Rs. 30.00
ISSN-0566-2257

UNIVERSITY NEWS

A Weekly Journal of Higher Education

Association of Indian Universities

Vol. 60 • No. 18 • May 02-08, 2022

#Let'sBeatCoronaTogether

UNIVERSITIES HANDBOOK – 34th EDITION (2018)

(Set of Two Volumes) : (ISBN 81-7520-147-9)

PRICE : Rs. 8000/- (+ Postage/Courier Charge Rs. 400/-)

The **34th Edition of Universities Handbook** is a compendium that contains latest information on 402 Universities level institutions of AIU Members including 56 Technical, 41 Agriculture, 24 Health Sciences, 13 Law, 03 Journalism, 15 Open Universities and Five Associate Members : Kathmandu University, Nepal; University of Mauritius, Mauritius; Royal University of Bhutan; Middle East University, United Arab Emirates and Semey State Medical University, Semey have also been included in this Edition.

The Handbook gives information relating to : Courses of Studies; Minimum Requirements for admission to each course; Duration and the subjects of study for each course; Library and Research Facilities; Scholarship and Fellowships; Academic year – date for admission and the approximate dates of examinations; Names of Faculties; Deans of Faculties, Names of Professors and Readers/Associate Professors with their specialization (department-wise); Staff, Officers and Name of Affiliated Constituent Colleges together with the names of Principals and Heads of Postgraduate Departments in the Colleges.

The Handbook also includes an introductory chapter giving an overview of the University System in India.

The payable amount is required to be remitted **in advance** by any of the following modes of payments :

A. **CASH DEPOSIT**: The required amount could be remitted directly to our Saving Account in any branches of Canara Bank from places other than Delhi & NCR Area.

B. **DEMAND DRAFT ONLY** : Such instrument is required to be prepared be in the name of **"ASSOCIATION OF INDIAN UNIVERSITIES" (payable at New Delhi), preferably from the Nationalised Banks ONLY.**

C. **CHEQUES OF ANY KIND ARE NOT ACCEPTABLE.**

D. The **requisite amount could also be transferred for its direct remittance to our Saving Account via NEFT/RTGS using the following details :**

1	**Bank Account No.**	**0158101000975 (Saving)**
2	Beneficiary Name	**Association of Indian Universities**
3	Address	16, Comrade Indrajit Gupta Marg New Delhi – 110 002
4	Bank & Branch Name	CANARA BANK, DDU MARG
5	Bank's Address	"URDU GHAR" 212, Deen Dayal Upadhayaya Marg New Delhi – 110 002
6	MICR Code	110015005
7	Branch Code	0158
8	IFSC Code	CNRB 0000158
9	PAN NO.	AAATA0407F
10	Contact No.& E-mail ID	(011) 23230059 Extn. 208/213 **(M)** 09818621761 **E-Mail ID : publicationsales@aiu.ac.in**

NOTE : In case of **Cash Deposit** and **Transfer via NEFT/RTGS/ECS**, the proof of payment in the form **Counterfoil of the Cash Deposit Slip** and the **NEFT UTR Number** may be communicated IMMEDIATELY BY MAIL for linking and crediting of the same against the respective Order/ Bill, please.

- **THE HANDBOOK WILL BE AVAILBLE ON CASH BASIS FROM THE SALES COUNTER OF THIS OFFICE.**

Please send Pre-paid Order to :

The Under Secretary

Publication & Sales Division

ASSOCIATION OF INDIAN UNIVERSITIES

16, Comrade Indrajit Gupta Marg, New Delhi 110 002

Phones: 23230059 (Extn. 208/213), Fax 91-011-23232131

UNIVERSITY NEWS
Vol. 60 May 02-08
No. 18 2022
Price Rs. 30.00

A Weekly Journal of Higher Education Published by the Association of Indian Universities

In This Issue

Views on Online Teaching and Learning Processes and National Education Policy—2020

Om Vikas* and G Gopalakrishnan**

During the pandemic, most of the schools and colleges in the STEM (Science, Technology, Engineering and Management) sector, the world over, were closed, in order to contain the spread of the virus. It was during this time, that ideas sprung up to offer on-line programs for school and college students. At about this time, both educators and the taught were not confident of getting into the on-line stream of teaching; perhaps the regular offline programs would commence or whether the on-line programs need to be continued. ICT – the acronym for 'Information and Communications Technology' had to be strengthened to enable proper on-line transfer of educational materials.

Simultaneously, the teacher and the taught had to be educated and brought on equivalent wavelengths to appreciate and undergo a thought revolution to accept the on-line programs. Initially there was quite some reluctance, 'to go or not to go' or try it for sometime till one is acquainted fully with the positive aspects of such an educational system! The anxieties arose when it came to taking laboratory lectures and classes, particularly for engineering and science streams.

Implications of Change-over

Apart from the various divergent views and mindsets of the teaching community, certain things are quite clear. What happens to all the study material that had been prepared over the years, like assignments, lecture notes, power point presentations, videos pertaining to offline programs? All these need to be reorganized, rewritten, and re-presented for online lectures and classes. Total dependence on ICT facilities in the schools, colleges and auditoriums! Though it may not be relevant or difficult for the teaching processes, the gamut of difficulties arises at the other end for the learners. Learners, particularly at the middle or high school levels need to have access to continuous sources of power, access to laptops or personal computers, internet supplies, or at least a good mobile phone.

