

## **UNIVERSITY NEWS**

A Weekly Journal of Higher Education

### **Association of Indian Universities**

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Career Making is Doing What We Love for a Living

- Convocation Address

# AIU Invites Proposals for Organizing Roundtables of Newly Appointed Vice Chancellors in the Session 2022-23

Association of Indian Universities invites proposals for collaboration from member universities/institutions to organize Two **Two-day Roundtables of Newly Appointed Vice Chancellors** in the current financial year ending on March 31, 2023.

The Roundtables are to be scheduled between **October 2022 to March 2023** during mutually convenient dates for the collaborating University and AIU.

Member Universities/Institutions of AIU are invited to send their proposal with an Expression of Interest (EoI) from the Vice Chancellor to collaborate with AIU in organizing the Roundtables. The institutions are required to send the Proposal containing (i) an Expression of Interest through a letter from the Vice Chancellor, (ii) Financial Estimates, (iii) Two Sets of Dates for convening the Events.

**The proposal** duly Approved /Endorsed by the Vice Chancellor/ Head of the Institution along with two sets of dates for convening the Roundtables must be sent latest by **September 01, 2022,** via Email: researchaiu@gmail.com to:

Dr Amarendra Pani Joint Director & Head (Res) Association of Indian Universities AIU House, 16 Comd. Indrajit Gupta Marg New Delhi – 110 002

E-mail: researchaiu@gmail.com

The allocation of the event to the University will be done after the selection process, and on terms and conditions as laid down by AIU. The details of terms and conditions will be communicated to the University after the selection process by the AIU.

**N.B.:** The Roundtables will be conducted under the banner of AIU. AIU is not a Funding Organisation. However, a token amount will be contributed by AIU for organizing the Roundtables. The two Roundtables will **Not** be allocated to the same University.

For any further queries please contact the coordinators on 011-23230059, Extn-202/241, Fax No: 011-23239325, E-mail:researchaiu@gmail.com

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## **Changing Paradigms in Engineering Education**

Sekar V\* and Elangovan K\*\*

Engineering education as a professional program has been witnessing myriad changes both quantitatively and qualitatively over the last few decades. The continuous increase in the number of engineering colleges signaled a growing demand for engineering courses by students; whether due to passion or fashion is a moot question. The addition of new branches to engineering education like Artificial Intelligence, Cyber Security, Data Science, Robotics Engineering, etc. to the existing engineering streams is a matter of concern and discussion. Apparent buoyancy of engineering education throws open a host of issues to be resolved; demand and supply of engineers, employability of young engineering graduates; engineers' preference for the IT sector than core industries, engineers finding offshore green pastures resulting in Brain Drain, underemployment of potential boys and girls with engineering background working for menial jobs. There is a need for effective utilization and harnessing of the engineering expertise of young prospective engineers of India. Therefore, the aim of this paper is to discuss a few issues in a macro backdrop of engineering institutions in India and Tamil Nadu, besides tracing the major branches of engineering to discern the present scenario. Keeping in view the quantitative data, the main objective is to present a qualitative discussion of issues and to outline a possible roadmap for international standards in engineering education in Tamil Nadu.

Albert Einstein once said, only the best engineering education and educators can produce the next generation. Einstein goes further and says, Scientists, investigate that which already is. Engineers create that which has never been. Engineering disciplines are unequivocally indispensable, where the world is witnessing engineering marvels across the industry, agriculture, and service sectors. New materials and energy may be discovered by scientists but engineers find out a new use for them. Keeping in view of significance and relevance of engineering disciplines, there is a need for quality engineering graduates to compete at the global level. Quality students who have good aptitudes for science and mathematics may be nurtured to accomplish the ideals of an advanced technological world. In this milieu, it is necessary to take stock of academic institutions offering engineering education in India and Tamil Nadu in particular, to discern the dynamics of moving forward. There is no dearth of secondary sources of online website information on the aforesaid. An attempt is made in this

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paper to present a macro scenario of a number of engineering colleges and students across different states and a few union territories in India and the same in the state of Tamil Nadu to trace the growth of institutions and students over the last two decades. Importantly, a detailed discussion of various issues pertaining to engineering education would be useful for streamlining the existing practices and in preparing a road map for the provision of global standards in engineering education in India.

### **Indian Scenario of Engineering Education**

Engineering programs, both undergraduate and postgraduate, have been offered in India by IIT, NIT, State universities, Deemed to be universities, Private universities and Government engineering colleges, and Private engineering colleges. As per the available information, notwithstanding the authenticity of the data, the total number of engineering colleges across 31 states/union territories was 5,290 in 2020, with an increase of 3,831, the number of colleges being added between the year 2000 and 2020. By looking at the number of seats, the intake of students has crossed one lakh during 2019, in five states viz., Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu, and Uttar Pradesh. Among the five states, the state of Tamil Nadu registered the maximum with 2.79 lakh students in 2019. There was a phenomenal growth of private engineering institutions in all five states. The state of Karnataka registered the highest number of Government engineering institutions followed by Tamil Nadu and Andhra Pradesh. The state of Maharashtra differed from all other states/ union territories by running the least number of Government engineering institutions and a maximum number of private engineering colleges (see Table 1). Contrary to the prevailing scenario, the state of Bihar posted a different picture with 44 Government engineering colleges and only 18 private colleges. No other state in India has this trend of Government colleges outnumbering private engineering colleges, with an exception of Goa where the number of Government colleges was 5 and the private being 3. Another interesting observation was the case of Punjab and Rajasthan, where the number of engineering colleges was 7 in 2000, a single digit in both the states, but increased to 174 and 184 respectively in 2020, more than a 2000 percent increase in two decades.

### Status of Engineering Education in Tamil Nadu

It is evident from Table 2, that all the districts of the State of Tamil Nadu are running engineering colleges. In terms of the highest number of engineering colleges, the Coimbatore district stands first with 73 colleges. Interestingly, before the bifurcation of Chengalpattu district from Chennai in 2019, the total number of colleges in Chennai was 85. Districts like Kanchipuram, Kanyakumari, Tiruchirappalli, and Namakkal do run more than 30 engineering colleges. In about 17 districts, the number of engineering colleges remained single-digit.

Regarding private engineering colleges, the data confirmed that private colleges are outnumbering government colleges. As of 2020, the Coimbatore district registered the highest number of private engineering colleges, notwithstanding the bifurcation of the district of Chengalpattu from Chennai. Three districts viz., Kanchipuram, Namakkal, and Tiruchirappalli are running more than thirty private engineering colleges. Excepting Ranipet, Tirupur and Villupuram all other districts do have at least one government engineering college. Not even a single district has touched double digit with respect to the number of government engineering colleges in Tamil Nadu.

### **Engineering Streams under B.E. and B.Tech Programs**

Conventionally, the academic engineering programs for under and postgraduate levels included Mechanical engineering, Chemical engineering, Electrical engineering, and Civil engineering. But, now the number of engineering streams has been increasing with the list showing 106 engineering streams. Aspirants of engineering education have fairly a long list before them to choose from. This indicates the growth of academic programs of engineering education in India and abroad. A list of streams is given in Table 3 for both B.E. and B.Tech programs, where most of them are recent ones. For instance, Artificial Intelligence, Cyber Security, and Robotics have come into the picture in the last one or two decades.

### **Discussion**

A macro picture of India, the data at the state level, and the various streams outlined in

Table 1: Engineering Colleges in India-- 2000-2020

S. No	Engineering College List Over all India	Total Count of 2000	Total Count of 2020	No. of Engg. Colleges Added Between 2000 & 2020	Government Engineering Colleges	Private Engineering Colleges	Be/B.Tech Seats 2019
1	A And N Island	0	1	1	0	1	90
2	Andhra Pradesh	90	506	416	84	422	142426
3	Arunachal Pradesh	2	8	6	2	6	3885
4	Assam	11	26	15	11	15	1215
5	Bihar	15	62	47	44	18	10130
6	Chadigerh	7	12	5	4	8	915
7	Chhattigarh	11	77	66	17	60	22604
8	Delhi	24	91	67	15	76	8395
9	Goa	2	8	6	5	3	1260
10	Gujarat	47	184	137	42	142	68447
11	Haryana	17	288	271	67	221	58557
12	Himachal Pradesh	8	42	34	19	23	7830
13	Jammu And Kashmir	9	24	15	10	14	3345
14	Jharkhand	19	47	28	11	36	7085
15	Karnataka	232	542	310	134	408	100565
16	Kerala	57	220	163	30	190	62398
17	Kolkata	20	65	45	15	50	13747
18	Madhya Pradesh	48	267	219	45	222	98247
20	Maharashtra	314	763	449	13	750	215254
21	Manipur	3	6	3	2	4	115
22	Meghalaya	2	6	4	1	5	420
19	Nagaland	0	3	3	2	1	240
23	Odisha	17	192	175	17	175	56133
24	Puduchery	11	21	10	3	18	8910
25	Punjab	7	174	167	26	148	43790
26	Rajashthan	7	184	177	15	169	58013
27	Sikkim	7	12	5	3	9	780
28	Tamil Nadu	290	684	394	110	574	279397
29	Telangana	82	309	227	23	286	141118
30	Tripura	3	6	3	3	3	600
31	U.P	97	461	364	27	434	142972
	Total	1459	5290	3831	800	4491	

### Sources:

- 1 Pmss (J&K) Engineering Pdf 107 Pages
- 2 College Dunia.Com
- 3 Wikipedia (Http://Www.Ingegneria.Unina.It)

Table 2: Engineering Colleges In Tamil Nadu

S. No	Tamilnadu Districts	Total	Total	Number of Colleges	Private	Government
		Count of 2000	Count of 2020	Added Between 2000 & 2020		
1	Ariyalur	0	1	1	0	1
2	Chengalpattu	4	21	17	18	3
3	Chennai	29	64	35	59	5
4	Coimbatore	22	73	51	64	9
5	Cuddalore	2	7	5	5	2
6	Dharmapuri	2	6	4	5	1
7	Dindigul	4	13	9	12	1
8	Erode	5	18	13	17	1
9	Kallakurichi	2	4	2	3	1
10	Kanchipuram	11	36	25	35	1
11	Kanyakumari	9	30	21	28	2
12	Karur	1	9	8	8	1
13	Krishnagiri	4	8	4	7	1
14	Madurai	9	17	8	15	2
15	Nagapattinam	3	6	3	4	2
16	Namakkal	12	34	22	33	1
17	Nilgris	1	2	1	1	1
18	Perambalur	4	8	4	7	1
19	Pudukkottai	3	11	8	10	1
20	Ramanathapuram	2	4	2	3	1
21	Ranipet	2	6	4	6	0
22	Salem	9	26	17	23	3
23	Sivaganga	2	7	5	6	1
24	Tenkasi	1	3	2	2	1
25	Thanjavur	4	15	11	13	2
26	Theni	2	5	3	4	1
27	Thoothukudi	2	11	9	10	1
28	Tiruchirapalli	18	36	18	30	6
29	Tirunelveli	3	20	17	19	1
30	Tirupathur	1	4	3	3	1
31	Tiruppur	0	1	1	1	0
32	Tiruvallur	24	25	1	25	1
33	Tiruvannamalai	12	15	3	14	1
34	Tiruvarur	1	2	1	1	1
35	Vellore	3	10	7	8	2
36	Viluppuram	4	14	10	14	0
37	Virudhunagar	7	12	5	11	1
	Total	224	584			

Sources : Wikipedia, Collegedunia.Com

Table 3: Engineering sub-streams in India

S. No	Engg Substream in India	S. No	Engg Substream in India
1	Agricultural and Food Engineering	51	Aerospace Engineering
2	Agricultural Engineering	52	Applied Electronics and Instrumentation
3	Agricultural Information Technology	53	Biochemical Engineering
4	Apparel Production Management	54	Bioinformatics
5	Applied Mechanics	55	Biomedical Engineering
6	Automotive Design Engineering	56	Bioprocess Technology
7	Biotechnology and Biochemical Engineering	57	Civil Infrastructure Engineering
8	Biotechnology	58	Computer and Information Science
9	Carpet and Textile Technology	59	Dairy Technology
10	Ceramic and Cement Technology	60	Electrical Engineering
11	Ceramic Technology	61	Electronics and Telecom Engineering
12	Chemical Science and Technology	62	Energy Technology
13	Civil Engineering	63	Fashion Technology
14	Cloud Computing & Virtualization Technology	64	Food Process Engineering
15	Computer Engineering	65	Genetic Engineering
16	Computer Engineering  Computer Science and Engineering	66	Industrial Microbiology
17	Electrical and Electronics Engineering	67	Instrumentation and Control Engineering
18	Electronics and Communication Engineering	68	Metallurgy
19	Electronics and Communication Engineering Electronics and Instrumentation Engineering	69	Plastic Technology
20	Electronics and Media Technology	70	Power System Engineering
20	Electronics and Nanotechnology  Electronics and Nanotechnology	70	Printing Technology
22		72	Production Engineering
23	Energy Engineering Engineering Physics	73	
		74	Robotics Engineering Textile Chemistry
24	Environmental Engineering Fashion and Lifestyle Design (FLD)	75	
25		76	Architectural Engineering
26	Food Technology	77	Automobile Engineering Biomedical Instrumentation
27	Foot-ware Technology		
28	Geo Informatics Engineering	78 79	Chemical Engineering
29	Geo Sciences Engineering	80	Electronics Engineering Food Science
30	Humanities and Management	81	
31 32	Industrial Biotechnology	81	Industrial and Production Engineering
	Industrial Engineering and Management		Industrial Engineering
33	Infrastructure Engineering	83	Information and Communication Technology
34	Instrumentation Engineering	84	Information Science and Engineering
35	Manufacturing Technology	85	Information Technology
36	Material Science Engineering	86	Leather Technology
37	Mathematics and Computing	87	Mainframe Technology
38	Metallurgical Engineering	88	Manufacturing & Management
39	Nanotechnology	89	Marine Engineering
40	Naval Architecture and Ocean Engineering	90	Mechanical Engineering
41	Oil & Gas Informatics	91	Mechatronics Engineering
42	Packaging Technology	92	Medical Electronics
43	Polymer Engineering	93	Mineral Engineering
44	Polymer Technology	94	Missile Technology
45	Power Engineering	95	Nuclear Power Technology
46	Safety and Fire Engineering	96	Nuclear Science & Engineering
47	Silk Technology	97	Optics and Optoelectronics
		98	
48	Telecommunication Engineering	98	Physical Sciences
49	Textile Engineering Water Resources Engineering		Software Engineering
50	Water Resources Engineering	100	Space Technology
		101	Urban & Regional Planning
		102	Petrochemical Engineering
		103	Pharmaceutical Technology
		104	Paint Technology
		105	Artificial intelligence
		106	Cyber security

Source: https://www.eduncle.com College dunia.com

the preceding pages formed the backdrop of the paper. As mentioned earlier, the purpose of the paper is to discuss and highlight the problems and prospects of engineering education keeping in view the basic information about India and Tamil Nadu and suggesting some measures for overcoming the problems.

Professional education in India, mainly engineering education has reached a crossroads where there are many questions that need to be addressed to improve its quality to meet world standards. Engineering graduates selling books, working in tea stalls, working on farms, selling goods on road, and doing menial works are a reality now in India once in the 1990s they were considered to be the most elite group of students in India. What ails engineering education in India? Is there a quality compromise, excess supply and less demand, mismatch of courses offered, fewer job opportunities, blind faith of parents that engineering course is the best, the lacuna in providing proper courses by colleges, cost of education, and so on? The search for an answer along with remedial measures warrants a detailed discussion on various issues of engineering education in India and Tamil Nādu in particular.

In 2019, close to 51 percent of seats were left vacant. The problem is not lack of jobs but uneven demand and supply say, experts. There are more seats available in Tamil Nadu than students interested in pursuing engineering. According to TNEA, 1.72 lakh seats were available in 2019 for engineering, 1.33 lakh registered for counseling, and only 1.03 were found eligible. Other drawbacks were quality of education poor in many colleges, industrial skills not taught, and industry gets upgraded once in 18 months but not the college syllabus. A survey carried out by the All India Council of Technical Education (AICTE) among undergraduate engineering students on vernacular language preference shows that majority of students are interested in Tamil as a course of language. 83195 students took part in the survey, 12487 selected Tamil, 7818 Hindi, 3991 Telugu, and 3226 Marathi, 1953 not sure. The survey included participants from 22 mother tongues. The suggestions were: to have industry oriented curriculum, impart technical knowledge, soft skills, and value-added programs, employ quality teachers, good support from the administrators and management, improve effective learning standards among students and

finally develop effective evaluation methods with unbiased appraisals.

Education is a path that paves way for students to explore and learn various skills and find their choice future. At the school level, students need to be given basic training in all streams of education. But once the college level is reached, the student has to channelize his/her course of education according to the choice. Some may find their future course at a later stage but most students should be allowed to make their choice at this level. These needs preparing them from the high school level, exposing them to all avenues available, and even some practical input about each stream of college education would be helpful for them to make their choice. It is reiterated here, that some may not be able to select their future goals at the opening level itself. But proper guidance and giving them free hand to select their course of higher education would lead to better output in graduates coming out of colleges and universities.

