indian Higher Institutions

According to the report 89% of universities, 92% of colleges, and 91% of Standalone Institutions are maintaining playgrounds. 94% of universities, 98% of colleges, and 98% of Standalone Institutions have a library facility. The percentages of universities, colleges, and standalone institutions having laboratories are 85%, 82%, and 93%, respectively. Data showed that many universities and colleges did not provide basic infrastructure facilities like libraries, laboratories, separate toilets, counselors, stadiums, etc. Overall, poor infrastructure can create significant challenges for both students and teachers and can hurt the quality of education. Policymakers and education leaders need to prioritize investment in infrastructure to ensure that all students have access to safe, high-quality learning environments.

Discipline and Subject-wise Enrolment

According to the survey of AISHE, in the total enrolment at the undergraduate level, the highest number

of students are enrolled in Arts courses (104 lakhs, out of which 52% are female), followed by Science (48.17 lakh students out of which 52% are female), Commerce (with 43.23 lakh students enrolled, out of which 48.5% are female) and Engineering and Technology is the fourth major stream (36.86 lakh student enrolment of which 71% are male). Data showed that Arts courses are preferred by students compared to science subjects. From the data, it is clear that female students are still underrepresented in courses like engineering and technology.

Status of Student's Enrolment in Higher Education

The top 6 States in terms of Student Enrolment are Uttar Pradesh, Maharashtra, Tamil Nadu, Madhya Pradesh, Karnataka, and Rajasthan (Figure 3). They constitute 53.17% of the total Student Enrolment. According to AISHE 2020-21 survey half of the student enrollment is from these 6 states. Thus, it can be said that the level of enrollment is not the same in all Indian states.

Figure 3. Top 6 states in terms of student enrolment in higher education.

Source: AISHE 2022



When students are equally distributed across all states, it leads to balanced regional development as all states get an equal opportunity to develop and contribute to the country's progress. It helps to bridge the gap between developed and underdeveloped states, ensuring that all states receive an equal share of resources and opportunities. With equal enrollment, all states have equal access to resources such as teachers, classrooms, and educational infrastructure. Equal distribution of students across all states helps promote

national integration by fostering a sense of unity and commonality among students from different regions. In conclusion, equal distribution of student enrollment across all states of India is crucial for ensuring balanced regional development, eliminating regional disparities, promoting national integration, and addressing skill shortages.

Representation of Foreign Students

The total number of foreign nationals/students enrolled in India is 48,035. The foreign students enrolled in India come from 163 different countries across the globe. The highest share of foreign students comes from the neighboring countries, of which Nepal contributes 28.25%, followed by Afghanistan at 8.4%, Bangladesh at 5.7%, and the United States at 5.1%. The top 10 countries from where students come to India include United Arab Emirates (4.8%), Bhutan (3.8%), Sudan (3.3%), Nigeria (2.9%), Tanzania (2.7%), and Yemen (2.3%). Also, the number of male students coming from these top 10 countries was higher than the number of female students. Data showed two major findings. Firstly, the numbers of foreign students are not good in India. Most of them belong to third-world or less-developed countries. A large number of students prefer USA, Germany and Japan and other developed countries for their studies, not India.

Secondly, the ratio of female students is less than that of male students. One of the main reasons for this may be that women from other countries do not consider India a safe country. India has an image as being unsafe for women due to high rates of gender biases and violence. A total of 4,28,278 cases of crime against women were registered during 2021, showing an increase of 15.3% over 2020 (3,71,503 cases) NCRB, 2021. This may discourage female students from considering India as a study destination. India has a very different culture and way of life compared to many Western countries, which may be off-putting for some female students. Some universities in India may not be as well-known internationally as universities in other countries, which could make it harder for students to get jobs or further their education abroad.

Internationalization of higher education is not a new concept but after a decade that is the biggest challenge in the Indian education system. To resolve the problem this new education policy vision 2020 India will be promoted as a global study destination providing premium education at affordable costs thereby helping to restore its role as a Vishwa Guru. MOUs with foreign countries will be signed. High-

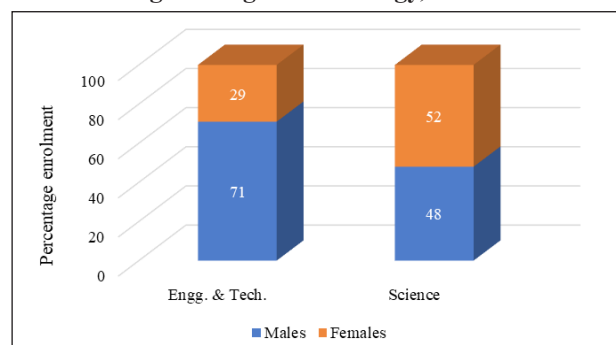
performing Indian universities will be encouraged to set up campuses in other countries, and similarly, selected universities e.g., those from among the top 100 universities in the world will be facilitated to operate in India. To do all this at the grassroots level, we need to make our institutions so competent and qualified that foreign universities can build their campuses here.

Gender-Wise Distribution of Stem Enrolment

In 2020-21, the percentage enrolment of males in engineering/technology is 71% and 48% in science while girls' enrolment in engineering/technology is 29% and in science 52% (Figure 4). Other data proves this fact. We analyzed data related to STEM and found that the Enrolment in STEM (at U.G., P.G., M.Phil. and PhD. levels) is 94,69,022 out of which 53,74,237 (56.8%) are males and 40,94,785 (43.2%) are females. Female participation is very high and has also increased sharply at M.Com levels during the last 5 years. However, female participation is still very low in undergraduate courses like BCA, BBA, B. Tech / B.E, and LLB.

The National Education Policy--2020 emphasizes the importance of STEM (Science, technology, engineering, and mathematics) education to equip students with the skills and knowledge necessary to succeed in the rapidly evolving and technology-driven world. The NEP--2020 recognizes the critical role of STEM education in shaping the future of India and emphasizes the need to provide quality STEM education to all students. But data from the AISHE report shows that the percentage of enrollment of male students in STEM is much higher in comparison to girl students. There is a significant gap between girls' and boys' enrollment in STEM subjects. To reduce this gap, we must make science and technology more accessible and affordable for girls to implement this provision of the new education policy.

Figure 4. Gender-wise status of enrolment in Engineering & Technology, Science



Source: AISHE 2022

Trend in Gross Enrolment Ratio (GER)

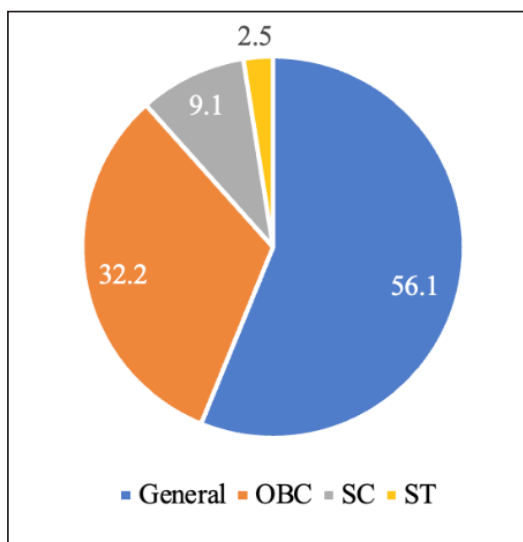
Gross Enrolment Ratio (GER) has increased during the last 5 years, from 24.1 in 2016-17 to 27.3 in 2020-21. The increase is high under the SC category which has increased from 20.3 in 2016-17 to 23.1 in 2020-21. In the case of the ST category, the GER has increased appreciably from 14.8 to 18.9 during this period. In comparison to males, the increase in GER is higher for females. One of the key objectives of the NEP is to increase the gross enrollment ratio (GER) in higher education to 50% by 2035.

Teaching Positions

According to the AISHE survey, the total number of teachers for the year 2020-21 was 15,51,070. Out of these, 56.1% are male teachers and 42.9% are female teachers. Female teachers are more common in states such as Kerala, Punjab, Chandigarh, Goa, Meghalaya, Nagaland, Delhi, Haryana and Lakshadweep. The total number of teachers at the university level is around 2.36 lakh out of which 62.2% are males and 37.8% are females. Another significant representation in terms of gender distribution is the number of female teachers per 100 male teachers. At the all-India level, there are 75 female teachers per 100 male teachers. This skewed data where female representation is lacking shows a significant gender gap where more opportunities for hiring and training of female teachers should be created. Category-wise, in the SC category, there are 60 female teachers per 100 male teachers and in the case of ST and OBC, it is 75 and 71 females per 100 male teachers, respectively. For the Muslim minority, it is 59 female teachers per 100 males. The female representation of teachers belonging to the Persons with Disabilities (PWD) category is 48 females per 100 male teachers. When we analyze this data through the lens of caste category, we found that 56.1% of teachers belong to the general category; 32.2% of teachers belong to the OBC category while SC and ST teachers are 9.1% and 2.5% respectively. Only 5.6% of teachers come from Muslim minority groups (Figure 5).

More than half of the faculty members in the country's higher educational institutions are from the general category, with those from the Scheduled Castes (SC) and Scheduled Tribes (ST) being the worst represented. The data only deepens the worries of the teacher community regarding the new UGC circular on hiring department-wise in the reserved category.

Figure 5. Distribution of Teaching Staff (%) as Per the Social Category.



Source: AISHE 2022

Status of Non-teaching Staff

Non-teaching posts in responding Institutions are 13,95,868 and are divided into four groups – A, B, C, and D. The share of Group C is the highest at 40%, while Group D stands second with 28%. Group-A and Group-B comprised of 14% and 18% of nonteaching posts, respectively. The number shows that there is a huge shortage of non-teaching staff; most of these shortages are at the level of Group B. On December 8, the Ministry of Education informed the Parliament that more than 18,500 posts of non-teaching staff are vacant in Central Universities, IITs, and IIMs. This needs significant improvements.

Conclusion

In this survey, both the condition and direction of the present higher education have been presented. The purpose behind displaying all the dimensions related to higher education in the survey is so that we

can know how much progress has been made in the past years and in which areas we are lagging, where more improvements and efforts are needed. The Indian government introduced the new National Education Policy in 2020 to build a new India. This policy aims to make India a great knowledge power. To make India a great knowledge power, we must make a lot of improvements in our higher education institutions. Today, there are many problems and challenges in higher education in India. In conclusion, the AISHE survey for 2021 provides valuable insights into the state of higher education in India and the progress made in implementing the NEP 2020. While there is still much work to be done, the report indicates that progress is being made in several key areas, including increasing the GER, promoting online learning, and offering multidisciplinary programs. By addressing the challenges highlighted in the survey, India can continue to make strides towards creating a world-class education system that prepares students for the challenges of the 21st century. The AISHE data can be utilized for various purposes in the higher education sector, such as enhancing instructional delivery, aligning student enrollment with available programs, facilitating student placement, achieving the objectives outlined in NEP-2020, and establishing an efficient data management system. However, to ensure that the AISHE data is effectively utilized for strategic decision-making by the Ministry of Education and State Governments, there needs to be stronger coordination among regulatory bodies. This will help to establish effective oversight of the data economy and maximize the benefits of AISHE data in the higher education sector.

References

1. GoI (2021) Crime in India-2021, Statistics vol.1, New Delhi: National Crime Records Bureau, Ministry of Home Affairs, Government of India
2. All India Survey on Higher Education (2020-21) New Delhi: Ministry of Education, Department of Education.

□

Sports Engineering: Need of the Hour for Sports in India

Pintu Modak*

Technology is continually changing the nature of sports. It has made a tremendous impact on many sports over the years. Its impact can be observed in a variety of ways ranging from the infrastructure, design of sports equipment and apparel, analysis of sports performance, accuracy

in performance measurements, and enabling umpires for better decisions to provide spectators with better viewing of sports performance. Technology also has a substantial impact on enhancing social inclusion and expanding the base of participation at the community level in society. Not only sports, but the advancement of technology also made a big impact on fitness as tele fitness. The internet of things (IoT) and AI applications are widely used to know about losing or gaining weight, calories burnt, tracking performance, and many more.