Another problem is Brain Drain; governments both central and state spend a considerable amount on producing engineering graduates. Many Engineers who pass out from Indian universities/ colleges move to foreign countries to serve. Engineers such as Sundar Pichai and Sathya Nadella could have contributed to our nation better had they been retained in India with suitable positions and compensation. Even the idea of retaining great achievers in India itself might appear rhetorical and strange, but the expertise of those achievers would change the entire IT sector in India, which in turn would provide huge employment opportunities to our young aspirants trained in computer engineering and other allied fields.

Contrary to customary practice, most engineers work in jobs totally unrelated to their domain knowledge. Engineering graduates trained in Mechanical, Electrical, Civil and other branches joining IT software sector due to attractive salary package. This issue too might look trivial but their productivity would certainly be higher had they preferred core companies and their output would have been more useful to society. There are also instances, where engineering graduates take to civil services, which may be better than resorting to the IT software sector. Sadly, there was also news that engineers had filled up the form for fourth-

grade government jobs which required minimum educational qualifications.

Narratives of engineering education and the problems connected with them are enormous. It may be hard to take a total stock of the situation; however, a few issues were discussed in the foregoing paragraphs. The next question is what is the way out? Albeit, there are no ready-made solutions for the problems, certain suggestions can be indicated for consideration at a macro level. First and foremost is a reorientation of the curriculum with a special emphasis on Innovation and Entrepreneurship. No doubt, the engineering curriculum has included aspects relating to innovative practices. But the point is, that a conscious effort to inculcate the spirit of innovation and entrepreneurship in the engineering curriculum is essential. Aspects relating to creative thinking leading to innovative ideas and prerequisites of becoming entrepreneurs must be incorporated into the syllabus itself. Each paper shall allot one module/ chapter to matters relating to innovation. The idea is that engineering students while studying different papers should get exposed to creative thinking, innovation, and entrepreneurship; thereby they would be entrepreneur ready immediately after completion of undergraduate or postgraduate engineering programmes. As of now, out of hundred engineering graduates, who pass out, only one or two are becoming entrepreneurs. This situation needs to be changed and it could be possible if curriculum revision takes note of innovation aspects into consideration. Developed countries like USA and Europe attach greater importance to innovation and entrepreneurship and thereby they become job providers and not job seekers. India should follow suit and there is no dearth of knowledge and expertise in India, but what is required is a change in the mindset of engineering educators.

Equally important are micro-level changes. Following are a few points to ponder over to bring certain positive changes in engineering education.

1. Educate and guide the student to select a suitable stream of future studies and jobs at the school level. It may be engineering or otherwise, also the branches available in engineering colleges need to be charted out and their pros and cons explained. Making his/her choice correct at the entry level itself is the major corrective measure.

- 2. Students who have not studied mathematics and physics at their school level may also be allowed to enter an engineering programme, if they are really interested, provided they pass a crash course in mathematics and physics during the first year of engineering
- 3. Students in the first year of engineering college study basic engineering subjects, common to all streams. Giving inputs and real hands-on experience in various streams would help them choose their optimal stream. Admission into their respective choice in the second year should be made possible.
- 4. In a year, students for one stream may be more and, in some streams, less, even less than 10. Colleges should not deem to fill up all seats equally. The total number of students' uptake may be constant but the strength of each stream need not be constant. This would negate the practice of students offered a different stream as their choice stream has been filled up.
- 5. To make it more effective, even after the second year, if needed a student can change his branch, provided he/she loses one year and has to study the second year in his new stream again.
- 6. Language of communication must be vernacular, or even bilingual. The main aim is to make them understand the subject and assimilate the teachings. In the case of students from other states or countries, instant translator software can be used to give input to such students in their native tongue. A separate course to speak in English, write, and present the ideas can be incorporated to help students from local villages.
- 7. Placement should be done in their specific stream of companies or industries, keeping in view the domain knowledge of candidates and not as it is being done now. Any student from any stream of engineering can join a software company just by writing the entrance exam, he will be trained to suit the company's needs. This is a waste of time, effort, and money put into different core streams of engineering courses.
- 8. Students need to be made aware of innovation and entrepreneurship options by introducing these in the syllabus and giving them a whole picture of how to proceed with entrepreneurship from scratch at the college level.
- 9. All engineering colleges/ universities plan to provide, dedicated faculty, world-class

- infrastructure, flexible curriculum, studentfriendly atmosphere, hostel facility, recreation, sports, and cultural opportunities to attract students to their campus.
- 10. In Tamil Nadu, there was a 50 percent reduction in engineering college admission of Scheduled Caste and Scheduled Tribe between 2016-17 and 2020-21, and that was attributed to 'tightening certain norms in the implementation of the Post Matric Scholarship' scheme by the Central government. The scheme needs to be modified to suit to maximize the number of beneficiaries.

### Conclusion

Engineering education at the college, university, and institute levels has undergone changes both qualitatively and quantitatively in the last few decades. The increasing trend is in place as the number of engineering colleges and institutions has increased and concomitant increase in engineering students, and the number of streams/branches. Quality education in engineering streams remains the need of the hour as that would take care of shaping quality students in tackling the employability of aspiring engineering graduates

for employment. Incorporation of creative thinking leading to innovation in the engineering curriculum is mandatory, should we aim for achieving the global standard.

#### Note

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### **AIU Publication**

on

### REIMAGINING INDIAN UNIVERSITIES

'Reimagining Indian Universities' edited by Dr. (Mrs) Pankaj Mittal and Dr S Rama Devi Pani is a collection of essays by some of the greatest thinkers in the field of Indian higher education. Each essay in the book examines one or more of the critical topics and provides solutions and methods to overcome the issues involved in them. It provides new solutions and methods in the form of reforms and innovations to elevate Indian universities to world-class top-ranking levels. The book aims at providing a roadmap to government as well as the universities to gear themselves towards becoming more responsive to the present and future demands of higher education. Generating a corpus of new ideas that are significant for reimagining, reforming and rejuvenating Indian higher education system, Book is 'must read' for all those who are interested in reforming Indian Higher Education System.

The release of the book in the Annual Meet of Vice Chancellors 2020, coincides with the launch of New Education Policy. The Foreword for the Book was written by the then Minister of Education Shri Ramesh Pokhriyal 'Nishank'.

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### Aspirational Study of Higher Secondary Students towards Undergraduate Programmes: A Special Study on the Occasion of Centenary Year of University of Delhi

Siddhant Singh\* and Rajesh\*\*

Several papers have been written on the effective implementation of the National Education Policy –2020 in educational institutions, but much less attention has been paid to the aspirations of students who were going to get admission to colleges and universities for the first time. Very few researches have been conducted to analyse the objectivity of the National Education Policy 2020, from the perspective of intermediate students. This paper delves into the expectations of higher secondary students towards a holistic and flexible 4-year undergraduate programme, which is formulated as per NEP-2020. Further, it also substantiates the major features of NEP-2020, to perceive the efficacy and potency of this policy. By providing an opportunity for students to converge their aspirations, policymakers and other scholars are able to use these responses for better efficacy and execution of schemes and functions as a balanced fulcrum between perceived students' aspirations and policy's offering with their experience. This paper underlines that the aspirations of Intermediate students are beyond conventional learning and it focuses more on skill enhancement and career planning.

Discussion on academic curriculum isn't a new subject. After independence, India adopted several educational policies for universalising access to high-quality education to develop and maximize the talent of the country, and radical restructuring of educational opportunities in order to achieve national integration and greater cultural and economic development (NEP, 1968). For equalising educational opportunities among Indian women, a Scheduled Caste (SC) and Scheduled Tribe (ST) community, the Government of India has introduced National Policy on Education in 1986. National Education Policy 2020 is the first

education policy of the 21st century, which is based on the recommendations of an expert committee headed by Dr. Kasturirangan, Former chairman of the Indian Space Research Organisation (ISRO). It focuses on reducing curriculum content to enhance essential learning and emphasise other methods of learning like holistic experiential, discussionbased, and analysis-based learning. Although the new national education policy has an emphasis on a drastic change of pedagogical and curricular structure, assessment for students development, approach to teacher education, standard setting and accreditation for school education, institutional restructuring and consolidation, holistic and multidisciplinary education, and also reconstruct the foundational learning of the child, holistic development of learners, experiential learning, multilingual courses, curricular integration of essential skills and capacities, equitable and inclusive education for all and enhance students activity and participation in educational institutes (NEP 2020) but the 4-year undergraduate program formulated as per NEP 2020 is the pivot point of our study.

4-vear undergraduate The programme articulated with a student-centric approach and provides flexibility in terms of choice of disciplines of study developing academic pathways having creative combinations of disciplines for study with multiple entries and exit points, determining semester-wise academic load and the ease to learn at his/her pace, to the extent possible. An increase in the number of choices of courses available to students will increase the need for more educators. This program also incorporates the spirit of NEP in terms of providing multidisciplinary and holistic education with the rooting in the culture and ethos of the nation and emphasises research, skill development, and higher order thinking skills to promote innovation and employability (UGCF 2022).

In this regard, the Investigators have used questionnaire-based surveys to record intermediate students' aspirations. The objective of this survey

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is to discern the alignment between students' aspirations toward the 4-year undergraduate program and the course's offering through NEP 2020. The conclusive arguments are purely based on primary data, which signifies that the changes suggested by the new education policy are needed for an hour. Some implications of programs like multilingual and flexible courses will surely benefit students, especially those who belong to impoverished sections and are studying their academics in regional languages. By strengthening digital infrastructure in colleges and universities, this NEP will open the door to opportunities for students. Also introducing skill enhancement programs and employability-oriented courses at the undergraduate level make NEP 2020 a panacea for the country having the largest young population.

### **Objectives of the Study**

The objective of this study is to analyse students' perception towards the recent paradigm shift of the education system from rote learning to conceptual learning, extensive use of technology, introducing skill enhancement, value addition, and generic elective courses, promoting life skills, multidisciplinary and flexible programs. This study is aimed to determine the impact of transitional changes in the education system on intermediate students by providing opportunities to converge their aspirations. This study also enables policymakers and other scholars to use these responses for better efficacy and execution of schemes and functions as a balanced fulcrum between perceived students' aspirations and policy's offering with their experience?. Thus, based on above-mentioned objectives, some following central questions have arisen.

- 1. How the aspirations of students are justified by the undergraduate programme's offering as per NEP 2020?
- 2. From the students' perspective, what are the most effective strategies to improve educational opportunities?
- 3. What do students perceive about digital learning and the extensive use of technology in their curriculum?
- 4. What are the impacts of transitional change in undergraduate programs on intermediate students?

5. To what extent some independent variables have affected students' expectations towards higher education?

### Literature Review

The theme of this study is novel in itself. Hence only a limited number of studies are available for this study. Although several scholars had discussed expectations of students towards educational institutes and implementation strategies of higher education part of NEP, which we briefly discussed here

Before moving forward with this study, we must be clear about why educational institutions should be concerned about student expectations. It is necessary because students' expectations and their experience in their educational institute have a direct impact on their engagement and retention (Longden, 2006).

Joseph SiaKee Ming (2010) conducted a study on "Institutional Factors Influencing Students' College Choice Decision in Malaysia: A Conceptual Framework". He found some independent variables such as location, college reputation, education facilities, cost, availability of financial aid, employment opportunities, representatives, and campus visits to higher education institutions (HEIs) are the factors that influenced students' college choice decisions in Malaysia.

Rajesh Dorbala and Phani Babu (2017) conducted a study on the "First Year Student Expectation of Management Program", in which they conclude that students from different cultural backgrounds may have different levels of expectations from educational institutes. Their results revealed that the students are expecting to go beyond their degree to gain the necessary skills and experience for employment and emphasis the importance of additional academic programs, internships and work placement opportunities. They also described that students are rarely satisfied with centred care services and in order to meet the expectations of the students, the educational institutions have to go beyond traditional teaching methods.

P. S. Aithal & Shubhrajyotsna Aithal (2020) have done the analysis of National education policy and remarked that as per NEP, "The Indian higher education system is moving from teacher-

centered to student-centric, information-centric to knowledge-centric, marks centric to skills centric, examination centric to experimental centric, learning-centric to research-centric, and choicecentric to competency-centric".

### **Research Design**

The tool which is used to measure aspirations of higher secondary students is a Questionnaire-based survey instrument. An evaluation method is used to analyse the collected data. The questionnaire is designed in a way to find a correlation between students' expectations and provisions laid by the undergraduate program in accordance with NEP 2020. The questions provided acumen to the program's offering and covered all the aspects of underlying features of this policy. We have assured that the questions are drafted for a fruitful dialogue with proper checks and balances.

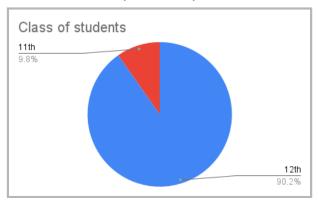
The questionnaire consists of 25 questions in total, of which 13 are open-ended and 12 questions are closed-ended, which requires students to indicate their level of agreement or disagreement with them on a 5-point Likert Scale. We have done simple random sampling to choose a sample size of 50 students from government-owned schools in Delhi and Varanasi. However, 43 questionnaires were filled and returned with a response rate of 86%.

### **Data Analysis**

Collected data was analysed through an evaluation method by using sheets in the form of pie charts, graphs and tables.

From Figure-1, we can see the sampling is

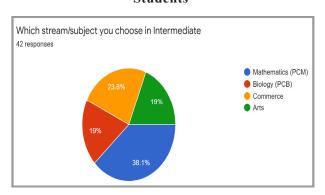
Figure-1: Participation of Students (Class-wise)



done majorly by 12th students who were going to join any undergraduate program in this year. Over 90% of the students belong to the 12th class of different schools, which shows the reliability of this study.

According to Figure-2, there is an almost equal distribution of students from every stream. Over 38% of students belong to Mathematics stream, 23% belong to Commerce, and an equal share (19%) of Biology and Arts stream students have participated in this survey. Almost equal participation of students from every stream gives an edge to this study, whether analysing the provisions of NEP from the perspective of diverse streams of students or to make this study's findings unbiased and effective.

Figure-2: Subject/Stream Distribution of Students



From Figure-3, we have witnessed that more than 80% of the higher secondary students have read the draft of National Education Policy 2020, fully or partially. Also from this figure, we can observe that students are excited about the policy which aims to bring changes to the education system. Having major participants aware of the salient features of the NEP--2020, helps the smooth conduction of dialogues and also makes the surveys familiar to students.

Figure-3: Students' Awareness of NEP 2020

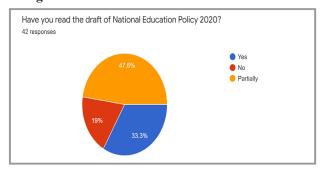


Figure-4: Students' Interest in Higher Education

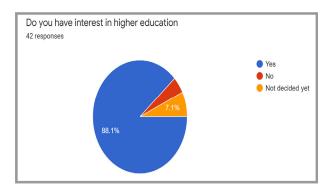


Figure-4 demonstrates that almost 88% have decided to pursue higher education through any higher educational institutes. Many students opting for higher education shows that now students are expecting the specialisation and this will help in catalysing quality academic research in all fields through a new National Research Foundation.

Almost 95% of students emphasised on having value-added or life skills courses in their curriculum. From the Figure-5, we can see that over 50% of students have strongly agreed and more than 42% of students have agreed that value-added courses are needed to add to their curriculum.

In Figure-6, it is shown that aspirations of students towards multidisciplinary courses

Figure-5: Aspirations of Students Towards Value Addition Courses

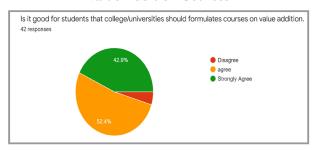
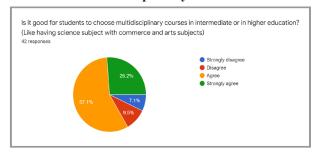


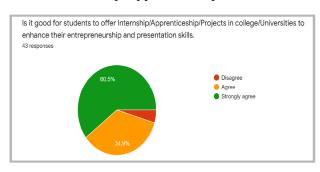
Figure-6: Aspirations of Students Towards Multidisciplinary Courses



are unequal. Over 80% of students assumed that Generic Electives (GEs) courses should be incorporated in curriculum but on the other hand, almost 20% of students showed disagreement to that provision. Major students believed that GEs courses promote creative combinations of subjects, which further promulgate contemporary realities of our demographic advantage globally.

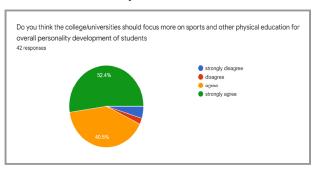
Almost 95% of students show the need of Internship/Apprenticeship/Projects in college for enhancing entrepreneurship and presenting skills. The big nod for entrepreneurship skills shows students are ready to move out of traditional learning and want some other employable skills for themselves (Figure-7).

Figure-7: Students' Perception Towards
Internship/Apprenticeship Skills



The need to focus more on sports and physical education isn't a new demand for students. Having a population of 1.38 billion and winning Figure-8 counted medals at world sports events made this discussion a big fuss frequently.

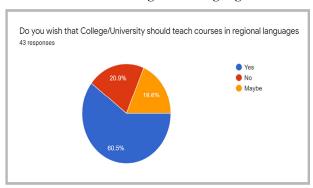
Figure-8: Students' Perception Towards Sports and Physical Education



As we see from Figure-9, nearly half of the respondents' parents haven't completed a college education. This implies that most students, who belong to rural backgrounds, are 'first generational learners. This sampling is also done

Graph--1: Educational Status of Respondents' Parents

Figure-9: Students' Perception Towards Courses in Regional Languages



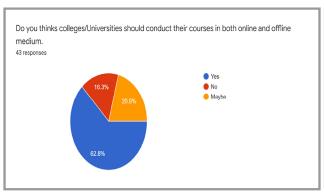
in a government-owned school in Varanasi city, where courses are offered in both the languages, English and Hindi. Therefore, many students, who belong to rural backgrounds, want to pursue their higher education in regional languages [Graph 1]. Hence the policy's offering to perform courses also in regional languages prevents language hindrance and increases access, quality and inclusion in educational institutes, which helps the students belonging to rural backgrounds.

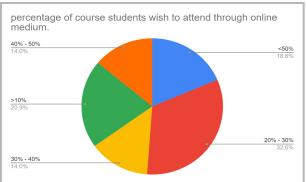
This open-ended question gives us a brief perception of students in their academic journey

Table 1: Activities that Need to Change in Educational Institutes to Make Them More Students-Oriented

1.	The teacher-student ratio should be in proportion.
2.	Should focus on the mental health of students
3.	Should introduce sex education
4.	More focus on Co-curricular activities.
5.	Inclusion of advanced computer skills such as programming languages, web development, and ethical hacking in the academic curriculum.
6.	Focusing on more employable skills like Entrepreneurship, financial skills, Hospital Management, Foreign languages, Photography, etc.
7.	Including meditation, yoga classes, and self defense skills in courses.
8.	Make special provisions for weak students.
9.	Courses should be designed in a way to make pace with the global world.
10.	Students should be taught subjects with practical examples using animations and videos
11.	24hrs online library, group discussion between students, educational trips.
12.	Flexibility in subject choice, Addition of more subjects which are more practical in life, Sports in every class as a subject.

Figure-13 & 14: Students Perception Towards Online/Digital Learning



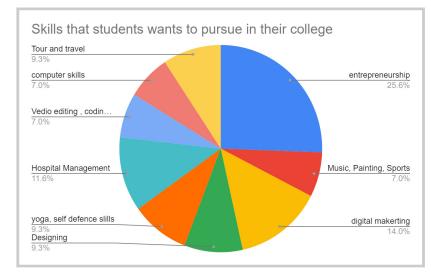


including the challenges they faced, and the changes they aspiring. Most students want practical learning methods, flexible choice courses, skill enhancement programs, and the use of technology in their institution. Some of the students wanted brief courses on sex education, yoga, entrepreneurship, sports, and other curricular activities (Table 1).

Figure-13 demonstrates that almost 80% of students wish to attend the courses through both media, offline and online. The rest 20% of students, who don't show their interest in a digital medium, accepted that lack of digital infrastructure and untrained teachers is the reason to not choose online medium for study.

From Figure-14, it is shown that the majority of students have advocated that learning should be carried by both mediums. From both the tables it is concluded that before we start courses in blended

Figure-15: Skills that Student Wants to Pursue in an Educational Institute



medium, we should ensure that the Institutes should create substantial digital infrastructure and trained teachers for smooth conduction of learning.

If we talked about the skills students want to acquire during their higher education, we can see in figure-15 that the most students (>25%) have listed entrepreneur skills as part of their curriculum. Also, more than 40% of students want computer literacy in the form of video editing, coding, web designing, and digital marketing. Some female students think yoga and self defence will be necessary skills, which should be taught in educational institutes. Other students also opt for travel & tourism and music, painting, and sports skills should be part of the curriculum. Female respondents who listed self defence skills as part of the curriculum are the underlying findings of this study. Due to the increased violence against women, female respondents stressed the need for necessary self-defense skills to protect

themselves in any condition. Students listed various creative and employable skills, showing that they want a curriculum that is beyond conventional learning and focuses more on skill enhancement and career planning.

### **Conclusion and Recommendations**

This paper is one such attempt to record the aspirations of students towards various courses in the undergraduate programme, as per the recommendation of NEP–2020. The results of this study have shown that the provision of a wide variety of courses in the undergraduate programme is a need

of the moment. Students have given nod to most of the proposals of this policy, which aims to revamp and revise many aspects of education structure, such as skill enhancement courses, generic elective courses, multilingual courses, flexible courses, and the use of technology in institutes, etc. The result revealed that students are willing to go beyond traditional learning to gain necessary employable skills such as entrepreneurship, advanced computer skills such as programming languages (Java, C++, Python, etc.), ethical hacking and web designing, financial literacy such as financial management, budgeting, investing and awareness about stock markets, foreign languages, internship/ apprenticeship and placement opportunities. The result has shown that students are rarely satisfied with current learning methods, co-curricular activities, teachers' experience with technologies, skill enhancement programs, and placement drive in educational institutes.

This paper has also found that students from different backgrounds have different levels of expectations towards educational institutes; especially the first generational learners have emphasised the use of regional languages in educational institutes. Students stressed the need to use technology in educational institutes to make pace with the current global academic system, but they believed first we need to revolutionise our digital infrastructure to do so. Students believed that there should be courses on awareness of sex education & Sexually Transmitted Diseases, sports, and physical education, which enables core life skills in students, such as teamwork, cooperation, and resilience. Female students stressed the need for necessary self-defense skills in their courses, to protect themselves against prevalent violence against women in the workplace, in public places,

and even in homes. According to the students, the transitional change in educational institutes is a requisite demand in current circumstances. The use of AI, big data, and machine learning is significantly increasing in the new world, and to make pace with it, we should construct a favorable environment for students to adapt these skills.

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## National Education Policy—2020 and Roadmap for Social Inclusivity

Bhumika Rathore\* and Meera Mathur\*\*

National Education Policy-2020 has drawn much attention to equality and inclusivity in education by addressing the aim to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030. It has also provided a future roadmap to barrier-free access to education by all the communities, despite having diverse languages by providing education in regional languages, multiple entry and exit options so there will not be a time limit bar, inclusion of disabled and minorities, etc. The objective of this study is to provide all the points which inculcate equality and inclusivity in education. Various Government reports and critics reports by scholar academicians and studies have been included. This study ends with predicting a future for inclusive education and conclusive remarks.

NEP-2020 has opened its heart for more and more social inclusion and providing education to all the diverse groups of India. In India, there is no need to make an effort to have diversity. India itself is the most diverse country in the world. But it is said that inclusion is a state of mind. It becomes essential to make diverse people feel included at all levels; be it in an education system, an organizational system, or a political system.

According to the Minister of Maharashtra State for Education Sanjay Dhotre "National Education Policy (NEP) 2020, envisages equitable and inclusive education for all, with special focus on children and youth, especially girls, from socially and economically disadvantaged groups who are more at risk of being left behind".

There are five pillars of NEP-2020 which strengthen the quality and equity education in India e.g. accessibility, equity, quality, affordability, and accountability.

### Need and Importance of Equitable and Inclusive Education

According to (UNICEF, 2021) inclusive education is the most significant way to give access to all children a barrier-free education to learn and develop the skills they need to thrive. There are 240 million children are struggling with some physical or mental disabilities. They need to realize their full potential like a common child.

A survey report conducted by IIM Ahmedabad, BCG (Boston Consulting Group), and Pride circle foundation of 1700 college students across India indicated that equitable and inclusive education can provide a better representation of LGBTQs in higher education (Education World, 2021). By providing a fair and inclusive educational environment students from these communities can develop a sense of belongingness and safety on college campuses. NEP-2020 has included almost all the aspects of inclusivity (gender inclusion, community inclusion, inclusion of regional languages, inclusion of minorities, disability inclusion, new pedagogical system, inclusion of new skill courses, inclusive universities, and inclusion in ranking in higher education) which are discussed here.

### Gender Inclusion

NEP has addressed all the issues which cause Gender inequality like disparity, inequality in opportunities to have higher education, marginalization, vulnerability, and inability to access education. Though there is outstanding progress in girls' education in the country and there are programs such as "Beti Bachao Beti Padhao", "Sukanya and Balika Samridhi Yojana" run by the Government, still there is a lot to be done for girls' education. NEP has put all the efforts into bringing gender sensitivity an integral part of the curriculum and gender inclusion covers widely socio-economically disadvantaged groups and also the trans genders (Anuja, 2020). The Government has also initiated the "Gender Inclusion Fund" to support deprived girl children in education.

### **Community Inclusion**

As the major points of inclusion, NEP indicates

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there is a wide range of inclusivity in education this time e.g. inclusion of minorities, girls, youth, skill courses, pedagogical courses, the inclusion of disability, local and regional languages, etc. This will minimize the exclusion on every basis and will provide sensitivity for diversity among educationalists and the children who will get to know more about diversity and inclusion. It fosters community inclusion at all levels.

### Inclusion of Regional Languages

NEP-2020 has provided a roadmap to linguistic minorities as they can get access to education in their mother tongues and regional languages. NEP has taken a significant step by providing the medium of instruction in home languages and mother tongue at least till 5<sup>th</sup> grade. It will help the children who only know the regional language can get access to primary education.

The policy also suggests the hiring of outstanding local artists, writers, crafts persons, and other experts as master instructors; accurate inclusion of traditional Indian knowledge including tribal and other local knowledge throughout the curriculum,

across humanities, sciences, arts, crafts, and sports, etc. Strong departments and programmes in Indian languages, comparative literature, creative writing, arts, music, philosophy, etc. will be launched and developed across the country, and degrees including 4-year B.Ed. dual degrees will be developed in these subjects (The Hindustan Times, 2022).

### **Inclusion of Minorities**

Everything which is inculcated in NEP-2020 is a paradigm shift in Indian education. This is a pathbreaking policy that will initiate minority schools and colleges, though the Government has been providing scholarships to the minorities' communities for a very long time to uphold their level and to make an educated inclusive society. There will be an establishment of "Socio-economic deprived groups (SEDGs)".

### **Disability Inclusion**

By considering the fact that disabled people are not different from the integral part of the society, the final NEP policy has recommended several disability organizations.

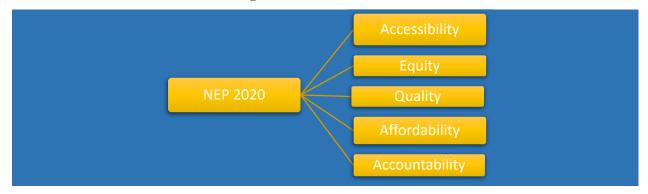
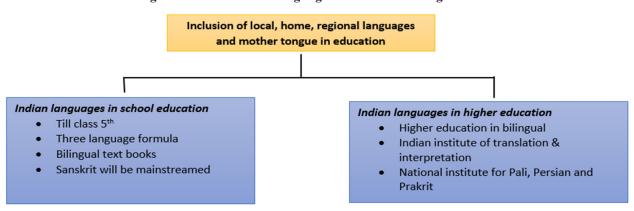


Figure 1: NEP-2020 and its Pillars

Figure 2: Inclusion of Languages in School and Higher Education



NEP-2020 has resolved some issues of disability for which RTE (Right to education) Act, and RPWD (Right of person with disabilities) Act have no clear answer. This is a social inclusion towards a charitable model of social isolation. The above flow chart is a summary of how disabled children will get barrier-free access to education. There will be school choices for these children where they can opt for the nearest or neighborhood school. There will be many special schools to fulfill the educational environmental requirement and there will be home-based schools. There is also an emphasis to include every type of disability e.g. Cognitive (autism), intellectual or physical (Divyang) children (Sarkar, 2020).

### New Pedagogical System Inclusion

The Government has decided to divide the Pedagogical system to provide early childcare education to every underprivileged child. As an inclusive education, this step will help every child in society to get easy access to primary education. In view of (Anuja, 2020) new pedagogical and curriculum structure of school education has been developed with flexible, multi-level, playbased, activity-based, and inquiry-based learning for all.

### Inclusion of Skill Courses and Graduation Research

To make youth self-reliant NEP has introduced some life skill courses by including contemporary subjects, vocational courses, and extra curriculum activities. The Government will support to the establishment of "Bal Bhavan" to inculcate artrelated skills, career-related and games-related activities.

#### Inclusive Universities

It is predicted that enrolments in universities will increase because of greater geographical mobility, demand for new skills, OBC reservations, growing aspirations, etc (Trivedi, 2018). It will provide equal learning opportunities to all the students regardless of their community, language, or background.

### Inclusivity in the Ranking of The Universities

The National Institutional ranking framework (NIRF) has 5 parameters to give ranking to the universities out of which one parameter includes outreach and inclusivity (OI). OI has again different parameters that inculcate a definite percentage of women, percentage of students from other states, economically and socially challenged students, and universities that provide facilities to physically challenged students. Apart from OI, there are

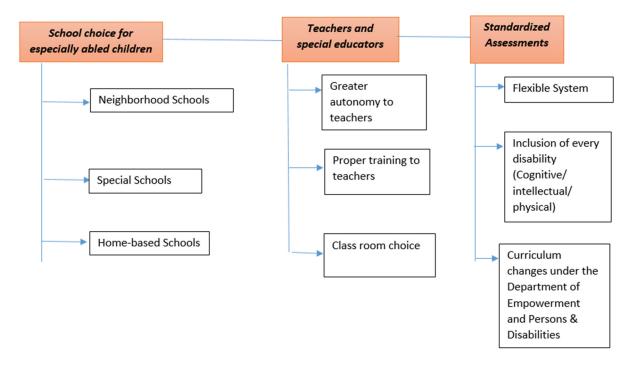
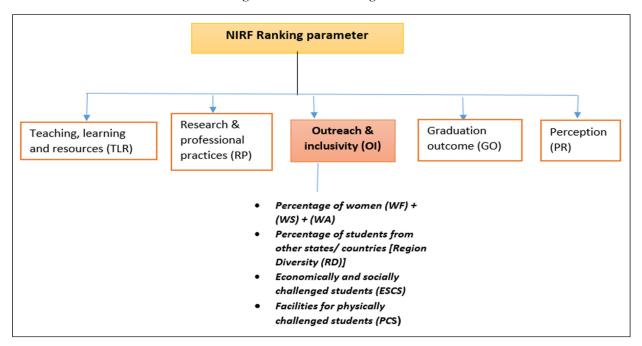


Figure 3: Disability Inclusion

Figure 4: NIRF Ranking Parameter



different criteria e.g. TLR (teaching and learning resources), RP (research professional practices), GO (graduation outcome), and PR (perception) (NIRF, 2021).

### **Future Roadmap**

After 34 years of last education policy; NEP-2020 has ushered a remarkable step for quality, equal, inclusive and accountable education. To implement it in a smooth way would require active participation from all levels. NEP-2020 is liberal in its own way by providing multiple exit options, choice in diverse subjects at the same time, and by the inclusion of

regional languages in school and higher education. The emphasis is on gaining knowledge and not running after the degrees. It will definitely foster innovative thoughtprocesses, research-oriented education, market skills, etc. There will be an establishment of quality universities and colleges by introducing a new and forward-looking vision for India's higher education. There will be continuous professional development (CPD), career management and progression (CMP), and professional standards for teachers.

UGC has also introduced UNESCO's global citizenship education (GCE) framework to enable

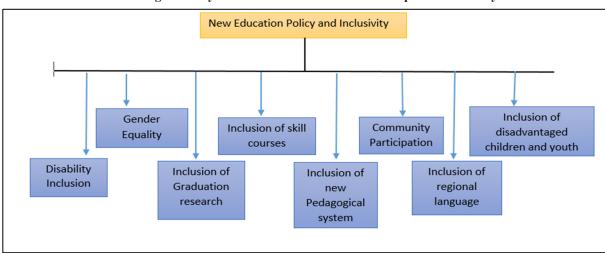


Figure 5: Synthesis of NEP-2020 as a Concept of Inclusivity

the learners to go global and to make more secure, inclusive, tolerant, sustainable, and peaceful societies (News 18, 2021).

### Conclusion

"Education is the single greatest tool for achieving social justice and equality. Inclusive and equitable education - while indeed an essential goal in its own right - is also critical to achieving an inclusive and equitable society in which every citizen has the opportunity to dream, thrive, and contribute to the nation" (NEP 2020).

It is indeed an equal and inclusive system for all where every community is included, there is an inclusion of disability, gender inclusion, the inclusion of an unprivileged and deprived group of society, regional languages, etc.