As technology is the application of engineering studies, sports engineering has become an essential domain in sports to provide coaches and athletes with the standard facilities and equipment as prerequisites for sports performance at all levels. Performance in the international arena depends heavily on the advanced sports infrastructure. Undoubtedly, India has no dearth of sports talents but what we lack is sports infrastructure and facilities at the peripheral level. Even though India has the third largest scientific and technical manpower in the world, its contribution to sports remains almost zero. Hence, we are dependent upon imported equipment, and facilities and outsourcing technical manpower which every school and college cannot afford. And outsourcing technology will never bring sustainability to sports development. This is one of the important reasons leading us to lag in sustainable sports development. It is important for us to have indigenous technology, affordable equipment, and facilities for improving sports at all levels. This makes a rationale to bring together people from Sports Science/Physical Education and Engineering/Science

on a single platform to deliberate the most forward-looking issues in sports.

Engineering plays a significant role in sports. As so engineering principles such as a lever, force, friction, energy transfer (kinetic & kinematic), stress in materials, aerodynamics, etc. are applied in designing sports equipment, infrastructures, and facilities. The primary purpose of using engineering principles in sports is to improve performance and make sports safer by having lighter, faster, and stronger equipment. And engineers in India are well capable of carrying out research to improve sports technology. But what they need is to know the application of their subject knowledge in sports technology. Aeronautics and Astronautics, for example, have a lot in common with tennis racquets, skis, and other sporting goods as the same engineering principles are applied. The similarities between sporting goods and aerospace technology are also quite striking. They both need strong, lightweight materials as they must have good aerodynamics. *Engineers don't need to divert from their core subjects but can apply their expertise in sports remaining in their own domain.*

There is no lack of effort from the athletes in India, but we are doing nothing in sports technology.

to support them. This has been the reason for the genesis of India's first avowed Sports Engineering Association (SEA) at BITS Pilani (Raj.). The SEA is a common platform for people from Engineering/Science and Sports Science/Physical Education to address the issues concerning the sports community in technology. But merely having sports engineering and technology will only lead to nothing else, unless the sports administrators will sense its application in practice. What we need is to synergize with each other remaining in our own domain and sincerely accepting the other domain and connecting with the sports will help us to achieve our goal. For the explication of Sports Engineering, we need to do the following:

- The Department of Science & Technology (DST) must divert some funds to attract technical institutes exclusively to research in Sports Technology and Infrastructures.

*Assistant Professor, Department of Humanities and Language In-Charge, Physical Education, SWD, Birla Institute of Technology & Science, Pilani (Raj.) 333 031 INDIA

- Technical Institutes should have a Sports Engineering Research Center where students and faculty from Engineering and Science can pursue their projects in sports technology.
- Decentralizing (towards rural areas) the sports Infrastructures and Facilities accessible to everyone irrespectively will mean a real sense of having the vision - *Sports for All* and the only way to make a *Strong Sports Culture*. This will be possible only when we can connect sports with engineering and have our own technology for affordable sports infrastructure and facilities of national standard.
- The acceptance of engineering applications by Indian Sporting Industries and their investments in R&D
 - The execution of the above ideas may strengthen the foundation of sports and will bring success sustainably to the nation as a whole

□

The Association of Indian Universities

The Association of Indian Universities (AIU), is one of the premier apex higher education institutions of the Country established in 1925. It is a research-based policy advice institution to the Government of India in the field of Higher Education, Sports, and Culture. Since its inception, it has been playing a vital role in shaping Indian higher education. Most importantly, AIU is vested with the power of according equivalence to Degrees/Qualifications offered by the universities across the world with those offered in India. AIU has also been mandated by the Department of School Education, Ministry of Education, Government of India to accord equivalence to the Indian Boards for the Secondary/Senior Secondary Examination vide Gazette Notification. AIU is a think tank body with the responsibility of undertaking academic activities such as: conducting Research Studies in higher education; acting as the bureau of information on higher education; liaising with international bodies and universities for the internationalisation of Indian higher education among many others. AIU conducts inter-university sports and cultural events at national and international levels. As a National Sports Promotion Organization (NSPO) it promotes sports among Member-Universities and maintains the standards in sports.

Being an apex advisory institution, it constitutes an integral part of all major decision-making committees and commissions in the country. As a representative body of Indian universities, it facilitates cooperation and coordination among Indian universities and liaises between the universities and the Government (Central as well as the State Governments) and also National and International bodies of higher education in other countries in matters of common interest. Whereas all the Indian universities benefit from its contribution, at present it has a membership of about 898 universities including 14 overseas universities from other countries viz. Bhutan, UAE, Kazakhstan, Mauritius, Malaysia Nepal, as Associate Members.

Some of the legends among many, who served AIU as its Presidents are Dr. Sarvepalli Radhakrishnan, Dr Zakir Hussain, Dr. Syama Prasad Mukherjee, Dr K L Shrimali A.L Mudaliar, Dr Akbar Hydary, Prof A C Woolner, Pandit Amarnath Jha, Sir Maurice Gwyer, Dr K L Shrimali, Prof Shiv Mangal Singh ‘Suman’, Prof M S Gore, Prof M S Adiseshiah, Prof M S Valiathan.

The Modern Teacher's Competencies in 21st Century

Tanushree S. Bhargava*

We frequently hear about 21st-century learners and the knowledge and skills our students will need in the future. What about teachers? What instructional skills will 21st-century teachers need to prepare our students? How are they different from the skills teachers needed in the past?

In recent years, the quality of education has notably changed. If, earlier, the university's major aim was that of providing students with certain types of knowledge that they were expected to apply later, universities today focus principally on 'life skills'. Our aim is to educate students to obtain knowledge by themselves and to work in ways that facilitate them to come up with new ideas. Generating new ideas is a key tenet of modern society. We require professionals who are culturally competent, talented, innovative and creative problem-solvers and skilled and critical thinkers. New technologies give an opportunity to encourage critical thinking.

We must provide students with skills that will help them work collaboratively and sensitively in a team, become decision-makers, plan and manage their time effectively, listen to one another and choose the right communication strategy at the right time. Thereby, we have come to understand that, to meet these new teaching requirements, we need 21st-century skills.

Teacher Competence

Competency is a term used broadly by different people in different contexts; hence, it is defined in different ways. Teacher education and job performance are two contexts in which this term is used. Competencies are the requirements of a "competency-based" teacher education and include the *knowledge, skills and values* a teacher-trainee must demonstrate for the successful completion of a teacher education programme.

Some characteristics of competency are as

follows:

1. A competency consists of one or more skills whose mastery would enable the success of the competency.
2. A competency is connected to all three of the domains under which performance can be assessed: knowledge, skills and attitude.
3. Possessing a performance dimension, competencies are observable and demonstrable.
4. Since competencies are observable, they are also measurable. It is possible to assess competency from a teacher's performance. Teaching competencies may require equal amounts of knowledge, skill and attitude, but some will not. Some competencies may involve more knowledge than skill or attitude, whereas, some competencies may be more skill or performance-based.

Some scholars observe "competence" as a blend of knowledge, skills and behaviour used to improve performance, or as the state or quality of being adequately qualified and capable of performing a given role. The Occupational Competency movement initiated by David McClelland in the 1960s sought to move away from traditional attempts to describe competency in terms of knowledge, skills and attitudes and to focus instead on those specific values, traits, and motivations (i.e. relatively enduring characteristics of people) that are found to consistently distinguish outstanding from typical performance in a given job or role. The term "competence" first appeared in an article authored by Craig C. Lundberg in 1970 titled "Planning the Executive Development Program", and then in David McClelland's seminal 1973 treatise entitled, "Testing for Competence Rather than for Intelligence". The term has since been popularized by Richard Boyatzis and many others.

Student Skills

The manifold complexities of today's society severely challenge individuals. What do these demands imply for those key competencies that individuals need

*Assistant Professor, Smt. RKD Khanushiya M. Ed. College, Palanpur-385001 (Gujarat). E-mail: tanushreebhargava92@gmail.com

to acquire? Defining such competencies can facilitate us to identify overarching goals for educational systems and lifelong learning and evaluate the range of competencies for the 21st-century teacher.

At first, we need to realize the skills and sub-skills students require for successful communication and personal development, those that should assure them a competitive advantage in life:

- *Thinking and Problem-Solving*
 - thinking logically
 - estimating and guessing
 - turning problems into opportunities
- *Self Direction and Learning*
 - developing memory
 - being assertive
 - making personal changes
- *Collaboration*
 - persuading others
 - working in a team
 - discussing alternatives
 - reaching compromises
- *Information and Research*
 - understanding graphs
 - taking notes on a text
 - writing surveys
 - reporting information
- *Organization and Planning*
 - making plans
 - managing time
 - setting personal goals

Teaching Competencies

Competency is more than just knowledge and skills; it involves the ability to meet complex demands by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context. Competency is essential to an educator's pursuit of excellence.

A wide range of competencies is required in order to face the complex challenges of today's world by teachers. Teaching competency is an inherent element of an effective training process, one that aspires to contribute to the welfare of a particular country or the world, itself. The central figures in the educational

process are teachers. The success of training and education depends on their preparation, erudition and performance quality. The teaching skills and life-long learning competencies of professional teachers comprise the following:

- to perform complex pedagogical duties;
- to be well-spoken, in good mental and physical health, stable and tolerant;
- to have the propensity to work with the younger generation, well-communicative and observational skills, tact, a vivid imagination, and leadership (Shmelev, 2002).

During their professional careers, teachers pass through the following levels of professional growth to achieve the acme of professional competency.

1st level: *pedagogical ability* – characterized by detailed knowledge of the subject;

2nd level: *pedagogical skill* – perfected teaching skill;

3rd level: *pedagogical creativity* – marked by the implementation of new methods and techniques into educational activities;

4th level: *pedagogical innovation* – distinguished by the incorporation of essentially new, progressive theoretical ideas, principles and methods of training and education (Buharkova, Gorshkova, 2007).

Schools of education have acknowledged the urgency to develop culturally competent teachers. Pedagogical culture is, therefore, an integral part of a competent teacher. Pedagogical culture consists of three components:

- i. **an axiological component**, meaning teacher acceptance of the values of pedagogical work;
- ii. **a technological component**, which facilitates solving different pedagogical tasks;
- iii. **a heuristic component**, which entails setting goals, planning, analyzing and self-critiquing; this is the creative part of the pedagogical activity (Ivanitsky, 1998).

- *Information and Research*

- understanding graphs
- taking notes on a text
- writing surveys
- reporting information
- *Organization and Planning*
- making plans
- managing time
- setting personal goals.

Pedagogical Innovations

Educational innovation has drawn increasing attention around the world, and many countries have already embarked on educational reforms that aim to change both the goals and practices of education. Expectations that such innovations can be leveraged or supported by incorporating ICT (Information and Communication Technologies) into the learning and teaching process are widespread. Such innovations are fundamentally changing students' learning experiences.

Innovation alters the pedagogical system, improving the teaching process and its results. Among the aims of innovation are increased motivation in teaching and educational activity, an increased volume of material studied per lesson, accelerated training, and more effective time management. The introduction of more progressive methods, the use of active teaching forms, and new training technologies are regular spheres of innovation. Genuine innovations emerge from new knowledge of the processes of human development, providing new theoretical approaches and practical technologies for achieving optimal results. Pedagogical innovation demands the replacement of educational paradigms. Another important component of a competent teacher is pedagogical experience. ***Advanced pedagogical experience*** can be transferred and passed on to others, as well as reproduced in training techniques and methods so as to be used by fellow teachers, providing high results without additional time expenditure (Kan-Kalik, Nikandrov, 1990).

21st-century competencies have been defined as the knowledge, skills and attitudes necessary to be competitive in the 21st-century workforce. Teacher preparation and professional development should be reworked to incorporate training in teaching key competencies. The 21st-century teacher needs to know how to provide technologically supported learning

opportunities for students and know how technology can support student learning.