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## Cyber Safety and Security: Contemporary Societal Issues and Concerns

Aerum Khan\*

The 21st-century literacy skills conventionally include reading, writing, listening, and speaking. Nowadays these literacy skills are redefined in view of broadening perspectives. Various other aspects are now considered to be essentially added in the context of literacy, one of those includes cyber or digital literacy and digital wisdom along with media literacy, information literacy, financial literacy, arts and creativity literacy, multicultural literacy, and many more. While surviving in the digital world keeping us safe and secure from various cybercrimes is an important factor.

### **Digital Literacy**

In the present time technology has taken a humongous place in our daily lives and has initiated a new form of literacy. This form of literacy involves technology usage in an effective way for various purposes and gives us a whole new way to communicate and discover information. In order to be digitally literate, there is a broad array of digital skills which are desired for acquisition, some of them include: researching on the internet, blogging, using search engines, using a map and address searches, and reading websites accessing videos, and audios or podcasts. Using e-mail, text messages, and chat services, using social media sites, evaluating web resources, and so on.

The use of technology also means that we must make sure the correctness of the information, we have to evaluate the content which we see the most. The internet is a place where anyone can post anything, so it becomes very important to segregate the right information. Digital literacy also covers the domain of being able to evaluate the content which we see or use and decide the trustworthiness and secure nature of the source.

### **Digital Wisdom**

The technological development in the area of

digital awareness is making citizens wiser and more vigilant. This digital wisdom is much needed and has immediate value. In today's world, it is difficult to live without a considerable amount of digital wisdom. In day-to-day life activities, we need a lot of technology orientation everywhere. We communicate very often through mobile phones and other devices and connect with each other through social media platforms like WhatsApp, Telegram, Facebook, Twitter, Instagram, LinkedIn, and many more. Now, we can track the geographical routes more accurately than earlier through Global Positioning System (GPS) services. Making decisions about traveling and other such issues have gone more sophisticated through Internet-based information. Gone are the days when people asked their friends or relatives about the weather and climate of a place before planning a visit, now the weather forecast gives almost accurate information for this purpose. With the use of various web and mobile applications now information is at our fingertips. All these things combine together to make us comfortable.

### Cyber Safety and Privacy Measures for All

This is a cruel fact that the online world is full of threats to our safety and security. With the growing online influence, it is a dire need for us to be secure in the online environment through cyber safety and security. This is a joint responsibility of all the members of the society to make themselves and the children safe from these threats. Maintaining the basic levels of cyber safety helps us to avoid any types of risks and related consequences. It is very important for parents to keep their children safe from cybercrimes. Some important guidelines for all the stakeholders of education towards empowering them to be cyber safe are discussed here.

### Guidelines for School Heads and Teachers

- All the stakeholders may be oriented on Do's and Don'ts of cyber safety and security.
- Students must be made aware of cyber bullying and how to avoid getting bullied. In addition, the students should refrain from cyberbullying others.

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 Sharing of personal information, textual communications, videos, or images of students on social media for any purpose including advocacy and showcasing of work must be avoided.

### **Guidelines for Parents**

- Parents can make sure that the devices like the TV/ Laptops/ PCs etc. are kept in the area where they can monitor the activities and overall usage of the digital devices, the usage time can be restricted to healthy limits.
- Digital rules can be developed and followed in consultation with the children. In these rules the things which must be included can be the duration of exposure to the digital devices, following internet safety rules, surfing the web or playing an internet-based video game, and not using any gadget in a specific area of the home used for spending time with the family, etc.
- Parents should talk to their children regularly so that they can understand the importance of responsible usage of the internet in their daily life activities.
- Parents should regularly discuss the netiquettes with their children in order to make them sensitive. These things include not posting hurtful messages about anyone, and avoiding online posting of photos, videos, or information about anybody without permission of the individual.
- Parents must enquire and discuss with children if they are spending a lot of time on the Internet or digital devices while instant messaging, texting or gaming, etc.
- The parental controls can be exercised on devices by enabling child locks, safe search in browsing, and checking the history of web searches at regular intervals.
- The parents can go through the materials on cyber safety and security launched by government agencies like CBSE, NCERT, etc. periodically.

### **Guidelines for Children**

- The children must not share any personal information on the Internet without their parent's permission.
- The children must be conscious of cyberbullying and refrain from bullying others.

• Children should follow netiquettes and display responsible behaviours while being online.

### The Experiment Related to Cyber Safety

This part of the paper is based on an experiment done by the Researcher during Co-curricular Activities, which is the compulsory part of all the undergraduate courses of Teacher education running in my department. This experiment was done with the students who were in my house, under house activities. The Teacher who is the house in charge has to lead the students in their activities. For this purpose, there are 2 consecutive classes every week. The students in every house come from the first year of D. El. Ed, B Ed General, B Ed (Nursery), and B Ed (Special) courses. There were 48 students in this class. Before starting the class, the students were provided Cyber Safety and Security Handbook developed by CBSE, through their WhatsApp group, to give them a starting point. When the class began, they were asked to make a group discussion on their own experiences related to the Internet or Cyber world. All the students got very excited and started sharing their experiences. throughout the class, the students were provided feedback on their points. The Student Representative of the house was asked to create a Google Document, which should be shared with all the students of the House. The purpose was to get the narratives of the students in written form, there were students who even shared a few photographs related to the cyber issue faced by them. This experiment was repeated for the next consecutive week

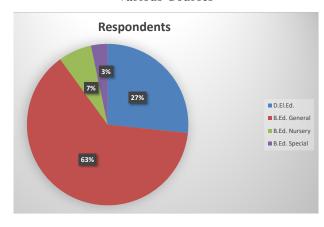
At the end of this second-week classes, the Researcher went through the entire set of narratives and found that out of 48 students, 30 gave their proper written responses selected for analysis. The rest of the responses were discarded due to their irrelevance to the topic. Among these 30 respondents, 8 were from D.El.Ed., 19 from B.Ed. General, 2 from B.Ed. Nursery and 1 from B.Ed. Special courses. After data cleaning, the researcher analyzed the narratives of the students.

### Analysis of the Responses on the basis of Experiences Narrated by the Respondents

### Student 1 D.El.Ed.

Internet is no doubt one of the best resources available to us. But it's also extremely dangerous if we are not aware of it properly, we the young

Figure 1: Percentages of Respondents from Various Courses



ones can be the victims. Nowadays, everyone goes through many scams and fraud messages like lucky draws, in which we have to spin wheels or scratch a picture to win some cash prizes. They send many offers, especially at the time of festivals to trap and cheat people. Many other scams happen with young ones in which they lose their private data.

Another thing is cyberbullying. Posting public pictures, social statuses or personal messages are forms of bullying. Effects of cyberbullying are:

- 1) Feeling inferiority and lack of confidence
- 2) Affecting performance and attendance of children in school
- 3) Depression
- 4) Suicidal thoughts

Kids are also bullied almost everywhere like in chat rooms, video games, blogs, emails, and even over cell phones, etc. We have to be aware and alert to all frauds, scams, bullying, etc. We should not take part in such contests and if we unknowingly become a part of this fraud, then immediately inform the police.

### Student 2, (B.Ed. General)

This Message with a website link is circulating on social media claiming that the Government is offering free laptops for youth and to click on the provided link to book it. #PIBFactCheck: The circulated link is a Spoof website to trick users perpetrated in the name of Government.

In the past, this message has been rejected by many media organizations like BBC Hindi, Dainik Bhaskar, Aaj Tak, etc. Two such websites, solor-panel. sarkaari-yojana.in and modi-laptop.wish-karo-yar.tk have also been proved false in these media reports. We should always avoid these phishing schemes.

### Student 3, (B.Ed. General)

Life is changing and everything in the world has become connected thanks to this new invention 'The giant Internet'. The whole world is in our hand now with just few clicks we can easily get whatever we need. But this easy connection has made our life so much open and prone to phishing and cyber-attacks and many more.

### Student 4, (B.Ed Genral)

Rs.34,300 Crore US lottery Now also Available in India.
Buy 2 ticket Just of Rs.160:vb.pcb3.in/dKp9V2mXU

I received this message, it is a form of a lottery scam, which begins with an unexpected email notification, phone call, or mail informing that "You have won!" a large sum of money in a lottery.

If you received an unsolicited SMS do not open any attachments or files that came with it, as they could contain malware or a virus.

### Student 5, (B.Ed. General)

While talking about an individual's privacy, there is one very important thing that we tend to overlook and don't give much importance to and that is data privacy. This is something that is being exploited daily by e-commerce, social media sites, and many other online service providers and we have a very casual approach towards it and we don't pay heed to that whereas we make a cry and hue when the talk is about *Right To Privacy*.

One of the best examples which come forward for this issue is that when we search for a product in any marketplace, next we open a social media site, there's an advertisement already present there asking us to buy that same thing which clears out the fog behind the idea of exploitation of privacy.

### Student 6, (B.Ed. Special)

There are a large number of evolving cyber threats putting individuals, their organisations, and their personal privacy at risk. Endless scams and frauds can, and do, financially impact the end users and their personal life. Much of this owes not only to the overly connected environment we live in but also to the lack of awareness of cyber threats and attacks. Thus, it becomes absolutely essential to raise cybersecurity awareness amongst people from all walks of life.

### Student 7, B.Ed. General

Cyber Security has become a new threat in the current era. We all are aware that systems are being updated day by day. Recently Facebook has changed its algorithm of posts which are suggesting the post according to the likes of the users. Earlier, it was working on community circulation which gave the user a wider view. But new algorithms make the views narrow.

It seems not a big deal kind of issue, but for children, it may be harmful. Children are one step away from apps nowadays. It's our responsibility to give them a broad view of society to keep them aware of these kinds of things. I would like to suggest a documentary "SOCIAL DILEMMA" based on this new threat for better understanding.

### Student 8, (B.Ed. Nursery)

With the emergence of new advanced technology as much as it has benefited us and brought us easy and convenient life it has as many dark sides. Cybercrime has become so common that each of us might have already experienced it one way or another, therefore it is very important to be aware of the

cyber scams, frauds, etc that's been happening around us and be knowledgeable. Cybercrimes can be in the form of cyberstalking, harassment, bullying, child sexual exploitation, money fraud, etc. Following are a few ways to protect ourselves against the range of cybercrimes:

 We can use strong passwords and keep all our software updated Mumbai: Mumbai police's cyber crime department on Monday urged people to not fall into the trap of frauds in the guise of "lucky draws" ahead of Diwali.

Fraudsters are sending different offers with titles like 'online shopping lucky draw contest' as well as scratch cards and letters in the name of reputed e-commerce firms to people claiming they have won prizes ranging from ₹ 1 lakh to ₹ 10 lakh, an official said.

"They then ask people to deposit an amount in order to claim the prize. However, the process is aimed at cheating people. No one should take part in such contests and should alert police instead," he added.

- 2) Talking to children about the internet and social media
- 3) Protect ourselves against identity theft

### Student 9, (B.Ed. general)

I received messages asking to do certain actions for winning prizes, I recognised the motive of these scammers and not accepted any of their demands.





### Student 10, (B.Ed. General)

We can adopt some habits to be Cyber-Smart, like Thinking again before clicking on links or opening attachments. Don't share your private information before verifying. Protect your passwords by making them long, strong, and unique and using multi-factor authentication (MFA). Use different passwords for different accounts. Don't let apps and websites remember your passwords. Keep your devices, browsers, and apps up to date. Keep back up critical files. Delete sensitive information after use. Report if you find anything suspicious.

### Student 11, (D.El.Ed.)

Sites on the internet have access to all our data, which includes our address, device information, real-time location, internet speed, etc, this doesn't mean that our data is in the wrong hands though.

- 1. Make sure to always check the URL of a site that has been forwarded to you.
- 2. Dark web is no mystery on its own, it's a place to be anonymous and is quite beneficial for many tasks.
- 3. While using apps like Paytm, not sharing the OTP will prevent 90% of frauds. Always read the payment request carefully. Never do any unplanned payments.
- 4. Always use an up-to-date browser and phone

### Student 12, D.El.Ed.

In the present time, everyone gets benefitted from advanced cyber defense programs. At an individual level, a cyberattack can upshoot in everything from identity theft, to extortion attempts, to the loss of important data like family photos. Securing these is essential for us. Educating the public on the significance of cybersecurity, and build up open-source tools can be the respite.

### Student 13, D.El.Ed.

Cyber security is not only limited to individuals it's a serious concern about national security Because nowadays nations are using it as a weapon of war. Recently in January 2022, Russians hacked the Ukrainian home ministry of all data. Israel attacked Iran's revolutionary guard and disturbed the nuclear program. North Korea's cyber cell hack Bangladesh's national bank site and stole millions of dollars

### Student 14, B.Ed. (Gen)

Talked about the meaning of Cyber security, the Importance of Cyber security, cybercrimes like hacking, child pornography, piracy of software, credit card fraud, phishing, etc.

### Student 15, (B.Ed. General)

Cybercrime can harm someone's reputation, mental harm, etc. We share a lot of information on social media like pictures, live locations, personal information, phone number, address, qualification, jobs, etc. This information could be used by attackers if appropriate privacy settings are not enabled. Nowadays there are so many games, fun websites, and great ways to keep in touch with strangers. When children communicate online with strangers in games, they should never share personal information.

### बधाई हो,अपने रम्मी खाते में 2000 बोनस प्राप्त करें <u>r04.in/s/XHj0kK2RWL</u>

Some kids may experience bullying/harassment. This may happen if their information is shared on social media or messaging apps.

### Student 16, (B.Ed General)

There are many dangers in installing third-party software without having proper control over them.

### Student 17, B.Ed. general

Cyber safety tips. Stay alert and don't:

- 1. Reply to suspicious messages or calls.
- 2. Share your bank card details or personal financial information.

- 3. Share News that doesn't come from official sources.
- 4. Make donations to charities without double checking their authenticity.
- 5. Open links and attachments in unsolicited listed emails and text messages.
- 6. Send money upfront to someone you don't know.

### Student 18, D.El.Ed.

How to be aware for cyber security

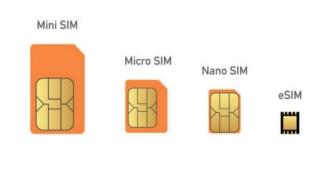
- 1. Use Two-Factor or Multi-Factor Authentication.
- 2. Learn about Phishing Scams be very suspicious of emails, phone calls.
- 3. Don't Use Public Wi-Fi
- 4. Use incognito or private tabs
- 5. A Little information share on social media

### Student 19, D.El.Ed.

As we all know cybersecurity techniques are designed to protect systems, network, programmes, devices, and data from cyberattacks. In this context, I would like to draw your attention to cybercrime which is e-sim fraud.

Basically, an e-sim is a \*virtual sim\*. Regarding e-sim fraud, I remember that this incident happened in Jamtara district (Jharkhand). The report said the fraud is conducted by calling customers to obtain their OTP and email address, and then converting their sim into an e-SIM.





The police said the accused confessed to controlling the victim's bank account through the e-SIM. The funds were transferred into mobile wallets on services on phone Pay, Paytm, and other payments bank.

What we can do for the prevention from this. We should not share our banking detail or login detail password, PIN, OTPs with anyone.

### Student 20, (B.Ed. General)

There are different types of cyber security threats, some of the most common types are: Viruses, Identity Theft, Password Attacks, Spyware and Keyloggers, Adware, Trojans, Ransomware, Phishing Emails, etc.

### Student 21, (D.El.Ed)

I received this MSG sometime back in which it has been told that my mobile number is considered



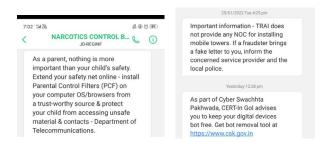
very lucky. Because of this I will get lucky draw amount for this I have to call on the given number that too only WhatsApp and this amount is very big which is given in it.

### Student 22, (B.Ed. General)

Decorating your home is definitely more fun than setting up security measures. But to protect your home from burglars is important. Home security should be the top priority. Let's ponder a bit about Cyber Security. What about the personal data you share online? So, securing it should be your top priority.

I am sharing a few messages from NCB regarding Cyber Security: As part of Cyber Swachhta Pakhwada, CERT-In GoI advises you to keep your digital devices bot free. Get bot removal tool at https://www.csk.gov.in

As a parent, nothing is more important than your child's safety. Extend your safety net online - install Parental Control Filters (PCF) on your computer OS/browsers from a trustworthy source & protect your child from accessing unsafe material & contacts - Department of Tele-communications.



### Student 23, (B.Ed. General)

We are living in the modern era, which is incomplete without the use of internet. We need internet on every next step. One side internet is useful, on the flip side it has some drawback also. Master with internet knowledge can misuse it and can affect general people. So, any crime involves internet network is called cybercrime. It has many types:

- 1. Phishing
- 2. Cyberstalking
- 3. Intellectual property theft

There are many more types of cybercrime such as Identity theft, Security hacking, Malware, botnet etc.

### Student 24, (D.El.Ed)

We do many activities by online mode like payment, chat, ticket book, buy something, learning, teaching etc.

So don't ignore the cybersafety concerns. Nowadays many hackers are hacking people's phones and they steal people's money. Only they send one link and when any person clicks on that link, that time he/she can lose his/her money.

### Student 25, B.Ed. (general)

In these challenging times our work is almost done online. In such situations the perpetrator (a person who carries out a harmful, illegal, immoral act) gets an opportunity to breach your privacy through different methods. In today's time mostly everyone is dependent on the internet, privacy breach leads to collection of data to the hijacker, the data that is exposed to them includes real names, phone numbers, emails, birthdates and home addresses as well as your photos and videos, etc. Later that hijacker can use it for ransom purposes.

To save yourself from such frauds: Download authorized applications on your mobile and computers. Avoid tapping on unnecessary links that claim to provide good deals. Don't share your phone number with anyone who is not authorized. Be mindful enough to not share your bank account details with anyone.

### Student 26, B.Ed. general

Cyber safety is very important for us. Never click on suspicious links that are sent by strangers on social media. It is important to keep the devices being used like mobile, tablets or laptop close to the person or in a safe place.

### Student 27, B.Ed. General

Current Scenario of Cyber Security in India is very important to discuss. We got our IT Act in the year 2000 which was amended and brought into existence again in the year 2008. National Cyber Security Policy was introduced in India in the year 2013. However, the policy turned out to be very weak. A 50% rise in cybercrimes in the year 2013 was seen. Till date, numerous cyber breaches have taken place in India.

### Student 28, B.Ed. Nursery

Cybercrime is a dangerous form of attack a

company or an individual may face. In many cases cyberattack has brought massive loss to the company and individuals. Cybercrime involves an attack on computers and digital devices. The most common cyber threats include: phishing, malicious software, hacking and Distributed Denial Of Service (DDOS) attacks on websites.

### Student 29, (B.Ed. General)

Nowadays cyber bullying, cyber hacking, online job fraud has become common. SMS related to the job, which gives you a work from home opportunity are very common., one such incident happened to my friend she got trapped by those fraud websites they offered her to sell online products and get commission for completing orders, in few stages she had to recharging coupons with her own money, she lost 16 thousand within in a few minutes. In fact, there are some fake websites in the name of reputed companies like Amazon, Flipkart, Snapdeal etc. They will trick and loot your money. We can file complaint against such online fraud, gather all data related to this fraud company website, messages, and file a complaint in nearby police station or online.

### Student 30, B.Ed. general

Cyberterrorism focuses upon the use of the Internet by criminals to affect a nation's economic and technological infrastructure.

### **Result and Discussion**

On the basis of the analysis of the responses received from various respondents it was found that the students of various courses are more or less equally concerned about the issues related to Cyber world. The D.El.Ed. first year students talked about frauds, bullying, device security, using safe URLs, Dark web, Not sharing of OTPs in order to prevent from frauds, cyber theft, national and international concerns of cyber security, cyberattacks, personal and official data misuse, cybercrimes, cyber safety tips, money frauds and cyber security. Most of them shared their own experiences in terms of the issues. It was reflected that there is a basic level of awareness is inculcated in them towards the cyber issues.

The number of respondents from B.Ed. General course were the highest. They discussed mostly on frauds, fake messages/ SMS scams, phone scams, phone hijacking false media reports, job related frauds, lottery scams, software related danger, third

party program use, device security, privacy rights, data privacy. Not sharing of OTPs in order to prevent from frauds, cyber theft, cyber security, cyberattacks, personal and official data misuse, cybercrimes, cyber safety tips, money frauds and cyber security, awareness drives, secure use of social media, IT Act, mental stress, harm to reputation, cyber bullying, hacking, child pornography, cyber terrorism, identity thefts, ATM Frauds, trafficking, e-commerce frauds, etc. Most of them shared their own experiences in terms of the issues. It was reflected that there is a better awareness level of cyber safety and security issues.

There were 2 respondents from B.Ed. Nursery and one from B.Ed. Special courses they talked about cybercrimes, cyber stalking, bullying, harassment, exploitation, money frauds, protective measures, cyberthreats, cyberattacks, etc. These responses were reflecting the level of awareness of these respondents in terms of keeping them safe in the world which is inseparable from the Internet.

### Conclusion

This experiment of making a group discussion on a topic like cyber safety and security was conceived by the respondents in a highly motivated way, may be the cause being their recent exposure and influence with the online education. The positives and negatives of the online education are somehow the best teacher during the pandemic time. Different experiences of their own and their closed one's have taught them many lessons of life to deal with various nuances of cyber world. The increased awareness related towards frauds, fake messages/ SMS scams, phone scams, phone hijacking, false media reports, job related frauds, lottery scams, software related danger, third party program use, device security, privacy rights, data privacy. Not sharing of OTPs to prevent from frauds, cyber theft, cybersecurity, cyberattacks, personal and official data misuse, cybercrimes, cyber safety tips,

money frauds and cyber security, awareness drives, secure use of social media, IT Act, mental stress, harm to reputation, cyber bullying, hacking, child pornography, cyberterrorism, identity thefts, ATM Frauds, trafficking, e-commerce frauds, etc. The advancements in terms of their knowledge are the result of their extreme exposure. Despite of all this we should always keep in mind that the criminals are one step ahead of us so keeping ourselves updated and vigilant is the only way which can save us in present world.

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### Career Making is Doing What We Love for a Living

Anish Shah, Managing Director and CEO, Mahindra & Mahindra Ltd. delivered the Convocation Address at the Annual Convocation Ceremony of the Bharatiya Vidya Bhavan's S P Jain Institute of Management and Research, Mumbai on May 14, 2022. He said, "You faced various challenges, battled adversities, and adapted to the circumstances. This has made you stronger. You graduate today with the power of this degree and with your aspirations. Each of you has to find your own balance. Your career is not a race or a competition, life is much more than that. Make your choices wisely." Excerpts

Today is your day. All of you have accomplished a lot already. Your academic record or experiences or unique skills enabled you to gain admission to SPJIMR, one of the most prestigious institutions in the country. You are a special batch as the majority of your 2 years were during the pandemic. You faced various challenges, battled adversities and adapted to the circumstances. This has made you stronger. You graduate today with the power of this degree and with your aspirations.

As you embark the next phase of your journey, my mind wanders back to 30 years ago... the time I completed my MBA, the dreams and aspirations and the lessons I learned from my journey over these past 30 years.

### Let's Start with Dreams

"You are never given a wish without also being given the power to make it true ... you may have to work for it, however".

These are Richard Bach's words, from his book "Illusions", they have stayed with me all through this journey, I will admit it took many years for me to fully understand the meaning.

To make dreams possible, you have to start with a dream. My dream started taking shape when I was in 8th grade. I was visiting my cousin and her fiancé at IIMA. I fell in love with the campus and knew that I had to go there. There was a special bond, as my parents met on that campus, my father was in the 1st batch that graduated from IIMA, my mother was in the second batch (one of the 2 women in her class). That was only the first step, the dream was to be the India CEO for a multinational company before the age of 40. It was influenced by my father's career. It led me to seek experience in the US, eventually to return as CEO of GE Capital India at the age of 39.

It was a wish ... I realized over time that I had the power to make it come true ... you have the power to

make your dreams possible. You may have to work for it, however ...

### **Innovation**

As I think about the work I had to put in to make my dream possible, it could be summed up in one word ... Innovation.

What is innovation ... for me, it is the willingness to learn, the determination to keep trying and the focus on tangible outcomes ... at both the personal and professional level.

Innovation is about the willingness to learn ... I'm here today because of everyone who has coached and guided me.

My parents, who kept pushing me to do better. My wife, who always reminds me that I should understand people's feelings and build relationships. My sons, who taught me that to gain control, one had to give up control. A special person, Anand Mahindra, who has taught me how to bring out the best in people (I'm still learning). And, my bosses over the years, who often told me "you're really bad at this".

One instance was very early in my career, in my first year at Bain. My manager and I were driving back to the airport after a client meeting and he said ... "Anish, you add no value in meetings ... you know a lot, but you don't talk much". He then gave me a very good suggestion, to use the whiteboard as a tool as it enabled me to take charge and structure the discussion. That made such a difference.

There were many such occasions. I was really bad at a lot of things. And, fortunate to have bosses who were direct enough to say it so directly. Their feedback was brutal, but I welcomed it. The willingness to learn has made me who I am today.

Innovation is about determination. During my Ph.D., I had developed a stock exchange game, where students played the role of CEOs and stock market traders. I had to create a computer network that could simulate a stock market in 1994. And, as a B. Com graduate with an MBA, I didn't know much about coding. So I got some computer books, learned coding and spent countless hours in the computer lab ... it didn't work ... I would stay in the lab all night to find the problem ... as I just did not know how to give up. The game was created and used to teach courses in corporate finance. Students got grades based on how well they played the game (I'm sure you'd love that). Many professors at Carnegie Mellon came to see this networked game, including the recently retired President of the university, who took me under his wing. That experience was a defining moment ... it taught me that anything is possible ... if you're crazy enough to keep trying again and again. Determination.

Innovation is about tangible outcomes. At Mahindra, I'm continually amazed by our teams. There is a culture of innovation that stems from our Rise philosophy. It starts with accepting no limits. Our head of Auto Product and Technology wanted to build an SUV that was better than BMW. And, at the Mahindra Research Valley in Chennai, he created the XUV700, a truly amazing vehicle and one that is certainly worth of a comparison with BMW. As I'm biased, will leave you to judge for yourselves whether it is better. I'm any case, we got 50K bookings in 3 hours ... a \$1B in 3 hours ... a global automotive record. Our Real Estate business has recently launched India's first NetZero residential community, which was sold out in 3 days.

It is not just about products and projects. Over the years, at the start of every role, I would think about what I should leave behind.

While moving out of any role, if you can clearly articulate the value you've created, you've achieved something. If others can articulate the value you've created, the value is real. And, if 3 years later, others remember that "this is what you did in that role you were in", then you will build a strong career. It is about tangible outcomes.

But innovation alone was not enough. There is another factor that played a key role in my journey. It is called ... *helping others succeed*.

### **Helping others Succeed**

Early in my career, I was the Sales & Marketing head for a dot-com within GE. For a number of reasons, we recommended to the CEO of the parent entity that the business should be shut down. That evening I called one of the senior leaders of the parent entity. I

had met him only once, at a dinner with 20 customers. His response was just amazing, he said "Anish, we will create a role for you, I'm not sure what that is, but you're not going anywhere else". I expressed surprised as he barely knew me. He said "I know you well ... you've helped many of your peers and they have been talking about you"

Helping others succeed is counter-intuitive if you think of career as competition ... and will result in some painful situations where others take credit for what you did.

I've found this to be very powerful across various roles. There was one role where I did not follow this approach and it did not go well, despite some tangible outcomes. And, many others where helping others succeed built trust and a high level of collaboration that actually helped me succeed.

### Conclusion

In conclusion, the one message I'll leave with you is "follow your heart". All my key career decisions were based on following my heart. I found that the most important thing was to love my work ... the people around me, the culture, the environment.

As I reflect on my journey, it started with the passion to be someone, to achieve something meaningful (and I'm sure all of you have that same passion). It has been a lot of hard work and a lot of fun ... there were many 100 hour weeks and all-nighters. We moved to a new city on average every 2-3 years. And, yes, I feel good about what I've achieved.

What gives me a lot more satisfaction, though, is a choice I made many years ago. The choice to spend weekends with family ... my wife and our 2 boys. Today, our boys are now young men, and I feel so glad that I've spent time with them while they were growing up. On most weekdays, they would not see me, but weekends were theirs. That was the most important choice I've made in my life and my career.

Each of you have to find your own balance. Your career is not a race or a competition, life is much more than that. Make your choices wisely. I wish you the very best in your journey and may Richard Bach's words always stay with you:

"You are never given a wish without also being given the power to make it true ... you may have to work for it, however".

### **CAMPUS NEWS**

### International Seminar on Perspectives on Kerala Economy, Sustainable Development and Public Policy

A two-day International Seminar on 'Perspectives Kerala Economy, Sustainable Development and Public Policy in the Post-Covid Recovery and Resilience' was organized by the Postgraduate Department of Economics, Mahatma Gandhi College, Thiruvananthapuram, Kerala in association with Internal Quality Assurance Cell through google meet, recently. During the inaugural session, there were more than 100 participants including academicians/students from different colleges and universities. Ms Priya L G, Head of the Department delivered the welcome speech and read the profile of the Chief Guest, Dr Sabu Padmadas, Professor of Demography and Global Health at the Department of Demography and Social Statistics and Co-Director of the Centre for Global Health, Population, Poverty and Policy, University of Southampton, United Kingdom.

The Presidential Address was delivered by Dr Ampili M, Principal, M G College, Trivandrum. Dr Sabu Padmadas delivered the inaugural speech and lecture on the topic 'Implications of COVID-19 on Kerala Economy and its Restructuring in the Post Pandemic World'. He explained the dangers of climate change and its impact on human life. He specifically focused on the impact of COVID-19 on the Kerala economy. He also shared his ideas about the need for sustainable development and a blue economy. After the presentation, the speaker handled the questionanswer session and also clarified the doubts of all the participants.

During Technical Session, the welcome speech was delivered by Ms Priya L G, Head of the Department. After that, Ms Gouri presented an introductory speech about the Keynote Speaker of the session, Dr Shaijumon C S, Associate Professor and Head, Department of Humanities, IIST Trivandrum. Dr Shaijumon explained the topic 'Structural Problems of The Expenditure of Government of Kerala'. He discussed features of the Kerala economy, expenditure trends, and policies of the government regarding expenditure. After the discussion, the speaker handled the question-answer session and also clarified the doubts of the participants.

Vote of Thanks for the session was proposed by Dr Binu Kumar B J, Coordinator of the event.

Dr. Lini G R, Faculty, Department of Economics delivered a welcome and introductory speech for the next session. She introduced the keynote speaker of the session, Dr. Lekha Chakraborty, Professor, NIPFP and Member of the Governing Board of Management, International Institute of Management, Munich who delivered her speech on the topic 'Fiscal Strategy for Post-Pandemic Era'. The Resource Person shared her ideas about the fiscal strategy, RNG, etc. Dr. B Anilkumar gave felicitation after the inaugural session on changes in the monetary policy of India, and political economy and also emphasised the postpandemic situation of India. The session was followed by a question-answer session where several questions were raised by the participants. The resource person clarified the doubts of all the participants. The vote of thanks was proposed by Ms Sruthi S, Faculty, Department of Economics, M G College.

The welcome speech for the next session was delivered by Dr Syam Lal G S, Faculty, Department of Economics, M G College, Trivandrum. He introduced the keynote speaker of the session, Dr Anitha V. Professor and Head, Department of Economics, University of Kerala who delivered on the topic 'Environmental Sustainability and Public Policies: A Review of Kerala'. Her presentation mainly discussed climate change, climate resilience and COVID-19, population trends in Kerala, international studies about climate change and vector bone diseases, and ecological-economic model and solutions for climate resilience. She also presented various case studies related to unstable resource management in Kerala. Ms Sruthi S, Faculty, Department of Economics, M G College delivered the vote of thanks for the session.

Ms Lalithambika, Faculty, Department of Economics, M G College delivered the welcome speech on the second day of the event. She introduced the keynote speaker of the session, Dr Manju S Nair Professor, Department of Economics, University of Kerala. The topic handled by the keynote speaker was 'Health and Healthcare Utilization: A Comparison between Pre-COVID and COVID Times'. Dr Jayadev S gave felicitation on the impact of COVID-19 in

Kerala, the Kerala model of health care, the nature of the medical treatment, expenditure differences across the public-private hospitals and mental health of children. Dr Syamlal.G S, Faculty, Department of Economics proposed a vote of thanks for the section. He also highlighted the points raised by the keynote speaker.

Dr Lini G R, Faculty, Department of Economics, M G College, Trivandrum delivered the welcome speech and introductory speech for the keynote speaker of the next session, Dr Krishna Kumar, Professor, Rajeev Gandhi Institute of Development Studies, Trivandrum. The topic discussed in the session was 'Economic Crisis in Kerala: An Overview'. He discussed Kerala's economic crisis, the history of the crisis in Kerala, public debt, unsustainable growth of Kerala, etc. The session was followed by question-answer session where several questions were raised by the participants. The resource person clarified the doubts raised by the participants. The vote of thanks was proposed by Sri Sanoop S, Faculty, Department of Economics, M G College, Trivandrum.

Sri Sanoop S delivered the welcome speech for the paper presentation session. The session was chaired by Dr Priyesh C A, Associate Professor, Department of Economics, University College Trivandrum. There were twelve paper presenters in the session who presented their papers on various themes explaining their perspectives on various elements of the Kerala Economy like 'Unemployment and Higher Education-A Case Study Conducted in Kollam', 'COVID-19 Rethink towards Agriculture in Kerala', 'Prospects of Trade and Tourism in Boosting Kerala's Economy in the Post COVID 19', 'Agri Tourism; Scope and Potentialities in Kerala', 'Impact of COVID-19 on Kerala's Agriculture Sector and Ways Taken for its Recovery', 'Global Economic Change and Sustainability of Kerala Model of Development', 'Sustainable Energy Usage and Consumption Pattern: How Women in Kerala Practice Energy Conservation in Daily Life?', 'Kerala is a Victim of its Own Success- A Conceptual Comparison of Kerala Model and Kerala Riddle During the Pandemic', 'Shadow Pandemic-A Challenge to Women and Children', 'Fiscal Consequences and Contingent Liabilities of National Disasters in Kerala', 'Impact of COVID-19 on Pandemic on Sabarimala Pilgrimage Tourism- A Study of Sabarimala Ward, Ranni-Perinad Panchayat' and 'The Link between Education and Unemployment

in Kerala: Some Observations'. Dr Lini G R proposed the vote of thanks for the session.