21st-century Teaching Competencies

Teachers Demonstrate Leadership

- a. *Teachers lead in the classroom by:*
 - evaluating student progress using a variety of assessment-data measuring goals;
 - drawing on appropriate data to develop classroom and instructional plans;
 - maintaining a safe and orderly classroom that facilitates student learning; and
 - Positive management of student behavior, effective communication to defuse and deescalate disruptive or dangerous behavior, and safe and appropriate seclusion and restraint techniques.
- b. *Teachers demonstrate leadership in the school by:*
 - engaging in collaborative and collegial professional learning activities;
 - identifying the characteristics or critical elements of a school improvement plan; and
 - displaying an ability to use appropriate data to identify areas of need that should be addressed in a school improvement plan.
- c. *Teachers lead the teaching profession by:*
 - participating in professional development and growth activities; and
 - developing professional relationships and networks.
- d. *Teachers advocate for schools and students by:*
 - implementing and adhering to policies and practices positively affecting students' learning.
- e. *Teachers demonstrate high ethical standards.*

Teachers Establish a Respectful Environment for a Diverse Population of Students

- a. *Teachers provide an environment in which each child has a positive, nurturing relationship with caring adults by:*
 - maintaining a positive and nurturing learning environment.
- b. *Teachers embrace diversity in the school*

community and in the world by:

- using materials or lessons that counteract stereotypes and acknowledge the contributions of all cultures;
- incorporating different points of view in instruction; and
- understanding the influence of diversity and planning instruction accordingly.

c. Teachers treat students as individuals by:

- maintaining a learning environment that conveys high expectations of every student.

d. Teachers adapt their teaching for the benefit of students with special needs by:

- cooperating with specialists and using resources to support the special learning needs of all students; and
- using research-verified strategies to provide effective learning activities for students with special needs.

e. Teachers work collaboratively with families of students and other significant adults by:

- communicating and collaborating with the home and community for the benefit of students.

Teachers Know the Content They Teach

a. Teachers develop and apply lessons based on an effective course of study by:

- integrating effective literacy instruction throughout the curriculum and across content areas to enhance student learning.

b. Teachers honor the content appropriate to their teaching speciality by:

- demonstrating an appropriate level of content knowledge in their speciality; and
- encouraging students to investigate the content area to expand their knowledge and satisfy their natural curiosity.

c. Teachers show they recognize the interconnectedness of content areas/discipline by:

- demonstrating knowledge of their subject by relating it to other disciplines; and
- relating global awareness of the subject.

d. Teachers make their instructions relevant to students by:

- integrating 21st-century skills and content in instruction.

Teachers Facilitate Learning for Their Students

a. Teachers show they know the ways in which learning takes place and the appropriate levels of intellectual, physical, social, and emotional development of their students by:

- identifying developmental levels of individual students and planning instruction accordingly; and
- assessing and using the resources needed to address the strengths and weaknesses of students.

b. Teachers plan instruction appropriate to their students by:

- collaborating with colleagues to monitor student performance and making instruction responsive to cultural differences and individual learning needs.

c. Teachers show their acumen and versatility by:

- using a variety of methods and materials suited to the needs of all students.

d. Teachers display their awareness of technology's potential to enhance learning by:

- integrating technology into their instruction to maximize student learning.
- e. Teachers help students grow as thinking individuals by:*

- integrating specific instruction that helps students develop the ability to apply processes and strategies for critical thinking and problem-solving.

f. Teachers help students to work in teams and develop leadership qualities by:

- organizing learning teams for the purpose of developing cooperation and student leadership.

g. Teachers reach their students best by:

- using a variety of methods to communicate effectively with all pupils; and
- consistently encouraging and supporting students to articulate thoughts and ideas clearly and effectively.

h. Teachers best assess what students have learned by:

- using multiple indicators, both formative and

summative, to monitor and evaluate student progress and to inform instruction; and

- providing evidence that students are attaining 21st-century knowledge, skills and dispositions.

Teachers Reflect on Their Practice

a. *Teachers analyze student learning by:*

- using data to provide ideas about what can be done to improve student learning.

b. *Teachers link professional growth to their professional goals by:*

- participating in recommended activities for professional learning and development.

c. *Teachers function effectively in a complex, dynamic environment by:*

- using a variety of research-verified approaches to improve teaching and learning.

Conclusion

Ideally, then, educators should demonstrate the following competencies:

1) ***Effective classroom management, maximizing efficiency, maintaining discipline and morale, promoting teamwork, planning, communicating, focusing on results, evaluating progress, and making constant adjustments. A range of strategies should be employed to promote positive relationships, cooperation, and purposeful learning. Organizing, assigning, and managing time, space and activities should ensure the active and equitable engagement of students in productive tasks.***

2) ***Effective teaching practices, representing differing viewpoints, theories, “ways of knowing” and methods of inquiry in the teaching of subject matter concepts. Multiple teaching and learning strategies should help engage students in active learning opportunities that promote the development of critical thinking, problem-solving, and performance capabilities while helping them***

assume responsibility for identifying and using learning resources.

3) ***Effective assessment***, incorporating formal tests; responses to quizzes; evaluation of classroom assignments, student performances and projects, and standardized achievement tests to understand what students have learned. Assessment strategies should be developed that involve learners in self-assessment activities to help them become aware of their strengths and needs and encourage them to set personal goals for learning.

4) ***Technology skills***, knowing when and how to use current educational technology, as well as the most appropriate type and level of technology to maximize student learning.

References

1. Buharkova, O., V., and Gorshkova, E. ,G. (2007). Image of the leader: technology of creation and promotion. Training programme. Saint-Peterburg.
2. Competence (human resources). Wikipedia. The Free Encyclopedia website. Retrieved in February 2012 from http://en.wikipedia.org/wiki/Competence_%28human_resources%29.
3. Conceptual Framework: Preparing the Future-Ready Educator. Official website of Department of Education at Davidson College. Retrieved in February 2012 from <http://www.davidson.edu/academic/education/framework.html>.
4. Diagram of teaching. Macmillan publisher website. Retrieved in January 2012 from http://www.mindseries.net/upload/assets/4/assets/3996/2950b6162255a6a6c6c875b0346f8d9c4e408e99/Spode_Diagram_graphic.pdf.
5. Ivanitsky, A. T. Training of personnel development in the educational collective: methodological guide. Saint-Peterburg, 1998.
6. Kan-Kalik, V. A., Nikandrov, N. D. Pedagogical creativity. Moskov, 1990.
7. Shmelev, A., G. (2002). Psychodiagnosis of personnel characteristics. Saint-Peterburg.
8. Teacher competence in higher education, February, 2012. <http://www.egyankosh.ac.in/bitstream/123456789/24676/1/Unit6.pdf>.



Architect of Innovations

Nitin Gadkari, Hon'ble Minister of Road Transport and Highways, Government of India delivered the Convocation Address at the 22nd Convocation Ceremony of the Sri Balaji University, Pune on January 27, 2023. He said, "There are opportunities everywhere. People can turn problems into opportunities and opportunities into problems. Education and knowledge both are important, but it is not necessary that an educated person will be a good person, humanity for mankind is very important too." Excerpts

Knowledge is the greatest power in the 21st century

Certainly, you have the potential to become officers and CEOs of many companies in the country. And I am certain that you will all do great work in different sectors of society in the future. Investment made in education is investment in building the future of a country. And knowledge is the greatest power in the 21st century. Innovation, entrepreneurship, technology, science, research skills, and successful practices, all come under knowledge. The conversion of knowledge into wealth is the future. The power that you have gained in your chosen subject today will definitely shape the country's future tomorrow. Another important philosophy that I strongly believe in is that no one is wasted, and no material is waste. It depends on the use of appropriate technology and an appropriate vision of the leadership that helps you to convert waste into wealth. That is why, the knowledge that you have gained here, the instruction, enlightenment and morals that you have received would have developed your sense of duty, leadership, and personality. And this is very important.

Now there's quality education

When I inquired about the number of private universities in Pune that impart such quality education, I was told that there are 14 such institutions. There was a time when there were only government run universities. But gradually there has been an exponential increase in the number of renowned universities with good ratings in the private sector as well. People are now well aware of the kind of quality education being imparted in these universities.

Education must reach all people, this much is 2 given. It must be omnipresent and at the same time its quality should be maintained.

When I was serving as a young Vidhayak in the Government of Maharashtra, I was part of a committee constituted to make a report on the condition of primary, secondary and higher secondary education in the State and submit the report to the government. After touring through the state for 15-20 days we returned to Mumbai. I sold our chairperson that our report could be written in just four sentences. He asked 'How's that possible?' and I replied, "Where there was a school building, there were no teachers; where there were teachers, there was no building; where both building and teachers were available, there were no students; and where there were all three, there was no education."

Entrepreneurship is very important

I have been an average student. I used to play cricket and was a student leader and hence my focus on studies was less. In those days, Matriculation was in the 11th standard. I was eager to become an engineer. But I had scored 52 percent overall. In science stream subjects, my score was 49 percent and I couldn't secure a seat in engineering as it was mandatory to score above 50 percent in science subjects. Sometimes, it makes me laugh that I have been awarded honorary degrees from four universities in Maharashtra. I told them that it was awkward that they were presenting me with these degrees when I could not secure an engineering seat by myself. One degree was presented to me by Panjabrao Deshmukh Agricultural University, one was from Mahatma Phule Krishi Vidyapeeth, Rahuri, one from Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, and the fourth one was from Nanded University. Three of these are related to Agricultural Science.

"We import fossil fuels worth Rs 17 Lakh Crores. How to reduce our imports and increase our exports will be the most important thing to achieve for

Atmanirbhar Bharat. Within ecology and environment, waste to wealth assumes special importance”

I always maintain that an institute of management is very important, and human resources are very important. But most important of all is the institute of entrepreneurship. And your appropriate vision, your political will, and your strong commitment play a very important role in entrepreneurship. And Pune has taught me this well.

Tryst with Dhirubhai Ambani

When I was a minister in the Maharashtra government, I was given the onerous responsibility of constructing the Mumbai-Pune Express Highway. Mr. Dhirubhai Ambani was the head of Reliance at that time. Reliance had submitted the lowest tender for the project, at Rs 3600 crores. Legally, the lowest bidder should have been given the contract. But my conscience told me that this project could be done with Rs 1800 Cr and Rs 3600 Cr was an overpriced quote. Obviously everyone from Balasaheb Thackeray to Pramod Mahajan told me that if legally the proceedings were correct, why was I opposing it? I told them that this project could be completed at half the price. When I did not sign the tender, it finally got rejected. Mr. Dhirubhai was also quite perturbed saying that in spite of being the lowest, their tender got rejected. He asked, how would I make the road, it was not the job of the government. I was quiet for a while but then I couldn't contain myself anymore. So I told him that if I was not able to construct the road I would shave off my moustache. But if I was able to make this road then what would he do? I slipped away from the conversation after a while.

Where there's a will...

Having rejected the tender process, I created the Maharashtra State Road Development Corporation Limited (MSRDC) and formulated a plan to construct the road. I had come to Pune, and the construction work was to begin shortly. There was a press meet arranged at the Patrakar Bhavan in Pune. After the entire presentation on the highway project was done, there was a question-answer session. There was a very renowned journalist, Mr. Prakash Kardaley, Resident Editor, The Indian Express, Pune. He asked me very politely, “Mr. Gadkari, how much money do you have?” To which I replied that I had Rs 5 Cr. He asked

how much would the road cost, and I said Rs 1800 Cr. “How much time would it take?” “Two years,” was my reply. He laughed and asked, do you politicians expect us to write whatever you say? I said, “No”. He said you have Rs 5 Cr, you have rejected a tender of Rs 3600 Cr, and you say that the project will be done in Rs 1800 Cr, how do you expect us to believe you? So, I said to him. “If there is a will, there is a way. And if there is no will, then there is only survey, seminar, discussion, committee, and sub-committee” I escaped the rhetoric that day but I was happy that after two years the road was complete, it cost only Rs 1600 Cr and saved the government Rs 2000 Crore.

Pat from Dhirubhai Ambani

And when this expressway work was going on, Mr. Dhirubhai invited me for lunch. He was a very large-hearted man. Mukesh and Anil were also there. This was a few years before his death. As we all sat down for lunch, he said, “Nitin, I've lost, and you have won.” I said, “It's not like that, I'm like your son, it's only your blessings that helped me to undertake the project” He said, “I have a wish; I am the son of a simple schoolmaster, yet I have earned so much respect and credibility in life that if I want to, I can put together Rs 5000-6000 Cr in a few hours. I am no more worried about myself or my family. I care about my country. I have been keeping a watch over your work since I didn't think that you would be able to achieve this. However, you are doing splendid work, I saw from the airplane. If we have more people like you in the country, we can hope to have a bright future for India. My felicitations to you.” Later Mr. Dhirubhai told me that there was a hospital in the name of his mother being constructed near the old Mumbai-Pune Highway. He wished that I could inaugurate the hospital. I told him that it would be an honour and asked him about the date for the same. He told me that it was scheduled to be inaugurated on Dussehra festival day. I told him that we have an important Rashtriya Swayamsevak Sangh (RSS) programme on Dussehra and have never missed it since childhood. He said, “Don't worry, when will the programme finish?” I said, “At 10 o'clock”. He said his airplane would pick me up, I could come to the venue to attend the function, have lunch and by 5 pm. would be Back at Nagpur. I came, and left after attending the programme.