The valedictory session started with the welcome address by Sri Sanoop S. The keynote address was delivered by Dr P S Nair, former Professor and Head, Department of Studies, University of Botswana. Dr P S Nair explained the topic 'Demographic Challenges in Kerala'. He discussed current national fertility rates, the norms on controlling the population, and the aftermath of population and controlling laws in world nations. He also discussed various demographic challenges like TFR falling below replacement level and the high number of lifestyle diseases among Keralites. Coordinator, Dr Binu Kumar B J proposed the vote of thanks for the event.

### National Workshop on Statistical Analysis of Data Using 'R'

A ten-day Online National Workshop on 'Statistical Analysis of Data using 'R' for Research, Planning and Development' organized by the A.K. Dasgupta Centre for Planning and Development, Visva-Bharati during September 05-14, 2022. The aim of the event is to familiarize academicians, practitioner, and researchers with the statistical research tools and techniques, with a special focus on the Software 'R'. The event will augment the skill of the participants to use 'R' and enhance the horizon of their research work. The knowledge of modern techniques applied to research is imperative for quality work and the workshop aims to give a comprehensive insight into those and enable researchers and academicians to apply those techniques rightly. The research scholars, faculty members of colleges and universities, and management executives who wish to deepen their understanding of the subject may participate in the event. The faculties and teachers, consultants and administrators engaged in Higher Education Institute, Industry training professionals, Research Scholars, Students, Extension specialists in agriculture, public health and rural development practitioners, and Consultants in the development sector may be benefited. The Course Outlines are:

- Introduction to 'R'.
- Entering and Editing of Data.
- Reading Data, Manipulating Data, Saving of Data
- Variable, Relationships, Visualizations of Data.
   Coding of Data.

- Exploratory Data Analysis: Correlations, Regression.
- Z-test, T-test, Chi-square Test, Inferential Statistics.
- Analyzing Categorical Variables.
- Cluster Analysis, Factor Analysis, Log-linear Models Discriminant Analysis, Logistic Regression, and Other Multivaraite Analysis Techniques.
- Analysis of Data with Repeated Measures.
- ANOVA.

For further details, contact Organising Secretary, A.K. Dasgupta Centre for Planning and Development, Visva-Bharati, Santiniketan-731204 (West Bengal), E-mail: vbplanning46@gmail.com. For updates, log on to: www.visvabharati.ac.in/event

### International Conference on Legal Contours of Victimology

A three-day International Conference on 'Legal Contours of Victimology: Theory and Practice' is being organized by the Centre for Excellence in Criminal Law, ICFAI Law School, ICFAI Foundation for Higher Education, Hyderabad in collaboration with the Indian Society of Victimology during September 09-11, 2022 through blended mode.

The event is an attempt to provide a platform for meaningful interaction in the field of victimology, more so with regard to victim rights and victim justice in the administration of the criminal justice system. The conference aims to bring together discussions on various aspects of the subject of victimology. Further, the event is aiming to amalgamate theory and practice in the field of victimology. The objective of the three days event is to assemble different actors and academicians, including scholars conducting research in the said field to give rise to sound deliberations on the subject in the study of victimology in the criminal justice system. The Subthemes of the event are:

- Legal Responses to Victimization.
- Victimization and Victims' Rights.
- Victims and Restorative Justice.
- Victim participation in Criminal Justice System.
- Global Dimensions of Victimology.
- Violence and Victims.

- Victimization of Vulnerable Groups and Indigenous People.
- Socio-psycho and Legal implications of Victimology.
- Positive and Radical Victimization.
- Forensic Victimology.
- Gender-baseded Victimization.
- Cost and Consequences of Gender-based Violence.
- Sexual Orientation Victimization.
- Trauma and Stigmatization.
- Best Practices to Combat Gender-based Victimization.
- Digital Victimization.
- Investigation and Prevention of Digital Crime.
- Digital Poly-victimization.
- Protection of Victims' Rights in Digital World.
- Combating Digital Crimes and Victimization.
- Victim Impact Statement and Victim Assessment Report.
- Victim Advocacy, Assistance and Service Providers.
- Victim Diaspora.
- Victims of COVID-19.
- Strategies and Research Methodology Across the Globe.

For further details, contact, Coordinator, Dr. K S Rekhraj Jain, Centre for Excellence in Criminal Law, Assistant Professor, ICFAI Law School, ICFAI Foundation for Higher Education, Hyderabad- 501503 (Telangana), E-mail: cenexcrime@ifheindia.org. For updates, log on to: www.ifheindia.org/events.

### National Seminar on Future of Teaching and Learning

The One-day National Seminar on 'Future of Teaching and Learning in School Education' is being organized by the Matrushri S S Govinda and Shrimati RKD Khanushiya College of Education (M.Ed.), Palanpur, Gujarat on October 16, 2022. The Research Scholars may participate in the seminar and can present their papers based on their Ph.D., M. Phil .and M.Ed. dissertation.

The Government of India has ventured to bring out a National Education Policy of 2020 to meet the changing dynamics of the population's requirement with regard to quality education, innovation, and research, aiming to make India a knowledge superpower by equipping its students with the necessary skills and knowledge and to eliminate the shortage of manpower in science, technology, academics, and industry. The Subthemes of the event are:

- Technology Integration.
- E-learning Initiatives Post COVID-19.
- Creative Teaching Methods.
- Alternative Ways of Teaching and Learning.
- Teacher Education.
- Open and Distance Education.
- Evaluating and Assessment.
- Enhancing Quality Education.
- Ensuring ICT-based Learning.
- Participatory Role of Parents in Education.
- Problems and Prospects of School Education in Concurrent India.
- Training the Trainers for New Trends in Education.
- Value Addition in Teaching by Integrating Skill Development Along with Learning to Live Together.
- Pace Setting Roles of Schools.
- Bridging Gender and Social Gaps.
- Language Across School Curriculum.

For further details, contact Convener, Mr. Chetankumar Raval, Assistant Professor, Matrushri S S Govinda and Shrimati RKD Khanushiya College of Education (M.Ed.), Palanpur-385001(Gujarat), Mobile No: +91 9687402383, E-mail: nationalseminar2022@gmail.com. For updates, log on to: www.bkkpsm.org/events.

### International Symposium on Recent Advances in Research

A three-day International Symposium on 'Recent Advances in Research on Healthy Aging and Future Challenges' and a Biennial Meeting of the Association of Gerontology (India) are being organized at the Department of Zoology, Institute of Science, Banaras Hindu University, Varanasi, (Uttar Pradesh) during November 05-07, 2022 in hybrid mode. The event may

provide a platform for renowned and young researchers to interact and share their findings in aging research in Biological, Medical, and Psycho-social Gerontology. It will create awareness among the researchers for indepth research towards understanding mechanisms and ways of healthy aging with developments of cutting edge Bio-medical and Psycho-social approaches. The Areas of the event are:

### Biogerontology

- Mechanisms and Age-related Diseases.
- Gene Expression.
- Stem Cell Therapy.
- Cognitive Decline.
- Metabolic Changes.
- Nutrition and Calorie Restriction.
- Cancer Unfolding Secrets of Human Longevity.
- Interventions for Healthy Aging.
- Geriatrics.
- Decades of Healthy Aging.
- Frailty and Sarcopenia.
- Geriatric Syndromes.
- New Trends in Clinical Assessment.
- Nutrition and Early Detection of Malnutrition.
- Community Geriatrics and New Treatment Guidelines.
- Roles of Preventive and Promote Health Practices in Healthy Aging.
- Policies for Geriatric Health Care.
- Psycho-social Gerontology
- Post Covid Psycho-social Issues and Morbidity.
- Cognitive Decline Due to COVID.
- Elder Abuse-community.
- Coping with Changing Health, Family, and Social System.
- Extremism and Displacement.
- Impact of Wide Spread Social Unrest.
- Long-term Care.
- Socio-economic Aspects.

For further details, contact Convener, Prof. S Prasad, President, AGI, Department of Zoology, Institute of Science, Banaras Hindu University, Varanasi -221005 (Uttar Pradesh), Mobile No: 91-9415812467; 8090353703, E-mail: s.sprasadbhu@gmail.com. For updates, log on to: www.bhu.ac.in/seminar/

## THESES OF THE MONTH

#### SCIENCE & TECHNOLOGY

A List of doctoral theses accepted by Indian Universities (Notifications received in AIU during the month of April-May, 2022)

#### AGRICULTURAL & VETERINARY SCIENCES

#### Agricultural Development

1. Pathrikar, Dheeraj Tatyasaheb. **Economic impact** of soybean production technology in Marathwada Region of Maharashtra. (Dr. D S Perke), Department of Agricultural Economic, Vasantrao Naik Marathwada Agricultural University, Parbhani.

#### **Animal Husbandary**

1. Jadhav, Vijaykumar Shrawan. **Development of functional** *shrikhand* **using encapsulated curcumin**. (Dr. K G Londhe), Department of Dairy Science, Vasantrao Naik Marathwada Agricultural University, Parbhani.

#### **Biotechnology**

- 1. Shree, Bharti. Influence of cold stress on expression of invertase and calcium-dependent protein kinase genes in chickpea (*Cicer arietinum* L). (Dr. K D Sharma), Department of Agricultural Biotechnology, CSK Himachal Pradesh Krishi Vishvavidyalaya, Palampur.
- 2. Sudarsanam, Vijaykumar. Introgression and evaluation of blast resistant genes in the background of elite rice cultivar Samba Mahsuri (BPT 5204). (Dr. M Srinivas Prasad), Department of Biotechnology, Acharya Nagarjuna University, Nagarjuna Nagar.

#### **Genetics & Plant Breeding**

1. Rathod, Sanjay Tukaram. Heterosis, genetic analysis and stability studies in sesame (Sesamum indicum L). (Dr. M K Ghodke), Department of Genetics and Plant Breeding, Vasantrao Naik Marathwada Agricultural University, Parbhani.

#### Plant Pathology

1. Dnyaneshwar, Navale Mayur. Investigations on dry rot of safflower caused by *Macrophomina Phaseolina* (Tassi) Goid. (Dr. V M Gholve), Department of Plant Pathology, Vasantrao Naik Marathwada Agricultural University, Parbhani.

#### Soil Science

1. Mohit. Evaluation of different farming practices in blackgram-garden pea cropping sequence

**under mid hills of Himachal Pradesh**. (Dr. D K Parmar), Department of Soil Science, CSK Himachal Pradesh Krishi Vishvavidyalaya, Palampur.

#### BIOLOGICAL SCIENCES

#### **Biochemistry**

1. Reddy, Eda Sasidhar. Specific role of DNA methylation in selected genes during cellular transformation and design of small molecules inhibitors against alpha 5 integrin interacting proteins. (Dr. Rajeswari Jinka), Department of Biochemistry, Acharya Nagarjuna University, Nagarjuna Nagar.

#### Biotechnology

- 1. Banerjee, Ananya. **Targeting cancer stem cell to eradicate ovarian cancer**. (Dr. Srinivas Patnaik), Department of Biotechnology, Kalinga Institute of Industrial Technology, Bhubaneswar.
- 2. Gundaraniya, Srutiben Ashokbhai. Identification of drought response candidate gene (S) through transcriptom and metabolome studies in *Arachis hypogaea* L. (Dr. Padma Ambalam), Department of Biotechnology, Saurashtra University, Rajkot.
- 3. Kadhim, Qasim Turki. Isolation and characterization of streptomyces sps showing antagonistic activity against fungal pathogens effecting soybean crop and optimization of secondary metabolite production for antibacterial assay of isolated strptomyces species. (Dr. A Krishna Satya), Department of Biotechnology, Acharya Nagarjuna University, Nagarjuna Nagar.
- 4. Mandal, Madan Kumar. Study of lipids and its modulation under different stress conditions in selected microalgae from Meghalaya. (Dr. Neha Chaurasia), Department of Biotechnology, North Eastern Hill University, Shillong.
- 5. Nath, Parej. **Understanding the role of IRGM** in regulating innte immunity. (Dr. Santosh Chauhan and Dr. Srinivas Patnaik), Department of Biotechnology, Kalinga Institute of Industrial Technology, Bhubaneswar.

#### **Botany**

1. Nongkynrih, Chester John. Taxonomic studies

**of grasses (Poaceae) in Meghalaya**. (Prof. Yogendra Kumar), Department of Botany, North Eastern Hill University, Shillong.

2. Rajarajeswari, Badri. A comparative study of evaluation and characterization of antidiabetic and wound healing bioactive metabolites of Cassia Occidentalis (Linn) and Pithecellobium Dulce (Benth) leaf extracts. (Dr. A Amrutha Valli), Department of Botany, Acharya Nagarjuna University, Nagarjuna Nagar.

#### Microbiology

1. Dabas, Pooja. **Production and application of Keratinase from bacteria**. (Dr. Neelam), Department of Microbiology, Kurukshetra University, Kurukshetra.

#### Zoology

- 1. Gulati, Harsh. Ecology and behaviour of Sarus Crane, Antigone antigone in selected important bird areas of Haryana. (Dr. Sarita Rana), Department of Zoology, Kurukshetra University, Kurukshetra.
- 2. Parvathi, Devalla. Studies on crab landings, biochemical composition and heavy metal evaluation of two mud crabs, *Scylla Serrata* and S Olivacea from Visakhapatnaam Coast, Andhra Pradesh, India. (Dr. P Padmavathi), Department of Zoology, Acharya Nagarjuna University, Nagarjuna Nagar.
- 3. Rajesh Prasad. Studies on the modulatory effects of rutin on the eisplatin-mediated antitumor activity and toxicity in mice bearing ascites Dalton's lymphoma. (Prof. S B Prasad), Department of Zoology, North Eastern Hill University, Shillong.

#### EARTH SYSTEM SCIENCES

#### **Environmental Science**

- 1. Chaudhry, Sandeep Kumar. Study on the effect of passive school transports and in cabin ventilation modes on students pollutants exposure. (Prof. Suresh Pandian Elumalai), Department of Environmental Science & Engineering, Indian Institute of Technology Delhi, New Delhi.
- 2. Gunti, Vijaykummar. Screening and kinetic studies of Chromium (VI) and Phenanthrene degradation bacteria from waste water dumping sites and industrial effluent. (Dr. P Brahmaji Rao), Department of Environmental Science, Acharya Nagarjuna University, Nagarjuna Nagar.
- 3. Kukkamalla, Aruna. Some studies on the identification and characterization of amino acid proteomic profile from root nodules of vigna radiata

host plant induced by bradyrhizobium strains. (Prof. Z Vishnuvardhan), Department of Environmental Science, Acharya Nagarjuna University, Nagarjuna Nagar.

4. Srivastava, Amartanshu. Study on dispersion modelling for particulate matter distribution in coal mine environments. (Prof. Suresh Pandian Elumalai), Department of Environmental Science and Engineering, Indian Institute of Technology Delhi, New Delhi.

#### Geology

1. Anwita. Petrographic and geochemical controls on coking and rheological behaviour of bituminous coals from Raniganj and Jharia Basins, India. (Prof. Atul Kumar Varma and Prof. V K Saxena), Department of Applied Geology, Indian Institute of Technology Delhi, New Delhi.

#### ENGINEERING SCIENCES

#### **Aerospace Engineering**

1. Kashinathrao, Muneshwar Sahebrao. Numerical simulation on the effect of flow pattern in solid rocket motor. Department of Aeronautical Engineering, Hindustan Institute of Technology & Science, Chennai.

#### **Automobile Engineering**

1. Sangeethkumar, E. Experimental investigations on effective utilization of waste cooking oil methyl esters in a thermal barrier coated compression ignition engine. Department of Automobile Engineering, Hindustan Institute of Technology & Science, Chennai.

#### **Biomedical Engineering**

1. Mourya, Gajendra Kumar. Towards volumetric liver segmentation from abdominal CT scans: A tool for effective diagnosis and treatment planning. (Dr. Dinesh Bhatia and Dr. Manashjit Gogoi), Department of Biomedical Engineering, North Eastern Hill University, Shillong.

#### **Civil Engineering**

- 1. Lingeshwaran, N. Investigation on structural behaviour of bed joint reinforced solid brick masonry walls and RC walls. (Dr P Poluraju and Dr. Veerendrakumar C Khed), Department of Civil Engineering, Koneru Lakshmaiah Education Foundation, Guntur.
- 2. Mulay, Bharat Nandkumar. **Experimental** investigation of water quality in aquaponic and bioponic system. (Dr. A Aravindan and Dr. K Rajasekhar Reddy), Department of Civil Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

3. Payal, Sachdeva. **Anchorage capacity of headed reinforced bars in concrete**. (Dr. Naveen Kwatra and Dr. A B Danie Roy), Department of Civil Engineering, Thapar Institute of Engineering and Technology, Patiala.

#### **Computer Science & Engineering**

- 1. Bedre, Reshma Devidas. Steganography and steganalysis techniques based on fall off boundary problem, unused block problem and multi-directional edges. (Dr. Gandharba Swain), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.
- 2. Bhuvaneswari, A P. Machine learning models to optimize the performance of the classifier for early prediction of the disease. (Dr. R Praveen Sam and Dr. C Shoba Bindu), Department of Computer Science & Engineering, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.
- 3. Chundru, Rajaramesh. **Performance optimization of unsupervised learning with distributed feature selection and clustering.** (Dr. K V S N Rama Rao), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.
- 4. Karampudi, Radha. A framework for improving the performance in heterogeneous environment through dynamic resource allocation. (Dr. K Thirupathi Rao), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.
- 5. Kodali, Sadhana. A neardy approach to mine meta paths in heterogeneous information networks. (Dr. K Thirupathi Rao and Dr. D Madhavi), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.
- 6. Pentapati, N RL C Sekhar. An object based statistical framework for localization of spliced region on a single image using image local statistics. (Dr. T Narayana Shankar), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.
- 7. Rao, Karu Prasada. **Multimodal feature** extraction and fusion for emotion recognition. (Dr. M V P Chandra Sekhara Rao), Department of Computer Science & Engineering, Acharya Nagarjuna University, Nagarjuna Nagar.
- 8. Rao, N Srinivas. An energy efficient routing protocol for maximization of network lifetime in WSN environment. (Dr. K V S N Rama Rao), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

- 9. Srilakshmi, R. A resilient secure scheme in mobile adhoc networks to shield the communication channel from malicious behaviour. (Dr. G Pardha Saradhi Varma), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.
- 10. Visa, Manish Rajendrakumar. Novel model based on an opinion mining approach for users behaviour of e-commerce. (Dr. Dhirenbhai Patel), Department of Computer Science, Gujarat Vidyapith, Ahmedabad.

#### **Electrical & Electronics Engineering**

- 1. Gupta, Sandip Kumar. Control strategies for voltage and frequency in microgrid coordinating different demand response programs and battery energy storage. (Prof. Kalyan Chatterjee and Prof. T Ghose), Department of Electrical & Engineering, Indian Institute of Technology Delhi, New Delhi.
- 2. Jha, Amitkumar Vidyakant. Analysis of communication networks for synchrophasor applications in a smart grid cyber physical system. (Dr. Abu Nasar Ghazali and Dr. Bhargav Appasani), Department of Electronics Engineering, Kalinga Institute of Industrial Technology, Bhubaneswar.
- 3. Mishra, Anirban. **Power quality issues of wind turbine**. (Prof. Kalyan Chatterjee), Department of Electrical Engineering, Indian Institute of Technology Delhi, New Delhi.
- 4. Pal, Poushali. Optimal dispatch strategy of distributed generations in a virtual power plant using cyber-physical controller for real time EMS. Department of Electrical & Electronics Engineering, Hindustan Institute of Technology & Science, Chennai.

#### **Electronics & Communication Engineering**

- 1. Jindal, Pardeep Kumar. Temperature dependent performance analysis of mixed-MWCNT bundle as VLSI interconnects. (Dr. Karmjit Singh Sandha), Department of Electronics & Communication Engineering, Thapar Institute of Engineering and Technology, Patiala.
- 2. Mudunuri, Padmanabha Raju. **Design and analysis of conductive fabric based conformal textile antennas for wearable off body communication applications**. (Dr. B T P Madhav), Department of Electronics & Communication Engineering, Koneru Lakshmaiah Education Foundation, Guntur.
- 3. Rajasekhar, Jammalamadaka. **Hybridization of heterogeneous embedded systems networks**. (Dr. J K R Sastry), Department of Electronics & Communication

Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

- 4. Rao, Kanduri Madhusudhana. Novel techniques for planar antenna design and synthesis for commercial wireless applications. (Dr. M V S Prasad), Department of Electronics & Communication Engineering, Acharya Nagarjuna University, Nagarjuna Nagar.
- 5. Raveendra, Kudamala. Automatic logo based document image retrieval methods. (Dr. B T P Madhav and Dr. Karthikeyan), Department of Electronics & Communication Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

#### **Mechanical Engineering**

- 1. Manikonda, Ratna Deepika. **Experimental investigation of machinability and tribological behaviour of AA2014 hybrid composite**. (Dr. K V Ramana), Department of Mechanical Engineering, Koneru Lakshmaiah Education Foundation, Guntur.
- 2. Shankar, Sachindra. Friction stir welding of dissimilar aluminium copper alloys with different thicknesses. (Prof. Somnath Chattopadhyaya), Department of Mechanical Engineering, Indian Institute of Technology Delhi, New Delhi.
- 3. Sree, N Santhi. Experimental analysis of the closed loop pulsating heat pipe with different working fluids at different fill ratios and orientations. (Dr. N V V S Sudheer), Department of Mechanical Engineering, Acharya Nagarjuna University, Nagarjuna Nagar.

#### **Mining Engineering**

1. Garai, Dayamoy. **Investigations on different parameters influencing blast induced ground vibration in opencast coal mine**. (Prof. A K Mishra), Department of Mining Engineering, Indian Institute of Technology Delhi, New Delhi.

#### **Petroleum Engineering**

1. Khan, Mohammad Yunus. Analytical and numerical investigations of gas and water - alternating - gas displacement processes in stratified porous media. (Prof. Ajay Mandal), Department of Petroleum Engineering, Indian Institute of Technology Delhi, New Delhi.

#### MATHEMATICAL SCIENCES

#### **Mathematics**

1. Chandani Kumari. Mathematical investigation of surface waves in piezo- electric, magneto-elastic and other anisotropic media. (Prof. S Kundu), Department

- of Mathematics and Computing, Indian Institute of Technology Delhi, New Delhi.
- 2. Lakshmipathy, N. **New neutrosophic fuzzy dynamical systems and their applications**. Department of Mathematics, Hindustan Institute of Technology & Science, Chennai.
- 3. Shailendra Singh. On categorical and L-Fuzzy topological study of L-Fuzzy automata, coalgebras and dialgebras. (Prof. Seetala Prasad Tiwari), Department of Mathematics and Computing, Indian Institute of Technology Delhi, New Delhi.
- 4. Sreenivasaulu, Ayyalappagari. Some studies on first order matrix sylvester and volterra integrodynamical system on time scales. (Dr. B V Appa Rao), Department of Mathematics, Koneru Lakshmaiah Education Foundation, Guntur.

#### **Statistics**

- 1. Chittibomma, Veera Aruna. **On different estimation methods of parameters for lomax distribution**. (Prof. G V S R Anjaneyulu), Department of Statistics, Acharya Nagarjuna University, Nagarjuna Nagar.
- 2. Chowdhury, Ankita Roy. Profit analysis of some Markovian Queueing models with feedback using matrix-geometric approach. (Dr. Indira Rani), Department of Statistics, Kurukshetra University, Kurukshetra.
- 3. Rao, Srinivasa K. On different estimation methods of parameters for PERT distribution. (Dr. N Viswam), Department of Statistics, Acharya Nagarjuna University, Nagarjuna Nagar.

#### MEDICAL SCIENCES

#### Ayurveda

- 1. Mishra, Gauridutt. Assessment of Nirma stage of Amavata and evaluation of Simhanada Guggulu and Guduchi modaka in its management. (Dr. Darshna Pandya), Department of Ayurved, Gujarat Ayurved University, Jamnagar.
- 2. Vinchhi, Shruti Dilipkumar. Etiopathological study of migraine (Ardhavbhedak) in context of Amlapitta: As its Nidanarthakaratva-and its management by Patoladi Kwath: A single arm study. (Dr. Darshana Pandya), Department of Ayurved, Gujarat Ayurved University, Jamnagar.

#### **Biochemistry**

1. Krishna, G Vamsi. New stability indicating RP-UPLC methods for selected anti-cancer and

hormonal drugs from oral solid and parenteral dosage forms and RP-HPLC methods for selected drugs from modified release forms. (Dr. J Rajeswari), Department of Biochemistry, Acharya Nagarjuna University, Nagarjuna Nagar.

2. Sarika, Daripally. **The effect of gene polymorphisms on oral cancer risk and patient survival**. (Dr. Peddi Kiranmayi), Department of Biochemistry, Acharya Nagarjuna University, Nagarjuna Nagar.

#### **Dentistry**

- 1. Govind, Shashirekha. **Bioactive materials in diagnosis and management of dental caries**. (Prof. Neeta Mohanty Prof. Sushanta Kumar Kamilla), Department of Dental Sciences, Siksha O Anusandhan University, Bhubaneswar.
- 2. Keshubhai, Ram Hardik. Comparative evaluation for the effects of occlusal splint therapy and Muscle Energy Techniques (MET) in the management of Temporomandibular Disorder (TMD): A randomized controlled clinical trial. (Dr. Darshana Shah), Department of Prosthodontics, Gujarat University, Ahmedabad.
- 3. Palwankar, Pooja. Assessment of oral health related quality of life and socioeconomic status among type 2 diabetic and nondiabetic patients with stage I periodontitis. (Dr. Shourya Tandon Dr. Vikram Blaggana), Department of Periodontology, Shree Guru Gobind Singh Tricentenary University, Gurugram.

#### **Pharmaceutical Science**

- 1. Gaonkar, Vishakha M Parab. Quality by design approach to formulate an anti- diabetic herbal drug product. (Dr. V S Mannur), Department of Pharmacy, KLE Academy of Higher Education and Research, Belagavi.
- 2. Khanal, Pukar. Study on molecular mechanism of anti-diabetic action of ficus Benghalensis and Duranta Repens. (Dr. B M Patil), Department of Pharmacy, KLE Academy of Higher Education and Research, Belagavi.
- 3. Shaik, Reehana. Analytical method development, validation and characterization of forced degradation products from the selected anticancer drugs and their in silico-toxicity predictions. (Dr. Sujana Kamepalli), Department of Pharmaceutical Sciences, Acharya Nagarjuna University, Nagarjuna Nagar.
- 4. Shetti, Priya P. **Development and optimization** of apigenin nanoparticle for targeting breast cancer.

- (Dr. Sunil S Jalalpure), Department of Pharmacy, KLE Academy of Higher Education and Research, Belagavi.
- 5. Srinivas, P. Analytical method development and validation for pharmaceutical formulations. (Dr. K Venkataramana), Department of Pharmacy, Acharya Nagarjuna University, Nagarjuna Nagar.

#### PHYSICAL SCIENCES

#### Chemistry

- 1. Butani, Pankaj Chhaganbhai. Synthesis, characterization and biological activity studies of highly functionlized azoles and azine. (Dr. B M Bheshdadia), Department of Chemistry, Saurashtra University, Rajkot.
- 2. Pambhar, Kaushik Dharmashibhai. **Design,** synthesis and characterization of some nitrogen containing heterocycles as bioactive compounds. (Dr. Rajan C Khunt), Department of Chemistry, Saurashtra University, Rajkot.
- 3. Sricharitha Annam. **DFT and TDDFT study** of the structural, optoelectronic and photovoltaic properties of Donor-Acceptor (D-A) polymers based on carbazole with different acceptors for polymer solar cells. (Dr. M Subba Rao), Department of Chemistry, Acharya Nagarjuna University, Nagarjuna Nagar.
- 4. Thuta, Suresh. **New preaparative route synthesis and validation of pharmaceutically active molecules in pure forms**. (Prof. K Rambabu), Department of Chemistry, Acharya Nagarjuna University, Nagarjuna Nagar.
- 5. Yamana, Anilvikas. Analytical method development, validation and simultaneous estimation of active pharmaceutical ingredients by RP-HPLC. (Dr. K B Chandra Sekhar), Department of Chemistry, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

#### **Physics**

- 1. Chintagunta, Chandrakala. Non linear optical and dielectric properties of PbO-ZrO<sub>2</sub>-SiO<sub>2</sub>: Fe<sub>2</sub>O<sub>3</sub> glass ceramics. (Dr. G Naga Raju), Department of Physics, Acharya Nagarjuna University, Nagarjuna Nagar.
- 2. Kankanala, Pandurangarao. Synthesis, characterization and electrochromic studies on magnetron sputtered deposited nanocrystalline pure and TiO<sub>2</sub> doped tungsten oxide films. (Prof. V Ravi Kumar), Department of Physics, Acharya Nagarjuna University, Nagarjuna Nagar.



## Child Abuse in Schools

Psychological Impacts

#### Sushma Pandey

Department of Psychology, D.D.U. Gorakhpur University, Gorakhpur.

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## Maternal Health and Child Mortality

Condition, Vision and Challenges

#### Edited by Nitish Mondal

Deptt. of Anthropology, Sikkim University, Gangtok.

#### Kh. Narendra Singh

Deptt. of Anthropology, Assam University (Diphu Campus), Assam.

2022 | 978-93-5594-530-3 | 428 | ₹ 1750

#### CONCEPT PUBLISHING COMPANY (P) LTD.

#### KHAJA BANDANAWAZ UNIVERSITY

(University established by an Act No. 18 of Karnataka State Legislature) KBNU Campus, Rauza-i Buzurg, Kalaburagi - 585 104 (KS) Tel: 08472 228540 / 236041 / 267657 Extn. 136

#### **ADMISSIONS NOTIFICATION-2022-23**

#### **Faculty of Medicine**

MBBS | M.D.| M.S.

Para Medical Courses: B.Sc. | M.Sc. Medical

Faculty of Engineering and Technology B.E. | M.Tech. | Ph.D.

Faculty of Sciences, Arts, Humanities and Social Sciences Diploma in Arabic | B.A. | B.Sc. | B.Com. | M.A. | M.Sc. | Ph.D

> Faculty of Law LLB (3 years course) BA LLB (5 years course)

Admission process already started. For Admission Forms, procedure and details please visit : www.kbn.university



#### (A Religious Minority University)

The Khaja Bandanawaz University, Kalaburagi (Karnataka State) is a Private University established by an Act of the State Legislature of Karnataka. The University invites applications from eligible citizens of India to the following positions:

#### REGISTRAR

### CONTROLLER OF EXAMINATIONS

#### ASSISTANT REGISTRAR

The last date of receiving applications is 25<sup>th</sup> August, 2022. Visit www.kbn.university for application form, eligibility and other details.

#### KHAJA EDUCATION SOCIETY KALABURAGI - 585 104 (A Minority Institution)

#### **WANTED - SECRETARIES**

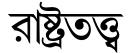
The incumbent should be atleast a graduate with 2-3 years of administrative experience. An MBA degree will be an added advantage. He must be fluent in English and knowledge of Urdu (and Kannada preferably). Should have innovative ideas with never give up attitude. Candidates who have worked in a similar position in educational organizations of repute will be welcomed.

A complete Bio-data and supporting documents be sent in a sealed envelope superscribing "CONFIDENTIAL" and addressed to:

The Hon'ble President
Khaja Education Society, KBN New Hostel Bldg.,
Rauza-i Buzurg, KALABURAGI-04 (KS)
E-mail: kesocietyhr@gmail.com



## **CBCS** Bengali Text Book



ডালিয়া হোসেন

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# শিক্ষাবিজ্ঞান ও শিক্ষাদর্শন

অলোক বাগচী

Department of Education, Bankura Zilla Saradamani Mahila Mahavidyapith, Bankura.

2019 | 978-93-86682-96-3 | 100 | ₹ 500 (HB) 2019 | 978-93-86682-97-0 | 100 | ₹ 120 (PB)

#### CONCEPT PUBLISHING COMPANY (P) LTD.

Dr. Rafiq Zakaria Campus II Dr. Rafiq Zakaria College for Women Navkhanda Palace, Jubilee Park, Aurangabad Minority Institution

#### **APPOINTMENT**

The Applications are invited for the following Senior College Teaching post vacant in Postgraduate/Undergraduate non grant in section on fixed/Consolidated pay, for the academic year 2022-23 only. The Eligible Candidate shall file their application with the Principal, in office hours within fifteen days of publishing this advertisement.

Sr. No	Subject	No of Post			
	POSTGRADUATE (NON-GRANT)				
01	M A English	02			
02	M A Urdu	02			
03	M.Sc Organic Chemistry	02			
UNDERGRADUATE (NON-GRANT )					
04	B.C.S	02			
05	B.A SOCIOLOGY	02			
06	B.A PSYCHOLOGY	02			
07	B.A HOME SCIENCE	02			

Eligibility: As per the UGC, Government of Maharashtra & University Norms and Rules of Appointments, all appointments are subject to University approval.

**Note**: In service candidates should apply through proper channel. No TA/DA will be paid to the candidates for attending the Interview.

Dr. Maqdoom Farooqui Principal

#### Nehru Memorial Education Society, Kanhangad

Nehru Arts and Science College, Kanhangad (Govt. Aided Private College & Affiliated to Kannur University)

> P.O. Padnekat, Kasaragod District Kerala-671314 www.nasc.ac.in • Ph: 04672280335

Applications are invited for the following post:		
Name of the Post No. of Vacancy		
Assistant Professor of English	1	

Educational qualifications, age, Pay Scale are as per the UGC (Regulations 2018), Government of Kerala and Kannur University's extant rules and regulations.