We need people who get things done

Later when our government was not in power, I was the Leader of the Opposition. Vilas-rao Deshmukh was the Chief Minister and Chhagan Bhujbal the Deputy Chief Minister. During that time, Bill Clinton, then President of USA had visited the Bombay Stock Exchange. Narayan Rane and I were the Leaders of the Opposition and therefore we also attended the event. It was a very small hall. Mr. Clinton finished his speech and he felicitated Mr. Dhirubhai Ambani. At that time, Dhirubhai called me over and introduced me to Mr. Clinton, and said. "Meet Nitin! He is like my son and he is the man behind all the flyovers and other construction you see in Mumbai today" He also mentioned the Worli-Bandra sea link. He blessed me and praised me generously before Mr Clinton. He had no qualms about the fact he could not get the contract to build those roads. He was rather happy that eventually the roads were built. That was also an indication of his large-heartedness. I would like to say that a strong political will is very important. Back in the day, Balasaheb Thackeray gifted me an acrylic sheet with a sentence written on it. I still have that gift with me. It says, "I like people who can get things done" There is no dearth of experts in our country who can analyse and tell you why a particular work is not getting completed. But how to get it done? How to overcome the hurdles and accomplish a particular task? That is where the role of a strong political will comes into play. Knowledge is important and resources are also important. But a strong political will and commitment are equally important. I strongly believe that a financial audit is very important but a performance audit is far more important than a financial audit. No one is perfect and no one can claim that he is perfect. Knowledge alone cannot bring perfection. Knowledge is undoubtedly very important, but certain matters require teamwork. You need the strength to bulldoze your way through these challenges. As an individual, you may be a very sharp, intelligent, and qualified. But how to get things done together with others as a team is also equally important.

"There is no dearth of experts in our country who can analyse and tell you why a particular work is not getting completed. But how to get it done? How

to overcome the hurdles and accomplish a particular task? That is where the role of a strong political will comes into play"

Inspiring Big B

About a month back, we were shooting a programme on road safety for TV18. I was with Mr. Amitabh Bachchan throughout the day. A small Boy from among the attendees stood up and shared his thoughts with us. Mr. Bachchan had been given some dialogues to be delivered. He was not comfortable saying that to a small boy.

I was touched by his simplicity, grace, humility, modesty, and respect toward others. So, knowledge is essential. But you see, knowledge, wealth, and power, these traits can lead to ego and arrogance in a person. But qualities like humility, courteous conduct, elegance, decency, simplicity, compassion, tolerance, spontaneity, kindness, and empathy are like ornaments that help to beautify or enhance one's personality. So, how to develop this team spirit and teamwork once you land in your respective roles at senior levels? The importance of knowledge cannot be underestimated, but the human relationship between two people is also of great importance. Your empathy, compassion, and thoughtfulness towards your subordinates are very important. There is a mathematical equation that you all must have studied. It goes like this, "The work done by a person A is A squared and the work done by a person B is B squared. So, the total work done is equal to A plus B the whole squared. And the answer to this equation is A squared plus B squared plus 2 times AB. This denotes work achieved when you work together as a team. Twice AB is a result of collective team spirit.

The feeling of oneness

I would like to share one of my experiences. This was when the expressway road was not there and the construction work was going on in the wilderness of the Lonavala-Khandala forest area. In those days, there were not many amenities or infrastructure available for the workers. Naturally, they had to face a lot of hardship working there. There was an executive engineer on the site. Once when I was visiting the site, he asked me if we could provide him with a mobile phone, so that he would be able to connect with us, as he was located so far off. He was absolutely right. I

went back to my office and informed the department about the requirement for a mobile phone. My financial advisor informed me that we could not buy a mobile phone using government funds. I was in a fix as I could not understand the difficulties the engineer was facing. Finally, I bought him a mobile phone with my own money. That man had tears in his eyes. These people working at different lower levels in an organisation give their best when they realise that you are treating them as humans with equally compelling needs and wants. You should have a kind and compassionate attitude towards them. Just by using power derived from rank, money, or authority, you can only achieve that much. Respect should not be demanded; respect should be commended. If you deserve it, you will certainly get it.

Your conduct denotes your character

So, the answer to ‘How to get work done?’ lies in your relationship with your subordinates. I am a political leader. Along with one of my friends, I visited the house of a political leader sometime back. We could hear the sound of cups and saucers while we were waiting for him in the living room. He was having tea inside, but he never offered us. That made me wonder how this person gives so many long speeches about noble causes for society and love for the nation and he hasn’t even offered us tea. That would be a typical common man’s reaction. Had he offered us even half of the tea he was having, we would have perceived an entirely different image of him based on his actions. These are the small but very important things based on our behaviour in our personal life, business life, social life, political life, and professional life. And character is defined as one’s behaviour in the dark. Your behaviour in public life is nothing but a charade. Your conduct while you are away from the public eye denotes your true character. This is the most important key in your life. Knowledge alone will not help you succeed in life. It can help you to get a job and get power and status in life. But what kind of person are you? How is your conduct and behaviour with your seniors, your subordinates, etc? How is your demeanour when you are interacting with others? What is your personality and character like? Are you kind, gentle, compassionate, and empathetic towards other human beings? All these traits do make a difference. If you think that you are a topper and a distinction holder, so are scores of other

people. What differentiates you from them are your human qualities, conduct, and demeanour. To become an efficient leader in your field, you must consider inculcating these qualities in your personality besides your knowledge and expertise.

Let not Atmanirbhar stay a dream

I would like to share a small thing with you. We have so many different kinds of people in our country. Different castes, different attires, however we are still one nation. Our country is made up of different socio-economic characteristics. The income of our agriculture and allied sector is 12% of GDP, manufacturing sector is 22 to 24% and that of the services sector is 52-54 %. What I want to tell you here is that unless this 12% goes above 24%, the dream of an Atmanirbhar Bharat will be very distant. It is imperative to bring technology into the rural, agricultural, and tribal India, where poverty, hunger and unemployment are rampant, and empower it to create employment potential and opportunities for development and growth. Till such time water, power, transport and communication, industry will not grow. With industry, comes capital investment. All these lead to employment potential. Therefore, without industry and investment, there will be no job opportunities and without job opportunities, there will be no growth of per capita income and GDP. And without these two it is impossible to eradicate poverty.

Turn waste to gold

Technology can be of different types, but I want to talk to you about ‘need-based technology’ We must know what our needs are, what raw material is available, and what waste material is available As I said before, waste material is also a strength. You would be surprised to know that Nagpur sells sewage water to the Maharashtra government for Rs 300 Cr., every year. When I first suggested to our Mayor, Anil Sole, that we will sell the sewage water, he would not believe me. I said everything is possible and now Maharashtra State Electricity Board (MSEB) buys water from us for its Koradi and Khaparkheda thermal power plants for Rs 300 Cr. With regard to solid waste—to segregate it from sewage water, rooftop solar can be used. Segregated solid plastic waste can be turned into fuel. Organic waste can be put in a bio-digester to create methane and from it, we can extract green hydrogen or CNG. But in the creation

of green hydrogen, there is an incurred cost of power to the tune of approximately 70 percent. If we can provide power at the rate of Rs 2.60 per unit. then we will be able to sustainably extract green hydrogen from sewage water which will run scooters,cars, buses, trucks, industry, chemicals, pharmaceuticals, everything.

Greenfuel to counter pollution

Green hydrogen is the most important technology amongst futuristic technologies. We import fossil fuels worth Rs 17 Lakh Crores. How to reduce our imports and increase our exports will be the most important thing to achieve for Atmanirbhar Bharat, and those will be the first steps towards us becoming a super-economic power. The pollution situation is very grim today. The three most important pillars of society are ethics, economy, ecology and environment. Within ecology and environment, waste to wealth assumes special importance. And if you all foray into this field, there is great potential for profit. There is a shortage of semi-conductors that are needed in the automobile sector as well. The total size of our automobile industry is Rs 7.5 lakh crores, and this industry brings in the maximum GST to both central and state governments. It has given 4.5 crore jobs, and a lot of exports. All reputed automobile brands, baring a few, are from India. I visited Pune and launched the Mercedes' Electric Car, Blue Energy's LNG Truck, Bajaj E-scooter, and also went to Bangalore and launched the TVS E-scooter. There are around 400 start-ups working on E-scooters. And that's why I feel technology and research are very important. Proven technology is also very important along with economic viability. If there is no profitability there is no use for the product. Proven technology, economic viability, availability of raw material, and marketing

of the finished product—only when these unite can you reach your goal. There will be many such projects which will be important for our country's development.

“The economy is important, as is the ecology and environment. We need to work on new solutions which are cost effective, pollution free. There are opportunities everywhere. People can turn problems into opportunities”

We need to work on new solutions

Major countries, including European and American are making deals with India. We have huge opportunities. If we take those opportunities, back them up with technology, take a look at whatever is needed to be imported worldwide and research on it, it will be beneficial for us. It will generate wealth and employment, and the country will progress. Agriculture, rural, and tribal sectors offer huge scope as a means of availability of raw material. In Vidarbha, where many farmers committed suicide, we set up

1,500 wells, rivers were cleaned and repaired, so it is now “Gaon ka paani gaon mein, khet ka paani khet mein, ghar ka paani ghar mein”. If everyone tries to plant even one tree each, our country's ecology will change. The economy is important, as is the ecology and environment. We need to work on new solutions which are cost effective, pollution free. There are opportunities everywhere. People can turn problems into opportunities and opportunities into problems. Education and knowledge both are important, but it is not necessary that an educated person will be a good person, humanity for mankind is very important too. I wish all of you do the same.

□

CAMPUS NEWS

National Conference on Emerging Issues in Functional Areas of Management

The one-day National Level Conference on 'Emerging Issues in Functional Areas of Management' was organized by the Department of Business Administration, Vidyavardhaka College of Engineering, Mysuru (Karnataka) on March 26, 2023. About 250 delegates including 40 outstation delegates attended the conference. The welcome address was delivered by the Conference Secretary, Prof. J Madegowda. The event was inaugurated by Prof. Jaswanth Singh, Visiting Professor and Consultant, Banking, Insurance, and Pensions Domain. In his Inaugural Address, Prof. Singh highlighted the emerging trends in the banking and insurance sectors with relevant real cases such as the role of insurance at the time of Chennai Floods for iPhone and for Wimbledon during the COVID-19 pandemic. He drew the attention of the august body about the inflation rate in healthcare charges/fees. He also argued for 'pay as you use' third-party insurance for vehicle owners – e.g., during COVID-19 for more than one year, the vehicles were not used and therefore, where was the need for third-party insurance, he asked. In his Keynote Address, Dr. Yashavantha Dongre, Vice Chancellor, Chanakya University, Bengaluru highlighted emerging trends in management in new areas like technology management, CSR (corporate social responsibility) management, etc., focusing also on the developments in banking technology and innovation in banking services including the democratization of banks, P2P lending (peer to peer), self-handling of money using technology instead of keeping it in banks, etc. In recent years, individual functional areas such as marketing management, human resource management, financial management, purchase management, etc., are losing importance paving the way for synchronization of these functions. If these developments continue, then there may be no need for the physical existence of banking companies in the near future – felt Dr. Dongre.

Sri. Er. P Vishwanath, Secretary, Vidyavardhaka Sanga explained how the Sanga protected the employees during COVID-19 by taking health insurance policies for all employees. Dr. B Sadashive Gowda, Principal,

College addressed the august gathering and highlighted two aspects viz., ethics and positivity to address any problem and these two are the key to success. Sri. Gundappa Gowda, President of Vidyavardhaka Sanga, in his presidential address advised the gathering the read, understand and apply the principles as advocated by Chanakya in his *Chanakya's Arthashastra*. Sri. Shrishaila Ramannavar, Treasurer graced the occasion and Dr. PSV Balaji Rao, Head proposed the vote of thanks.