Prescribed application form can be obtained from the Office of the College on payment of Rs.1000/- or submitting a DD for Rs.1050/- drawn in favour of The Manager, Nehru Arts and Science College, Kanhangad payable at Kanhangad.

Eligible candidates should submit the duly filled in application form along with the attested copies of all necessary documents, in proper channel, within 30 days from the date of publication of the advertisement by registered post/by hand to the undersigned.

**Kanhangad 30-07-2022** 

Sd/-Manager



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P P Savani University invites distinguished personnel / professionals for the various teaching and non-teaching positions.

#### **TEACHING POSITIONS**

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Science

Biotechnology / Microbiology / Environmental / Chemistry / Physics / Fire & Safety / Agriculture

Liberal Arts &

Management Studies

History, Mass Communications, Operations, Quantitative Techniques, Data Analytics Design

Visual Communication, Fashion Design, Product Design, Interior Design

Ayurveda

MD Consultant & Medical Officer

Nursing Physiotherapy Homeopathy Agriculture Architecture MPH

#### NON-TEACHING POSITIONS

Hostel Rector, Student Section Co-ordinator / Accounts Officer / International Co-ordinator / Admission Officer, Librarian, Music Teacher / Sports Officer

Kindly apply with all credentials to following address:

NH 8, GETCO, Near Biltech, Village: Dhamdoa,
Kosamba, Dist.: Surat - 394125.

E-mail: career@ppsu.ac.in, hr.assistant@ppsu.ac.in

www.ppsu.ac.in



#### **New Delhi-110067**

# Advertisement No. RC/64/2022 (Re-Advertisement)

Online applications are invited from eligible candidates for appointment to the post of **Associate Professor** in the Academic Pay Level 13A of 7<sup>th</sup> Central Pay Commission Pay Matrix, in various Schools/Special Centers of the University as per latest UGC Regulations.

The details of vacancies, qualifications, general instructions etc. are available in JNU website https://www.jnu.ac.in/career. The last date for submission of applications completed in all respects, shall be 30<sup>th</sup> August, 2022 (5.30 PM). The candidates who have applied earlier with reference to Advt. No. RC/61/2019 are required to apply afresh.

Any addendum/corrigendum shall be posted only on the University website.

REGISTRAR



# VINAYAKA MISSION'S RESEARCH FOUNDATION

Accredited by NAAC with 'A' Grade & Ranked in NIRF

## ADMISSION FOR Ph.D. PROGRAMME

(Full Time/Part Time)
OCTOBER 2022 SESSION

	OCTOBER 2022 SE	331014
* Medicine Dentistry	* Engineering &	* Arts & Sciences
* Homoeopathy	Technology	(Chemistry, Computer
Nursing	Management	Science, Commerce,
* Physiotherapy		English, Mathematics,
Pharmacv		Physics)

Eligibility: Post Graduate Degree in the relevant subject with minimum 55% Marks (Relaxation of 5% for SC/ST/OBC (non-creamy layer) and differently abled candidates). Candidates qualified in UGC-NET or any other National –level test for JRF, are exempted from the Entrance Test.

# University Research Fellowships Available up to Rs. 25,000/-\*

\* Fellowship only for deserving candidates as per the university norms.

# \*Admission Subject to Availability of Supervisors & Vacancies.

For application & further details, please visit the University website www.vinayakamission.com.

Last date to submit the filled in application is 03.09.2022, by 5.30.PM.

REGISTRAR

Contact: 0427-2529700 (Ext: 1158/1162) email id : vmu.phd@vmu.edu.in

#### WANTED

Applications are invited for the post of **Principal** to be filled in **PRADNYA PRATISHTHAN's PRADNYA PRATISHTHAN ADHYAPAK MAHAVIDYALAYA, Waman Nagar, Purna Road, Nanded** (Permanent Non-Granted). Eligible Candidates should submit their application along with all necessary documents on the address given below by Registered Post only **within Fifteen (15) days** from the date of publication of this advertisement.

Sr. No.	Name of Post	No. of Post	Reservation
01	Principal	01	Unreserved

#### **Educational Qualification:**

The Candidate shall possess the following qualification:-

- 1) Postgraduate Degree in Arts/Sciences/Social Science/Humanities/Commerce with minimum 55% Marks.
- 2) M.Ed. with minimum 55% Marks.
- 3) Ph.D. in Education or in any Pedagogic subject offered in the Institution, and
- 4) Ten years of teaching experience in a Secondary Teacher Education Institution.

**Desirable**: Diploma/Degree in Educational Administration or Educational Leadership.

Salary and Allowances Pay: - Scale as per UGC/ State Government & Swami Ramanand Teerth Marathwada University's rules from time to time.

#### Note:-

- 1) Prescribed Application form is available on University Website (www.srtmun.ac.in).
- 2) No. T. A. / D.A. will be paid to attend the interview.
- 3) Eligible candidates those who are already in services should submit their application through proper channel.
- 4) All attested xerox copies of certificates and other relevant document should be attached to the application form.

Address of Correspondence: The President, Pradnya Pratishthan's College of Education, Waman Nagar, Nanded (M.S.) 431605.

Presidend Dr. Kinhalkar M.B. Secretary Shree Anand Chavan

#### CHEMBUR KARNATAKA SANGHA'S

#### CHEMBUR KARNATAKA COLLEGE OF LAW

Vidyasagar, 4th Floor, Ghatla, Chembur (East), Mumbai – 400 071

#### **MINORITY**

#### APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS FROM THE ACADEMIC YEAR 2022-23:

#### **UNAIDED**

Sr. No	Cadre	Subject	Posts	Reservation
1.	Principal		01	01 – OPEN
2.	Assistant Professor	Law	03	03 – OPEN
3.	Assistant Professor	BLS/LL.B	02	02 – OPEN

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

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

Candidate having Marathi knowledge will be preferred.

"Qualification, Pay Scales and other requirement are as prescribed by the UGC Notification dated 18th July, 2018, Government of Maharashtra Resolution No. Misc-2018/C.R.56/UNI-1 dated 8th March, 2019 and University Circular No. TAAS/(CT)/ICD/2018-19/1241 dated 26th March, 2019 and revised from time to time."

The Government Resolution & Circular are available on the website: mu.ac.in.

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

Application with full details should reach to the Secretary, Chembur Karnataka Sangha, CHEMBUR KARNATAKA COLLEGE OF LAW, Vidyasagar, 4th Floor, Ghatla, Chembur (East), Mumbai 400071 within 15 days from the date of publication of this advertisement. This is University approved advertisement.

Sd/-SECRETARY

Vidya Mandir Mandal's Matoshree Sumati Chintamani Tipnis College of Arts and Commerce Accredited with 'B' Grade by NAAC Mamdapur – Neral, Tal. Karjat, Dist. Raigad-410 101 (Maharashtra)

#### APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS FROM THE ACADEMIC YEAR 2022-23:

#### UN - AIDED

Sr. No.	Cadre	Subject	No. of Posts	Total No. of Posts	Post Reserved for
01	Principal	_	01	01	OPEN - 01
02	Assistant Professor	English	01		ST - 01
03	Assistant Professor	History	02		OBC - 02
04	Assistant Professor	Economics	02	07	EWS - 01 OPEN - 02
05	Assistant Professor	Commerce	02		DT (A) – 01
06	Librarian	_	01	01	OPEN - 01

The posts for the reserved category candidates will be filled in by the same category candidates (Domicile of State of Maharashtra) belonging to that particular category only.

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

Candidates having knowledge of Marathi will be preferred.

"The Educational Qualification, Experience and other for the post of Principal & Assistant Professor are as prescribed by the UGC, Government of Maharashtra & University of Mumbai from time to time."

The Government Resolution and Circular are available on the website: mu.ac.in

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

Application with full details should reach the Jt. Secretary, Vidya Mandir Mandal's, Matoshree Sumati Chintamani Tipnis College of Arts and Commerce, Mamdapur – Neral, Tal. Karjat, Dist. Raigad, Pin-410 101 (Maharashtra) within 15 days from the date of publication of this advertisement. This is University approved advertisement.

Date:
Sd/Place:
JT. SECRETARY



## Matsyodari Shikshan Sanstha, Jalna Motibag, Near Railway Over Bridge, Jalna-431203

# WANTED

Applications are invited for the posts of **Assistant Professor** (UG & PG) in the colleges run by Sanstha on Permanent Non-Grant Basis. Eligible candidates should submit their application along with all necessary documents **within 15 days** from the date of publication of this advertisement.

Name of the College	Subject	No. of Posts	Qualification	Reservation	
	Marathi	04			
	Hindi	04			
	Urdu	02			
	English	09			
	History	02			
	Geography	02	M.A. B+,		
	Political Science	01	SET / NET / Ph.D.		
	Public Administration	04			
	Psychology	09			
	Sociology	03			
	Economics	02			
Arts, Commerce & Science	Home Science	02			
Colleges	Chemistry	05			
(UG & PG)	Physics	02		S.C - 10	
	Mathematics	02	Ma Di	S.T - 10	
	Micro-biology	02	M.Sc.B+, SET / NET / Ph.D.	VJA - 03	
	Botany	03	SET / NET / TH.D.	NTB - 04 NTC - 03 NTD - 03	
	Zoology	02			
	Computer Science	06			
	Commerce	04	M.Com B+, SET / NET / Ph.D	SBC - 03	
	Computer Science (B.C.A. Science)	06	M.Sc. / M.C.A. Comp. Sci. B+, SET / NET / Ph.D.	OBC - 27 EWS - 13	
	Physical Education	04	M.P.Ed. B+,	Open - 29	
	Director of Phy.Edu & Sports	02	SET / NET / Ph.D.		
	Librarian	05	M.Lib. B+, SET / NET / Ph.D.		
M.S.S.'s Law College	Law	9	LL.M. B+, SET / NET / Ph.D.		
	Education (Perspectives in Education)	2			
M.S.S.'s	Education (Pedagogy in School Subjects)	2	M.A./M.Com./ M.Sc., M.Ed. B+,		
College of Education	Education (Health & Physical Edu., Fine Arts, Performing Arts (Music/ Dance/ Theatre)	1	SET / NET / Ph.D.		
M.S.S.'s College of Physical Education	Physical Education	4	M.P.Ed. B+, SET/NET/Ph.D.		

#### Terms & Conditions:

- Educational qualification, pay scale, service conditions and recruitment for the above posts are as per UGC, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Govt. of Maharashtra and Matsyodari Shikshan Sanstha's norms.
- The application should be submitted to **The Secretary, Matsyodari Shikshan Sanstha**, Motibag, Near Railway Over Bridge, Jalna, Dist. Jalna, Pin-431 203.
- · Candidates who are already in service should apply through proper channel.

Administrative Officer President

# AIU Invites Proposals for Collaboration for organizing ANVESHAN- Student Research Conventions -2022-23

Association of Indian Universities organizes *Anveshan*-Student Research Convention every year to identify and nurture the young talents and budding researchers in the Indian Universities. In these Conventions, Innovative Research Projects are invited from the students (Undergraduate to Ph. D level), and assessed by a group of experts of the field on a well laid criterion. The best Research Projects are conferred with certificates and awards. The Projects are invited from the disciplines of Basic Sciences & Applied Sciences, Engineering and Technology, Agriculture and allied fields, Health Sciences and allied fields, Social Sciences; Humanities; Commerce; Business Management; and Law. The Conventions are to be held at two levels i.e., **Zonal and National**. The duration of each convention is of **two days**. These events are to be conducted in the current Financial Year i.e. before **March 31**, **2023**.

AIU invites proposals from member universities/institutions for collaboration in organising these Conventions in Five Zones - East, West, North South, Central Zones, and One National Level Convention. Interested Member universities/institutions may send their Expression of Interest (EoI) along with proposal duly endorsed by the Vice Chancellor/Head of the Institutions to AIU at the address:

Dr Amarendra Pani, Joint Director & Head (Research), Association of Indian Universities, AIU House, 16 Comd. Indrajit Gupta Marg, New Delhi – 110 002, **E-mail: anveshansrc@gmail.com** 

The proposals are required to be submitted **latest by September 01, 2022.** The Event will be finalized on mutually convenient dates and terms and conditions laid down by AIU. For any further query please contact on: 011-23230059, Extn-202/241, **E-mail: anveshansrc@gmail.com**. The details can also be downloaded from AIU **Website: www.aiu.ac.in** 

**N.B.:** AIU is not a Funding Organization. However, a token amount will be provide by AIU. All these events are AIU activities for which Collaboration from member Universities/Institutions are solicited. Primarily, the events will be conducted under the banner of AIU. The details of terms and conditions will be communicated on selection of the Proposal. **Proposal must be sent to AIU with the Approval/Endorsement of Vice Chancellor/Head of the Institution.** 

Regd. No. RNI-7180/1963

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# GATE 2023 GRADUATE APTITUDE TEST IN ENGINEERING

Organising Institute: Indian Institute of Technology Kanpur, Kanpur - 208016 Contact No.: 0512-2596052, Website for information: https://gate.iitk.ac.in

Online applications are invited for GATE 2023 examination. Admissions to postgraduate programmes (Master's and Doctoral) with Ministry of Education (MoE) and other Government Scholarships / Assistantships in Engineering / Technology / Architecture / Science / Commerce / Arts are open to those who qualify GATE, subject to fulfilling the admission criteria of the admitting institute. The GATE score is also used by some Public Sector Undertakings (PSUs)/ Govt. Organisation for their recruitment. GATE 2023 score will be valid for THREE YEARS from the date of announcement of results. GATE Examination is a Computer Based Test (CBT).

GATE 2023 examination will be conducted in selected cities and towns which are distributed across 8 zones in India.

The following candidates are eligible to appear in GATE 2023: A candidate who is currently studying in the 3<sup>rd</sup> or higher year of any undergraduate degree program OR has already completed any government approved degree program in Engineering / Technology / Architecture / Science / Commerce / Arts.

**Disclaimer:** GATE is NOT an admission ensuring examination. Qualifying in the GATE examination does NOT guarantee admission / scholarship. Admission to any institute is fully dependent on the admitting institute's criteria for educational qualification. Similarly, GATE qualification does not assure a job, as it depends on the recruitment procedure of the concerned employer. GATE committee is NOT liable for any legal obligations related to admission / scholarship / job.

GATE 2023 examination will be conducted for the following papers: Aerospace Engineering (AE), Agricultural Engineering (AG), Architecture and Planning (AR), Biomedical Engineering (BM), Biotechnology (BT), Civil Engineering (CE), Chemical Engineering (CH), Computer Science and Information Technology (CS), Chemistry (CY), Electronics and Communication Engineering (EC), Electrical Engineering (EE), Environmental Science and Engineering (ES), Ecology and Evolution (EY), Geomatics Engineering (GE), Geology and Geophysics (GG), Instrumentation Engineering (IN), Mathematics (MA), Mechanical Engineering (ME), Mining Engineering (MN), Metallurgical Engineering (MT), Naval Architecture and Marine Engineering (NM), Petroleum Engineering (PE), Physics (PH), Production and Industrial Engineering (PI), Statistics (ST), Textile Engineering and Fibre Science (TF), Engineering Sciences (XE), Humanities and Social Sciences (XH), Life Sciences (XL).

**Maximum Two papers in GATE 2023:** A candidate may appear either in ONE or TWO subject paper(s). For candidates who choose TWO papers, the combination must be selected from the approved list of combinations and subject to the availability of infrastructure and date. Even if a candidate is appearing for TWO Papers, the candidate should fill ONLY ONE application form. Duplicate application or Multiple application with or without combination papers will be rejected and paid fee will not be refunded.

Important Dates for	Opening Date of online registration / application p	oortal 30 <sup>th</sup> August, 2022 (Tuesday)			
Application Submission:	Closing Date of REGULAR online registration	n / 30 <sup>th</sup> September, 2022 (Friday)			
	End of EXTENDED period for online registration application (with late fee)	7 <sup>th</sup> October, 2022 (Friday)			
Dates of Examination:	4 <sup>th</sup> , 5 <sup>th</sup> , 11 <sup>th</sup> & 12 <sup>th</sup> February 2023. Two sessions (forenoon and afternoon) on each day.				
Application Fee: (Per Subject Paper)	SC/ST/PwD (Persons with Benchmark Disability candidates. Additional fee during extended period is	xamination centres in India, the application fee is ₹850/- for female candidates, ₹850/- for T/PwD (Persons with Benchmark Disability) candidates and ₹1700/- for all other dates. Additional fee during extended period is ₹500/ The application fee has to be paid NE. The application fee once paid SHALL NOT BE REFUNDED.			
Application Process:	All candidates must apply ONLINE. For details, updates and application, visit https://gate.iitk.ac.in	Scan QR Code for more details.			
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Further details can be obtained by a	ccessing any of the GATE zonal websites.	IIT Kanpur is not responsible for any printing errors, if any.		
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Website:	Website:	Website:	Website:	
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