After the inaugural function, two parallel technical sessions were conducted. In the first technical session on 'Financial Management', Dr. T Mallikarjunappa, Justice K S Hegde Institute of Management, Nitte delivered the keynote address. He covered various aspects including the failure of financial institutions and the role of central banks, monetary policies and inflation, the European Sovereign Debt Crisis and the current debt crisis of countries like Sri Lanka, Pakistan, etc., and the role of China, responses to global financial crisis and the lessons from the ongoing banking crisis focusing on Silicon Valley Bank, Credit Suisse and UBS (Swiss National Bank), etc. The keynote address was followed by the presentation of 12 research papers by academicians and researchers. Dr. M Shivalinge Gowda, Sri. K Puttaswamy First Grade College, Mysuru chaired the technical session and Sri. M B Shraavan, Assistant Professor of the Department was the Rapporteur of the session.

In the next technical session on 'Marketing and Human Resource Management' nearly ten research papers were presented by the researchers and the academicians. In the beginning, Dr. Krishna, R, CEO, Ramanuja Management Services, Bengaluru delivered the keynote address. He stressed that advancement in the area of technology is supporting research and felt that technology disrupts education and research in a positive way. Digital tools help social science researchers in many ways – community and collaboration become easy and the research tools are powerful and user-friendly. He also felt that the research should be in fundamental or conceptual areas rather than application. He elaborated on change management, the future of the workforce, employee experience, etc. Dr.

M. S. Ranga Raju, Director, Department of Business Administration, Surana College, Bengaluru chaired this technical session and Sri. Manjunath S, Assistant Professor of the Department was the Rapporteur.

The valedictory address was delivered by Dr. R. K. Tailor, Associate Professor, Department of Business Administration, Manipal University, Jaipur (Rajasthan). He emphasized the developments in technology and their impact on functional areas of management. Earlier, technology was influenced by human beings, but now, human beings are technology driven. An Edited Volume on 'Contemporary Issues in Management' comprising the selected papers was also released during the occasion.

Workshop on Research Methodology

A five-day Workshop on Research Methodology is being organized by the School of Research Methodology, Tata Institute of Social Sciences, Deonar, Mumbai during May 08-12, 2023. The aim of the workshop is to enable the participants both social sciences research approaches – qualitative and quantitative. The researchers, M. Phil/Ph.D. research scholars, teachers, and NGO working in social sciences subjects in any sector may participate in the workshop.

Course Content

- Different Approaches of Social Science Research.
- Fundamental of Social Science Research.
- Tools and Methods of Data Collection for Qualitative and Quantitative Research.
- Research based on Secondary Data.
- Data Analysis Using Statistical Software.
- Reporting and Presentation.
- Citation, Reference Management Tool and Plagiarism.

For further details, contact Course Coordinator, Prof. D P Singh, School of Research Methodology, Tata Institute of Social Sciences, Mumbai-400088, Mobile No: + 91 9819177709, E-mail: dpsingh1212@gmail.com, dpsingh@tiss.edu. For updates, log on to: <https://tiss.edu/events>

International Conference on Hydraulics, Water Resources, River and Coastal Engineering

A three-day International Conference on

'Hydraulics, Water Resources, River and Coastal Engineering' is being organized by the Civil Engineering Department, NIT Warangal under the aegis of the Indian Society for Hydraulics (ISH) on December 20-22, 2023. The conference aims at providing a forum for the dissemination of recent contributions from academicians, scientists, researchers, practitioners and consultants in the fields of hydraulics, hydrology and water resources. The themes of the event are:

Hydraulics

- Computational Fluid Dynamics.
- Hydraulic Transients
- Dam-break Problem.
- Physical Modeling.
- Hydraulic Structures.
- Aerated Flows.
- Environmental Hydraulics.

River Engineering and Fluvial Hydraulics

- Sediment Transport.
- River Morphology.
- Trans-Boundary Water Sharing.
- Reservoir Sedimentation.
- Hyper Concentrated Flow.
- Sediment Management in Hydropower Projects.

Surface Hydrology and Watershed Management

- Watershed Hydrology.
- Hydrologic Modeling.
- Flood Forecasting and Protection Measures.
- Drought Assessment and Mitigation.
- Integrated Watershed Management.
- Forest Hydrology.
- Agricultural Hydrology.
- Urban Hydrology.
- Catchment Erosion.
- Water Conservation.

Environmental Hydraulics

- EIA Water Resources Projects.
- Hydrodynamics of Flow-biota Interactions.
- Water Recycling and Reuse.
- Environmental Flows in Rivers.

- Pollutant Transport in Rivers.
- Groundwater Contamination.
- Sea Water Intrusion.

Groundwater Hydrology

- Groundwater Resource Assessment.
- Well Hydraulics.
- Modeling of Flow and Solute Transport.
- Planning of Groundwater Development.
- Forensic Groundwater Hydrology.
- Planning of Groundwater Development.
- Forensic Groundwater Hydrology.

Hydraulic Structure and Hydropower Project

- Dam Safety and Monitoring.
- Hydraulic Machinery & Instrumentation.
- Hydraulic Structure and Hydropower Project.
- Dam Safety and Monitoring.
- Hydraulic Machinery & Instrumentation.
- Rehabilitation of Old Dams.
- Operation and Maintenance of Dams.
- Risk in Hydropower Development and Management.
- Design of Storage and Diversion Dams.
- Streamflow Turbines.

Water Resources

- Optimal Water Allocation.
- Reservoir Operation.
- Conjunctive Use Planning.

- Irrigation and Drainage.
- Downstream Issues.

Coastal Engineering

- Coastal and Ocean Environment.
- Ports and Harbours.
- Coastal and Offshore Structures.
- Surface and Subsurface Seawater Intrusion.

Climate Change

- Scientific Aspects.
- Impact Assessment on Water Resources.
- Mitigation of Climate Change Impact.

Hydro-informatics

- Management of Large Data Bases.
- Pre and Post modeling data processing.
- Data mining and Data-driven Modeling.
- Geospatial Applications.
- Cyber Infrastructure in Water.

Hydroclimatic Extremes and Impacts

- Flood Risk Assessment.
- Climatic Extremes.
- Drought.
- Compound Extreme.

For further details, contact, Organizing Secretary, Dr. Manish Pandey, Department of Civil Engineering, NIT Warangal-506004, Phone No: +91-9760402431 E-mail: hydro2023@nitw.ac.in. For updates, log on to: <http://cms.nitw.ac.in/conference/hydro2023/>

□

ANVESHAN: Student Research Convention

East Zone

A two-day East Zone Student Research Convention, *Anveshan* was organized by the Association of Indian Universities, New Delhi in collaboration with The Assam Royal Global University (RGU), Guwahati during March 01-02, 2023. More than 70 students from nine universities from the states of the East region of India participated in the event. Students and mentors showcased 30 innovative projects, marking one of the milestones of the *Anveshan* Eastern Zone event. A number of exemplary projects were showcased in the event that was expected to have a significant impact on society.

The inauguration ceremony commenced on March 01, 2023. The ceremonial dais was honored by the august presence of Prof. S P Singh, Vice Chancellor, The Assam Royal Global University, Guwahati as the Patron-in-Chief, Mr. Manoj Kr. Das, former Managing Director, North Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC) as a Chief Guest, Dr. Usha Rai Negi, Assistant Director, Research Division, AIU, as Guest of Honor, Prof. Dr. Ankur Ganguly, Dean Academics and, RGU and Zonal Co-coordinator, and Prof. Dr. Rohit Singh, Pro Vice Chancellor and Zonal Coordinator for the East Zone Students' Research Convention.

Prof. Dr. Rohit Singh, in his opening speech, introduced the concept of *ANVESHAN* East Zone SRC-2023 and expressed his joy at having been selected to host this prestigious student-driven event dedicated to promoting innovation through the power of interdisciplinary research by AIU. As Prof. Singh stated, RGU strives to create innovative research-driven opportunities for aspiring researchers.

Dr. Usha Rai Negi, Assistant Director (R) gave a brief background of *ANVESHAN*, an annual flagship student research convention that includes the spirit of research culture in Higher Education Institutions (HEIs) to promote out-of-the-box ideas in diverse fields ranging from Agriculture, Engineering, Health and Social Sciences to solve contemporary societal and technological challenges. The winning proposals from each zonal region shall compete in the national

level competition. Dr. Negi also informed that in addition to capacity-building activities, AIU's research division regularly organizes seminars and conferences to safeguard Indian higher education.

Prof. S P Singh, Vice Chancellor welcomed the gathering. Prof. Singh encouraged students to pursue interdisciplinary research to solve societal problems and form communities of practice to become lifelong learners and true innovators through his words of wisdom.

The inaugural session was graced by Mr. Manoj Kr. Das, former Managing Director. During his speech, Mr. Das encouraged the students to participate in research projects that contribute to the startup ecosystem and national development. To make India an innovation hub of the 21st century, he emphasized research at both the grass-roots and multidisciplinary levels. Moreover, he emphasized that *ANVESHAN* offers a unique research platform to budding researchers. Additionally, he stressed the growing importance of India around the world. Therefore, the participants should interact and skill themselves to thrive in this fast-changing complex world.

Prof. Ankur Ganguly, Co-coordinator, East Zone *ANVESHAN* thanked all the participants and encouraged the participants to go Global.

Immediately following the inaugural session, the competition began. Contestants presented posters of the prescribed size in the first round of the competition. In accordance with specified parameters, subject-matter experts evaluated the participating projects in concerned areas, and after a thorough review, all of the registered projects were allowed to proceed to the podium presentation round of evaluation. At the podium round, shortlisted projects presented PowerPoint presentations to judges, followed by question-and-answer sessions. Projects were evaluated based on their scientific thoughts and principles, creativity, thoroughness, skill, relevance, and teamwork. Jury members and distinguished evaluators selected first, second, and third prizes based on the excellence and usefulness of the research projects presented during the convention. The names of the winners are given below.

Agriculture Science

Rank	Name of the Students	Topic	Name of University/Institute
1 st	Jyotim Gogoi Subham Singh	Biological Synthesis and Conversion of Fish Scale to Bioplastic and Alternative to Conventional Plastic	Central Agriculture University Meghalaya
2 nd	Antarleena Chodhury Karabi Gogoi Biki Verma	A Sustainable and Biodegradable Alternative to Styrofoam	Tezpur University, Tezpur
3 rd (a)	V. Manisa	Development of Multiple seed Hill Drop Planter for Direct Sowing of Rice Seeds	College of Agricultural Engineering and Post Harvest Technology- Sikkim (Central Agriculture University Imphal)
3 rd (b)	Savrabh Jaiswal	Innovative and Economical Buckwheat Dehuller	College of Agricultural Engineering and Post Harvest Technology- Sikkim (Central Agriculture University Imphal)

Basic Science

Rank	Name of the Students	Topic	Name of University/Institute
1 st	Upama Das Nikhil K Daimary Pohar Bora	PadCOM: Paper-based Micro-fluidic Unit for Sensing Adulterants and Contaminants in Milk	Tezpur University, Tezpur
2 nd	Dhanjay Mondal Jhilik Roy Saheli Ghose	Vikran: 'An All in One' Module for Combating Mater Pollution and Energy Crisis	Jadavpur University, Jadavpur
3 rd	Tasgeen Khan Jinki Kalita	Botaniks- Organic Skincare	University of Science and Technology Meghalaya

Engineering Technology

Rank	Name of the Students	Topic	Name of University/Institute
1 st	Anurag R Lambor Amarnath Kumar Shashank Kulkarni	All in One Soil Health and Plant Disease Monitoring Using Machine Learning	IIT Guwahati
2 nd	Tanmoy Chakraborty Alisa Saha Manisha Kundu	Superior Microwave Absorption of Layer Structured for EMI Shielding Application	Jadavpur University, Jadavpur
3 rd	Maibam Pooya Nur Mehbood Alam Shourya Kumar Singh	Brain Computer Interface-based Control of Prosthetic Hand	Jadavpur University, Jadavpur

Health Sciences and Allied subjects, Pharmacy, Nutrition, etc.

Rank	Name of the Students	Topic	Name of University/Institute
1 st	Varsha Lamichang Jishu Das Udiptta Das	VANCOBISK-Combined Effect of Antibiotic and Nutrients in Dog Biscuit for Treating Bacterial Infection	University of Science and Technology Meghalaya
2 nd	Sewagi Sabhapandit Marmish Debbarman Subhojit Choudhury	Flemingia Strobilifera (Makhioti-based Potential Mosquito Repellent)	The Assam Royal Global University, Assam
3 rd	Getartha Sarma Abhijit Kalita	Paper Capacitive Sensor for Rapid Diagnosis of COVID-19 Swab Fluids	Tezpur University, Tezpur, Assam

Social Sciences, Humanities, Commerce and Law

Rank	Name of the Students	Topic	Name of University/Institute
1 st	Atendriya Dana Neha Nazreen Raina Chatterjee	Dona and Defence, Bastar Leading the Green Alternative	Jadavpur University, Jadavpur
2 nd	Shantanu Debbarma Paulama Dutta Khaphuihha Reang	Prevalance of Tobacco Use and Alcohol Consupmtion among Rickshaw Puller in Agartala City	Maharaja Bir Bikram University
3 rd	Disha Choudhury Rahul J Medhi Iftikar Alam	COVID-19 and Sualkuchi Silk	The Assam Royal Global University, Assam

THESES OF THE MONTH

SOCIAL SCIENCES

A List of doctoral theses accepted by Indian Universities (Notifications received in AIU during the month of Dec 2022-Jan 2023)

Commerce

1. Neelappa, S Nikitha. **Financial literacy and financial capability among the urban street vendors.** (Dr. Karthigai Prakasam C), Department of Commerce, Christ University, Bangalore.
2. Nikki Kumari. **A study on functional synergy created by the integration of banking and insurance sectors.** (Dr. Giridhar K V), Department of Commerce, Kuvempu University, Shankaraghatta.
3. Passah, Kiefe Heibormi. **Entrepreneurial intention among post graduate students in North East India.** (Prof. N M Panda), Department of Commerce, North Eastern Hill University, Shillong.
4. Rathore, Pooja. **Ujjain Jile mein jalprabandhan ka krishi par prabhav: Ek adhyayan (Varsh 2009 se 2014 tak).** (Dr. R K Vijay and Dr. Rakesh Dand), Department of Commerce, Vikram University, Ujjain.
5. Songara, Lokesh Chandra. **Krishi upaj ka lagat labh vishleshan: Ujjain Jile ke vishesh sandarbh mein.** (Dr. P S Patel and Dr. B S Makkad), Department of Commerce, Vikram University, Ujjain.

Economics

1. Gupta, Mohini. **Empirical analysis of real exchange rate volatility on Indo-US Bilateral trade at commodity level: A symmetric and an asymmetric approach.** (Dr. Sakshi Varshney), Faculty of Humanities and Social Sciences, Jaypee Institute of Information Technology, Noida.
2. Hynniewta, Shedrina grace. **Employment and unemployment among educated youth in Meghalaya with special reference to Shillong Town.** (Dr. D Nongkynrih and Prof. N Srivastav), Department of Economics, North Eastern Hill University, Shillong.
3. Jakhar, Babloo. **A study of indebtedness amongst farmers in Haryana.** (Dr. Rohtas), Department of Economics, Chaudhary Devi Lal University, Sirsa.
4. Nongrem, Wistful In Excelsis. **Health and livelihood conditions of a coal workers: A case study of Jaintia Hills of Meghalaya.** (Prof. Vanlalchhawna), Department of Economics, Mizoram University, Aizawl.
5. Sah, Jyotish Kumar. **A study on impact of agriculture on the economic development of Bhagalpur District (2009-2019).** (Dr. Rina Chand), Department of Economics, T M Bhagalpur University, Bhagalpur.

Education

1. Koch, Rangana. **Goal orientation, educational aspiration, and parent-child relationship amongst the secondary school students belonging to Koch Community of Garo Hills, Meghalaya.** (Prof. Nikme S C Momin), Department of Education, North Eastern Hill University, Shillong.
2. Kotwal, Payal Dilipbhai. **A study of the attitudes on Gujarati subjects of students of Std. IX.** (Dr. Manoj Shastri), Department of Education, Gujarat University, Ahmedabad.
3. Longkumar, T Alemla. **An analytical study of the two-year B.Ed programme as perceived by teacher educators and student teachers under Nagaland University.** (Dr. Anjali Karmakar), Department of Education, Assam Don Bosco University, Guwahati, Assam.
4. Maheta, Sonalben Narmada Shankar. **A study of written expression in Gujarati language of secondary school students.** (Dr. Dharam Kambalia), Department of Education, Saurashtra University, Rajkot.
5. Mendonca, Janet Sylvia. **Embedding quality culture in higher education: A paradigm of assessment and accreditation.** (Dr. Paul Pudussery), Department of Education, Assam Don Bosco University, Guwahati, Assam.
6. Moyong, Kaling. **Status of implementation of Right to Education Act, 2009 and its challenges**

at elementary school stage in Arunachal Pradesh. (Prof. Kesang Degi), Department of Education, Rajiv Gandhi University, Itanagar.]

7. Sambad, Viram Savashibhai. **A study of implementation of Right to Education Act 2009 in primary schools of Surendranagar District.** (Dr. Sushilkumar Dubey), Department of Education, Saurashtra University, Rajkot.

8. Sarswat, Sunita. **Samaveshi shiksha evam E P C pathyakaram ka B.Ed prashiksharthiyaon par padne wale prabhav ka adhyayan.** (Dr. Sangeeta Soni), Department of Education, IASE Deemed University, Sardarshahr.

9. Sharma, Sunita. **Swami Ramsukhdasji ke shaikshik vicharoan ka adhyayan evam vartman mein prasangikta.** (Dr. Sangeeta Soni), Department of Education, IASE Deemed University, Sardarshahr.

10. Swer, Thymmeiri. **Awareness and attitude towards family life education among adolescence girls: A comparative study of urban and rural settings in East Khasi Hills District, Meghalaya.** (Dr. Jemino Mawthoh), Department of Adult and Continuing Education, North Eastern Hill University, Shillong.

11. Tripathi, Pratibha Shivshankar. **Relationship of reflective teaching levels teaching self efficiency and practice teaching of secondary student teachers.** (Dr. Bharatbhai Joshi), Department of Education, Gujarat Vidyapith, Ahmedabad.

Home Science

1. Monika. **Impact of electronic media on late childhood (6 year to 12 year).** (Dr. Manik Samvatsar Dange), Department of Home Science, Vikram University, Ujjain.

Journalism & Mass Communication

1. Chhibber, Shefalli. **Effects of advertisements on consumers: An empirical study of natural spin and consumer perception in the FMCG industry.** (Dr. Pavitra Shrivastava), Department of Mass Communication, Makhanlal Chaturvedi National University of Journalism and Communication, Bhopal.

2. Jha, Sharmistha. **New media and filmmaking pedagogy: A critical exploration of their relationship in the context of India.** (Dr. George Plathottam), Department of Mass Communication, Assam Down Town University, Guwahati.

3. Joseph, Shiby. **Agricultural information dissemination and utilization among settler farmers: A case study of facebook in Palakkad District of Kerala.** (Dr. B Aravinda Sheety), Department of Journalism & Mass Communication, CMR University, Bangalore.

4. Paul, Thekkanath Louis. **Analysis technological preparedness in media classroom: Proposing CMIT-comprehensive model for integration of technology.** (Dr. V Natarajan), Department of Media Studies, Christ University, Bangalore.

5. Swamy, K N Mahadeva. **Reach, access and utilization patterns of new media among the dalit community in Shivamogga.** (Dr. P A Varghese), Department of Journalism & Mass Communication, Kuvempu University, Shankaraghatta.

Law

1. Almeida, Francis Assisi. **Minority educational institutions in India in the era of privatizations.** (Dr. Upankar Chutia), Department of Law, Alliance University, Bengaluru.

2. Choudhoury, Kaustav. **Human rights in India: A study of the elderly persons.** (Prof. C Rout), Department of Law, North Eastern Hill University, Shillong.

3. Dwivedi, Sukriti. **Constitutional safeguards to civil servants in India: A politico-legal (critical) study.** (Prof. S P Singh), Department of Law, Chanakya National Law University, Patna.

4. Kamboj, Deepika. **Justice system for Juveniles in India: A critical study.** (Dr. Rajesh Hooda), Department of Laws, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan.

5. Mangal, Laishram Malem. **Right to land and natural resources under the constitution of India.** (Prof. Chintamani Rout), Department of Law, North Eastern Hill University, Shillong.

6. Nehru, B Jawaharlal. **A study of medical negligence liability under Consumer Protection Act.** (Prof. Kumudha Rathna), Department of Law, The Tamil Nadu Dr Ambedkar Law University, Chennai.
7. Rajesh Kumar. **Appreciation of digital evidences in the administration of criminal justice system in India: A critical study with reference to cyber crime.** (Prof. S C Roy), Department of Law, Chanakya National Law University, Patna.
8. Sanghavi, Haresh Vanechand. **A study on exploitation of consumer and its economical, psychological and legal impacts on consumer.** (Dr. R M Dave), Department of Law, Saurashtra University, Rajkot.
9. Sarika. **Trends of punishment in India with special reference of sexual offences.** (Dr. Vimal Joshi), Department of Laws, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan.
10. Shams, Tanwi. **Empowerment of physically disabled persons in Assam: A socio-legal study of Dibrugarh District.** (Dr. A K Singh), Department of Law, North Eastern Hill University, Shillong.
11. Shukla, Anjana. **Girftari evam nirodh mein manav adhikaroan ka ulanghan: Antarrashtriya evam Bhartiya vidhik paridrashya ka tulnatamak adhyayan.** (Dr. Aruna Sethi), Department of Law, Vikram University, Ujjain.

Library & Information Science

1. Lalhlimpuii, B. **Skills and competencies of college library professionals of Mizoram in changing information scenario: A study.** (Prof. Pravakar Rath), Department of Library and Information Science, Mizoram University, Aizawl.

Management

1. Francis, Fiona Sheenu. **Investment behaviour of women: A study among stock investors of Kerala.** (Dr. VAmbilikumar), Department of Business Administration & Management, Kerala University of Fisheries and Ocean Studies, Kerala.
2. Joseph, Bejoy. **The ascendancy of accounting variables on share price and its fundamental**

navigation to investors: An empirical study on sectors listed in BSE. (Dr. VAmbilikumar), Faculty of Management, Kerala University of Fisheries and Ocean Studies, Kerala.

3. Krishna, T A. **An investigation of multifractality and herd behaviour in the Indian capital market during macro-political events: An empirical evidence through econophysics approach.** (Dr. Suresha B), Department of Management, Christ University, Bangalore.

4. Madan, Komal. **Development of a model for talent management for teachers in private self financing universities of Haryana.** (Dr. Priyanka Ranga), Department of Management, Maharishi Markandeshwar University, Ambala.

5. Malik, Anshul. **Mobile app adoption and continuous intention to use it: A study of wallet and social networking apps.** (Dr. S Suresh and Dr. Swati Sharma), Department of Management, Jaypee Institute of Information Technology, Noida.

6. Marbaniang, David F. **An empirical investigation into the entrepreneurial intention of the youth in Meghalaya.** (Dr. K S Rajput), Department of Management, Assam Don Bosco University, Guwahati, Assam.

7. Saritha, S. **Impact of change management factors on the employee job satisfaction and performance in select IT companies of Bangalore.** (Dr. T Narayana Reddy), Department of Management, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

8. Sharma, Anju. **Work engagement and organizational effectiveness: A study of State universities of Haryana.** (Dr. Kapil Kumar), Department of Management, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan.

9. Shrimali, Ankur Jagdishbhai. **Role of training and development on employee performance.** (Dr. Anjali Gokhru), Department of Management, Gujarat University, Ahmedabad.

Physical Education & Sports

1. Saini, Neha. **Role of yogic practices in general menstrual problems and related myths: A study.**

(Dr. Shyam Ganpat Tikhe), Department of Yoga & Ayurveda, Sanchi University of Buddhist-Indic Studies, Bhopal.

2. Vishwakarma, Akhilesh Kumar. **Swaprabandhan meinyogkeebhumika: Ekvivechnatamakadhyayan: Patanjaliyog sutra evam Shrimad Bhagavad Gita ke vishesh sandarbh mein.** (Dr. Tikhe Sham Ganpat), Department of Yoga & Ayurveda, Sanchi University of Buddhist-Indic Studies, Bhopal.

Political Science

1. Bhat, Manzoor Ahmad. **E-governance of a fundamental leverage for India: A comparative study of its pros and cons in J & K.** (Dr. Vishnu Kumar), Department of Political Science, Bhagwant University, Ajmer.

2. Dar, Ajaz Ahmad. **Good governance a desideratum for India: Asymmetrical study of challenges and prospects.** (Dr. Dinesh Mandot), Department of Political Science, Bhagwant University, Ajmer.

3. Jain, Chandani. **Madhya Pradesh mein ubharta mahila naitritav: 14v Vidhansabha mein mahila vidhayako ke sandarbh mein ek adhyayan.** (Dr. Mangleshwari Joshi and Dr. Nisha Vashishta), Department of Political Science, Vikram University, Ujjain.

4. Lapsam, Spainlinmi B. **India-USA relations with reference to defence and civil nuclear cooperation (2000-2013).** (Dr. M Majumdar), Department of Political Science, North Eastern Hill University, Shillong.

5. Mehran, Humaira. **Psychological distress among Afghan migrants in India: A study of their problems and prospects.** (Dr. Neerja A Gupta), Faculty of

Diaspora & Migration Studies, Gujarat University, Ahmedabad.

6. Zarger, Feroz Hussain. **Panchyati Raj of Jammu and Kashmir in disarray: A study of evaluation, challenges and post 2019 developments.** (Dr. Vishnu Kumar), Department of Political Science, Bhagwant University, Ajmer.

Psychology

1. Agarwal, Anchal Ramawtar. **Demographical, clinical and psychological correlates among patients of coronary angioplasty: A cross-sectional analysis.** (Dr. Kamayani Mathur), Faculty of Psychology, Gujarat University, Ahmedabad.

2. Parekh, Kirtikaben Rajeshkumar. **Educational aspiration, achievement motivation and self concept of college students.** (Dr. B S Trivedi), Department of Psychology, Gujarat University, Ahmedabad.

3. Shrestha, Nishtha. **Efficacy of art based interventions for emotional problems among children affected by earthquake in Nepal.** (Dr. Baiju Gopal), Department of Psychology, Christ University, Bangalore.

4. Singh, Tripti. **Contextual and psychological determinants of quality of life for caregivers of neurocognitive disorders: A prospective study.** (Dr. Kamayani Mathur), Department of Psychology, Gujarat University, Ahmedabad.

Social Work

1. Lalrempuii, C. **Working and living conditions of women domestic workers in Mizoram.** (Dr. H Elizabeth), Department of Social Work, Mizoram University, Aizawl.

□

MAR ATHANASIUS COLLEGE ASSOCIATION



KOTHAMANGALAM, KERALA - 686 666

Phone : 0485-2822326, 9447082501,

E-mail : hr.maca2955@gmail.com

www.macollegeassociation.org

WANTED

Applications are invited for the following notified permanent vacancies in **Mar Athanasius College (Autonomous), Kothamangalam.**

Assistant Professors in : Hindi (1+1C+1*), Economics (1*), Mathematics (1*), Statistics (1), Physics (1C) Chemistry (2C+1) and Physical Education (1).

* Reserved for Persons with Disability, C Community quota.

Age, Qualification, Scale of pay etc. will be as per the norms prescribed by the UGC/Mahatma Gandhi University/State Government. Application form and other details can be had from the **Secretary, Mar Athanasius College Association, Kothamangalam-686 666, Kerala** on payment of Rs. 2000/- or can be downloaded from www.macollege.in and forwarded to the Secretary alongwith DD for the requisite amount.

Filled up application should reach the office of the undersigned within 30 days from the date of publication of this notification.

01.04.2023

SECRETARY

Palus Shikshan Prasarak Mandal's
ARTS, COMMERCE AND SCIENCE COLLEGE PALUS
Tal. Palus, Dist. Sangli – 416310 (M.S.)
(Affiliated to Shivaji University, Kolhapur)
(Permanently Granted)

WANTED

Applications are invited from eligible candidates for the following post:

Sr. No.	Name of Post / Subject	Subject wise Vacant Post	Total Number of Vacant Post	Total Reservation
A) Asst. Professor			1	1 OBC
1	Chemistry	1		

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

Place : Palus

Date :

Secretary
Palus Shikshan Prasarak Madal
Palus, Tal. Palus, Dist.Sangli

President
Palus Shikshan Prasarak Madal
Palus, Tal. Palus, Dist. Sangli

MAR THOMA COLLEGE TIRUVALLA

(A Christian Minority Institution)

KUTTAPUZHA P.O, PATHANAMTHITTA,

TIRUVALLA, KERALA - 689103

Ph:0469-2630342

E-mail : mtcoffictvla@gmail.com

WANTED

Applications are invited for the post of the Principal (Open Category) from the qualified teachers. Age, qualifications, work load criteria and scale of pay as per UGC, MG University Kottayam and Government of Kerala rules. Appointment is subject to the approval of MG University/Government. Apply to the Manager **within 30 days** from the date of this notification, accompanied by a DD of Rs. 1000/- drawn in favour of the Principal payable at Tiruvalla. Application form can be downloaded from the website : www.mtct.ac.in.

18/03/2023

Sd/-
MANAGER

Saraswati Shinde Education Society

D.D. Shinde Sarkar College, Kolhapur

C/o. Vidyapeeth Highschool, Bhavani Mandap,

Near Mahalxmi Mandir,

Kolhapur – 416012 (Maharashtra)

Contact No.0231-2542185

www.ddsscollege@gmail.com

(Affiliated to Shivaji University, Kolhapur)

(Permanently Granted)

WANTED

Applications are invited from eligible candidates for the following post :

Sr. No.	Name of Post	Vacant Post	Unreserved (Open) Post
1	Principal	1	1

Note :

For detailed information about Post, Qualifications and other Terms & Conditions, please visit University Website: www.unishivaji.ac.in & www.ddsscollegekop.com

President
Place : Kolhapur Saraswati Shinde Education Society,
Date : 31/03/2023 KOLHAPUR

Akkalkot Education Society's (Estd.1970)
C.B. Khedgi's Basaveshwar Science, R.V. Commerce
& R.J. Arts College, Akkalkot, 413216, Dist. Solapur (Maharashtra)
Affiliated to P.A.H Solapur University, Solapur, NAAC B++ (2.87)
E-mail : cbkcollege@gmail.com; Phone No. 02181-220227

KANNADA LINGUISTIC MINORITY

(Grant in Aid)

WANTED

Applications are invited from eligible candidates for the following post :

Sr. No	Name of Post	Vacant Post	Unreserved (Open)Post
1	Principal	1	1

Conditions:

1. Educational qualifications and other requirements are as prescribed by the UGC Notification dated 18 July, 2018, Govt. of Maharashtra Resolution No. Misc -2018/C.R.56/18UNI-1 Dated 8th March, 2019 and University Circular No. PAHSUS/Estt/7th -pay /2019/2285/Dated 25th March, 2019.
2. Appointment to the post of Principal will be for a period of 5 years from the date of appointment or upto the attainment of the age of superannuation of the candidate, whichever is earlier of as per rules time to time.
3. For the post of Principal, candidate should submit their Academic Research score (ARS) as per U.G.C. norms along with application.
4. All the Terms & Conditions are mentioned in the NOC letter No. JDHE Solapur/NOC/2019/7 dated 27/02/2023 from Hon. Deputy Secretary, Higher and Technical Education Dept. Govt. of Maharashtra, Mumbai and letter No. JD/HE/Solapur/2023/365 dated: 08/03/2023, Hon. Deputy Director of Higher Education, Solapur Division, Solapur.
5. Applicants who are already in service they should apply through proper channel.
6. T.A./D.A. will not be paid for attending the Interview.
7. Incomplete application will not be entertained.
8. Apply giving full particulars **within 15 days** from the date of publication of this advertisement to the undersigned to Secretary, Akkalkot Education Society, Akkalkot, C/O C.B. Khedgi's Basaveshwar Science, R.V. Commerce & R.J. Art's College, Akkalkot, 413216, Dist. Solapur.
9. This is University approved advertisement.

Place: Akkalkot

Chairman
Akkalkot Education Society's,
Akkalkot

Secretary
Akkalkot Education Society's,
Akkalkot

Date:



जम्मू केंद्रीय विश्वविद्यालय

Central University of Jammu

राया-सूचानी (बागला), जिला सांबा-181143, जम्मू (जम्मू एवं कश्मीर)

Rahya-Suchani (Bagla), District: Samba - 181143, Jammu (J&K)

EMPLOYMENT NOTIFICATION FOR NON-TEACHING POSTS

EMPLOYMENT NOTIFICATION NO. 28

Central University of Jammu invites online application for following non-teaching positions under direct recruitment from the eligible candidates :

Name of Post	Group	Pay Level	Category-wise Posts	Total Posts
1. Section Officer	B	7	1 - OBC(BL)	1
2. Private Secretary	B	7	1 - PwBD-OH(BL)	1
3. Personal Assistant	B	6	2 - UR, 1 - OBC(BL)	3
4. Assistant	B	6	1 - UR	1
5. Junior Engineer (Civil)	B	6	1 - UR	1
6. Statistical Assistant	C	5	1 - UR	1
7. Upper Division Clerk	C	4	1 - PwBD-HH(BL)	1
8. Lower Division Clerk	C	2	3 - UR, 1 - EWS, 1 - SC(BL), 1 - ST(BL), 1 - OBC, 1 - PwBD (BL)	8
9. Driver	C	2	2 - UR	2
10. Library Attendant	C	1	1 - PwBD-VH(BL)	1

BL-Backlog Vacancy/SC-Scheduled Caste/ST-Scheduled Tribe/EWS-Economically Weaker Section

The detailed eligibility conditions and other relevant details are available on the University website www.cujammu.ac.in. The online application form, complete in all respects must be submitted along with online payment of **Rs 1,000/-**. Online SAMARTH portal for applying will remain open from **30-03-2023 (10 AM)** to **29-04-2023 (4 PM)**.

For further details please visit University website : www.cujammu.ac.in.

-Sd/-
(Prof. (Dr.) Yashwant Singh)
Registrar (I/c)
Ph: 01923-249658
registrar@cujammu.ac.in

Ref No. CUJ/Estab.NT/EN28/2023/132

Dated: 22.03.2023

Shramjivi Samaj Kalyan Mandal, Hadolti

WANTED

Applications are invited from the eligible candidates for the following Assistant Professors posts to be filled in **Shramjivi Samaj Kalyan Mandal's Punyashlok Ahilyadevi Holkar Mahavidyalaya, Ranisawargaon, Tq. Gangakhed, Dist. Parbhani on GRANT BASIS**. Eligible candidates should submit their applications along with all necessary documents within **Fifteen Days** from the date of publication of the advertisement by Registered Post Only. The candidates of Reserve Category should submit one copy of their application to the Assistant Registrar (Special Cell), Swami Ramanand Teerth Marathwada University, Nanded by **Registered post only**.

Sr.No	Subject	Post	No of Post	Reservation
1	Home Science	Assistant Professor	01	ST

Permission as per NOC No. JDHENanded/NOC/2019/21 Dt.15.02.2023.

Note :- For more detailed information about post qualifications, for salary and other terms and conditions, please visit University website: www.srtmun.ac.in

Address for Correspondence :-

Secretary,
Shramjivi Samaj Kalyan Mandal, Hadolti.
At. Ranisawargaon, Tq. Gangakhed,
Dist. Parbhani - 431536

Place : Ranisawargaon
Date : / /2023

Secretary
Shramjivi Samaj Kalyan Mandal,
Hadolti



Fulbright-Nehru Specialist Program Opportunity to Host U.S. Experts for Short-term Duration

United States-India Educational Foundation (USIEF) invites applications from Indian institutions for hosting U.S. experts for a short-duration of two to six weeks under the Fulbright-Nehru Specialist Program. USIEF pays for international airfare and an honorarium to the expert. Host institution is responsible for the cost of housing, meals, and program-related in-country transportation.

For eligible disciplines, application procedure, and other details, visit USIEF website: <https://www.usief.org.in/Fellowships/FIC-Institutional-Awards.aspx>; and for any query, write to girish@usief.org.in. The last date for submission of application is **April 30, 2023**.

AKKALKOT EDUCATION SOCIETY'S
C. B. KHEDAGI'S BASAWESHWAR SCIENCE, R. V. COMMERCE
& R. J. ARTS COLLEGE, AKKALKOT-413 216, NAAC B++ (2.87)
Tal. Akkalkot, Dist. Solapur, Maharashtra
Email : cbkcollege@gmail.com; Phone No.02181-220227
(Affiliated to Punyasholk Ahilyadevi Holkar Solapur University, Solapur)

GRANT IN AID (Kannada Linguistic Minority)

WANTED

Applications are invited from the eligible candidate for the following posts :

Sr. No	Subject Designation	Name of Post (Designation)	No. of Post	Reservation
1.	Geography	Asst. Professor	01	Open
2.	Botany	Asst. Professor	01	Open
3.	Physics	Asst. Professor	01	Open
4.	Chemistry	Asst. Professor	04	Open
Total			07	

CONDITIONS:

1. Educational Qualification and other requirements are as per prescribed by the UGC Notification dated 18 July, 2018, Govt. of Maharashtra Resolution No. Misc 2018/ C. R. 56/18 UNI-1 dated 8th March, 2019 and University Circular No. PAHSUS /Estt./7th pay/2019/2285/ dated 25th March, 2019.
2. Application received after the last date will not be considered. The college will not be responsible for post delay, if any.
3. Applicants who are in services must send their application through proper channel.
4. T.A, D.A will be not be paid for attending the interview.
5. Application with full details should reach through the channel Secretary, Akkalkot Education Society's, Akkalkot to C/o Principal, C.B. Khedgi's College, Akkalkot, Tal. Akkalkot, Dist. Solapur - 413216, **within 15 days** from the publication of this advertisement.
6. Incomplete applications will not be entertained.
7. All the terms and conditions are mentioned in the NOC letter No. JDHE Solapur/NOC/ 2019/7 dated 27.02.2023 from Hon. Deputy Secretary, Higher and Technical Education Dept. Govt. of Maharashtra, Mumbai and letter No.JD/HE/Solapur/2023/365 dated: 08.03.2023, Hon. Deputy Director of Higher Education, Solapur Division, Solapur.
8. All the terms and condition are applicable as mentioned in the GR Dated 12.11.2021 from Higher and Technical Education Department of Government of Maharashtra.
9. Please note that the recruitment procedure initiated by this advertisement subject to decision by Hon. Bombay High-Court, Aurangabad Bench on Writ Petition No. 12051/2015.
10. This is University approved advertisement.

Place: Akkalkot

Date: /03/2023

CHAIRMAN

Akkalkot Education Society,
Tal. Akkalkot, Dist. Solapur

SECRETARY

Akkalkot Education Society,
Tal. Akkalkot, Dist. Solapur



DAYALBAGH EDUCATIONAL INSTITUTE

(Deemed to be a University)

DAYALBAGH, AGRA-282005

ADMISSION NOTICE FOR SESSION 2023-24

The Dayalbagh Educational Institute is a Deemed to be University under Section 3 of the University Grants Commission Act, 1956 as per Notification No. F.9-3/78-U-3 dated 16.5.1981 issued by the then Ministry of Education & Culture, Government of India. The Institute has six faculties, viz., Arts, Commerce, Education, Engineering, Science and Social Sciences besides a Technical College and a centre offering certificate level modular programmes. Applications are invited for admission to various programmes/courses listed in the table below for the session 2023-24.

Note: (1) For any clarifications, regarding details of (i) Eligibility Criteria (ii) No. of Available Seats (iii) Admission Criteria (iv) Mode of Selection (v) Fee details (vi) Reservation Policy and (vii) Procedure for applying for admission etc., please refer to the Institute prospectus or official website <http://www.dei.ac.in> (2) All CGPA be converted to percentage of marks for all purposes.

(1) Bachelor's degree in B.A. (Hons.) in Arts, B.F.A., B.A. Social Science (Hons.) / B.A. Soc. Sc. (Cognitive Science) Hons., B.A. Soc. Sc. (Human Service Management)*, / Bachelor of Arts (Honours) - Social Science (online mode) / B.Sc. (Cognitive Science)*, B.Com. (Hons.), B.Com. Hons. (Accounting)*, B.Com. Hons. (Corporate Accounting & Law), B.B.A. (Hons.) / B.B.A. Hons. (Logistics) / B.B.A. Hons. (Retail Specialization), B.Sc. (Hons.) / B.Sc. (Hons.) Applied Botany Science, B.Sc. (Hons.) Home Science, B.Sc. Agriculture (2) (a) B.Tech. in Agricultural Engineering / Civil Engineering / Electrical Engineering / Mechanical Engineering / Footwear Technology (b) B.Com. / B.B.A. Combined Degree with B.Tech. Footwear Technology (c) B.Tech. (Part-time) in Electrical Engineering (d) Bachelor of Architecture (3) Bachelor of Homeopathic Medicine and Surgery (BHMS)# (4) B.Voc. in (1) (a) Apparel Design (b) Textile (c) Dairy Technology (d) Food Processing (e) Tourism and Hospitality Management (f) Commercial Arts (g) Pottery and Ceramic Design (h) Accounting and taxation (i) Banking & Finance (j) Bamboo & Wood Technology (k) Recycled Craft Design (2) (l) Renewable Energy (m) Automobile (n) Telematics (o) AI & Robotics (p) Internet of Things (q) Telecommunications (r) Digital Manufacturing (3) (s) Water Sanitation and Waste Management (t) Agriculture Technology (u) Greenhouse Technology (4) (v) Management and Manufacture of Homeopathic Drugs / (w) Management and Manufacture of Ayurvedic Drugs (5) Diploma in Elementary Education (D.El. Ed.) (6) B.Ed. (7) M.Ed. (8) M.Voc. in Apparel Design / Textile / Automobile / Food Processing / Dairy Technology / Renewable Energy (9) (a) M.Com. with or without specialization in International Business (b) M.B.A. / M.B.A. (General Management) / M.B.A. (Agricultural Management) / M.B.A. (Innovation) / M.A. Social Science (Business Management) - to be offered at project sites / Online PG Certificate in Financial Services (PGCFS) / Online PG Certificate in Career Progression for Working Professionals (PGCCPWP) (c) P.G. - M.B.A. INTEGRATED PROGRAM : Integrated M.B.A. Programme with PG Degree / PG Diploma - to be taken along with a relevant PG degree / diploma (10) (a) M.A. in Hindi / Sanskrit & Culture / Drawing & Painting / English / Music (Sitar / Tabla / Vocal) / Theology / M.A. (Social Science) in Psychology / M.A. (Social Science) in Political Science / M.A. (Social Science) in Sociology (11) M.Sc. (Home Science) with or without specialization in Human Development, M.Sc. in Botany with or without specialization in Plant & Microbial Biotechnology / Chemistry / Computer Science / Mathematics with or without specialization in Computer Applications / Physics with or without specialization in Electronics or Computer Science / Zoology (12) (a) M.Tech. in Engineering Systems (Full Time / Part Time) (b) M.Tech. in Engineering Systems (Full-time) with specialization in Computer Science (13) Ph.D. (Full-time / Part-time) (14) (a) PG Diploma in Theology / Devotional & Folk Music / Journalism & Mass Communication / Safety, Health & Environment / Textile Designing & Printing (b) PG Diploma in Business Economics / PG Diploma in Human Rights and Social Work (15) PG Diploma in Urban Planning and Management (16) PG Diploma in Computer Science & Applications / Big Data, Logistics & Operations Research (17) PG Diploma in Environmental and Green Technology (18) (a) Diploma in Engineering in Automobile / Electrical / Mechanical / Electronics / Civil / Architecture Assistantship / Leather Technology & Footwear (CASD) (b) Vocational Diploma in Automobile / Information Technology (c) Dual Diploma - Degree Program: Vocational Diploma in Information Technology with B.Sc. Computer Science (19) Diploma in Polytechnic in Textile Designing / Interior Designing & Decoration (20) Diploma in Polytechnic in Garment Technology (21) Diploma in Polytechnic in Modern Office Management & Secretarial Practice (22) **Certificate Programmes based on Modular Format [2-semester or 4-semester] or [4 Modules or 8 Modules]** : Modern Office Management & Secretarial Practice, Office Assistant - Cum - Computer Operator, Textile Technology, Motor Vehicle Mechanic (2-Wheeler, 4-Wheeler), Electrician, Fitter, Turner, Welder, Wireman, Dress Designing & Tailoring, Food Processing, Preservation & Nutrition, Interior, Exterior Designing & Decoration, Textile Designing & Printing, Cutting & Sewing, Pre-School Teacher Education, Nursing Aide (Advanced Certificate of 3 semesters Duration), Electronics Mechanic, Installation & Maintenance of Solar Electric Systems, 3-D Printing, Plumber, Mason (Building Constructor), Mushroom Technology, Electric Vehicle Service Technician, Online Certificate in Soft Skills for Success in the Work Place (CSSSW), Online Certificate Course in School Mathematics for Everyone (CCSME) - For Eligibility and other details refer to the Institute Prospectus (23) Distance Education Programmes at Post-Graduate, Graduate, Diploma, Certificate and modular levels are offered in Distance Education / Synchronous mode also. Refer to Section D of DEI Prospectus. (24) **Uttar Pradesh Skill Development Mission Vocational Training & Skill Development Programmes (UPSDM) - Kaushal Vikas Programme** : Automotive, Refrigeration & Air Conditioning, Electronics, Fabrication, Production & Manufacturing, Apparel Made-ups & Home Furnishing, Textile - For Eligibility and other details refer to the Institute Prospectus.

***Trans disciplinary Programmes (TDP)**

****Graduate refers to 3 years degree course under 10+2+3 system.**

The matter is sub-judice. Action at all stages shall be taken as per Hon'ble Court's Directive.

NOTE : (1) Program Duration for various courses will be in accordance with the DEI Education Policy 1975 and NEP 2020. (2) Reservation in admissions is applicable as per the Government norms. (3) For relaxation of Marks for various categories and maximum age limit for various programmes, refer to the Institute Prospectus. (4) At present, various programmes for admission are open to selected categories of candidates, viz., only for female candidates or only for male candidates and for candidates belonging to all genders. For details, refer to the Institute Prospectus. (5) For all other details refer to the Institute Prospectus.

The last date for submission of online applications complete in all respect shall be as mentioned below : (a) For Diploma / All Undergraduate / B.Voc. / B.F.A. / B.Arch. & B.Tech. Courses : **30th April 2023** (b) For B.Ed. / M.Ed. / M.Voc. / All Postgraduate & Postgraduate Diploma Courses : **30th April 2023**. **Vocational Certificate Programmes** : Online Applications shall start from : **15th June 2023**. The last date for Online Submissions : **15th July 2023**.

Schedule of the Admission Tests/Interviews and declaration of results shall be notified separately on the DEI website (www.dei.ac.in)

March 28, 2023

Ph : (0562) 2570372

REGISTRAR



Ganpat University
॥ विद्यया समाजोत्कर्षः ॥

July-2023 Intake

Last date of Application
April 18, 2023

APPLY NOW

Ph.D. Admission 2023

Full Time / Part Time

ENGINEERING & TECHNOLOGY

PHARMACY

SCIENCES

COMPUTER APPLICATIONS

MANAGEMENT

ENGLISH

ECONOMICS

COMMERCE

Focused Research Areas

Machine Learning | Artificial Intelligence | Cyber Security | Cloud Computing | Data Analytics | Robotics | Energy Management | Non-Conventional Energy Sources | Food Technology | NDDS | Drug Design | EV | 5G | Additive Manufacturing | Hospital Management | Entrepreneurship | Public Policy & Good Governance

*Terms & condition apply

Candidate can avail special Research Scholarship with Research Funding support for focused research area.

Candidates interested for full-time Ph.D. Program are eligible for JRF/ SRF/ Research Associateship with Financial Assistance.

For financial assistance, application process and more details please refer www.guni.ac.in

Ganpat Vidyanagar-384012,
Mehsana-Gandhinagar Highway,
Dist.: Mehsana, Gujarat, INDIA



Mo. 99250 65025