It was in 2019, when Padma Vibhushan Dr. K. Kasturirangan, Former Chief, ISRO submitted the Draft National Education Policy that was put open for wide consultations, and later approved by the Government of India in 2020 as National Education Policy—2020(NEP 2020). It recommends the change in the Educational Framework, emphasis on holistic education, multi-disciplinary university,

**Former Director, Indian Institute of IT & Management, Gwalior. E-mail: dr.omvikas@gmail.com*
*** Provost, Dr. M.G.R. Educational & Research Institute, Chennai-600095 E-mail: drgg2007@gmail.com*

freedom on choice of courses, entry and exit, skill predominance, teachers training, online resources, and use of ICT.

Corona Pandemic stepped in India in January, 2020 which shook the country due to a shortage of necessary medical equipment and kits. The workforce got displaced affecting the businesses. Schools and colleges were closed for over two years to keep off the wider spread of the COVID-19 virus.

This demanded innovation in Technology, Business and Education. Human resources at school, college, industry, services, and various sectors of the economy played a pivotal role. This prompts us to discuss issues in the evolving strategies for knowledge transfer and skill development. Virtual means of knowledge transfer were attempted. NEP-2020 also demands newer strategies of educational framework and a resilient education system. The nation must develop the ability to adjust to changes, and the ability to innovate.

Objective of Education

"Educate and raise the masses, and thus alone a nation is possible… We want that education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet".

Swami Vivekananda

The Delors Report (1996) to UNESCO identified the technological, economic and social changes at local and global levels and the expansion of knowledge and our capacity to assimilate it. The report suggests four pillars of Education:

- *Learning to know* – A broad general knowledge with the opportunity to work in depth on a small number of subjects.
- *Learning to do* – To acquire not only occupational skills but also the competence to deal with many situations and to work in teams.
- *Learning to be* – To develop one's personality and to be able to act with growing autonomy, judgment and personal responsibility.
- *Learning to live together* – By developing an understanding of other people and an appreciation of interdependence.

National Education Policy (NEP) 2020 is aligned with aspirational goals of the 21st Century education, including Sustainable Development Goals while building upon India's traditions and value systems. The vision of the policy is to instill among learners, pride in being Indian, and to attain high-quality knowledge and skills to provide solutions to rapidly changing climate, and socio-economic man-machine perception. Fundamental principles are holistic education, synergy inflexible curricula, emphasis on critical thinking and creativity, multilingualism, and pride in Indian ethos, NEP-2020 gives a broad architecture of the 'Education System'.

Awakening towards Self-reliance

With particular reference to the Indian scenario, where there is a problem of educating a large percentage of have-nots, it seems more logical to offer E-learning platforms at both secondary and tertiary levels. From the CEIC Data, the India Population reached 1,355.0 million in March 2021; of this the labour force participation reached a 46.3% in December, 2020. As per NITI Aayog, a positive feature of situation is that education levels will improve over time because the younger age groups are much better educated. Further, independent report by Brookings concluded that the number of people living in extreme poverty in India has reduced from 268 million in 2011 to less than 50 million as of 2020.

All these statistics indicate that with skill development and education, the Indian scenario would become more robust by 2030. This implies that cheaper and more economical sources of learning should be made available to the poorer sections of society. One of the advantages of Online or E-Learning could be that the education could be offered at a cheaper cost so that the lower strata of the Indian Diasporas could benefit from this approach.

Some of the obvious advantages of E-learning are: it is cost-effective, easily available, could be taken at convenient times, isolated thinking, and one can choose any program that is being offered online. This could suit the working population, as the time for learning is not fixed, but could be chosen at will. In the case of the student community, the rivalries, public criticism, ragging, and group politics now noticed would be eliminated. E-Learning facilitates learner-centric learning anytime and anywhere at one's own pace.

Critical Views on E-learning

Critics of E-learning would argue that one should possess time management skills, social interactions are negligible and concentrating more on theoretical aspects of the subject, practical being totally visual with no hands on experience and health being affected. Answers to these are simple. Time management could be controlled by the person choosing an appropriate time frame to do an on-line course. Further, discussions with peers and the teaching faculty eliminate isolation, and with a judicious timing selection and relaxed atmosphere eliminates any mental health problems and anxiety ridden situations.

Online Teaching-Learning Processes became a speedily accepted norm during the Corona pandemic when offline education was not possible. We may talk about blended learning taking judicious advantage of both online and offline teaching-learning, adaptable for all professional courses/programmes. Change-over demands a shift in Blended T-L pedagogy:

- Teacher-centred to learner centric.
- Peer / collaborative Learning.
- Case based teaching material.
- Focus on Why and How - scientific thinking, reasoning and critical thinking

Accessibility and Affordability in the Rural Areas

In order to make E-learning competitive and easily available, it becomes necessary to introduce a variety of ICT techniques to be easily affordable and within reach of the average person; which at the moment seems to be expensive.

In one of his regular *Mann Ki Baat* Radio programs, on the occasion of the National Science Day, to quote Hon'ble Prime Minister Modi -"How does a calculator work, how does a remote control work, what are sensors? Along with this, are such scientific elements also discussed in the house? Maybe we can easily explain these things behind the everyday functioning of the household, what the inherent science behind a phenomenon is?" These are the lines that in short explain the rural areas of our country! We need to accelerate the scientific temper, and also aim to promote the use of laptops, in the first instance. *This implies that such laptops should be made available on a mass scale at low costs to the common man.*

Further, another important area to be handled is the availability of communication towers/electrical power in the far-flung villages of India. Even now, as of date, several areas in the interiors of various states do not have a continuous power supply, even if there exist connections to the electrical grids. Non availability of power – introduction of solar power could perhaps be a solution in such rural sectors!!

Towards Holistic Education

There have been deliberations by various governments all over the world to provide their people with skills needed for their own country's development. In the wake of such cries throughout the world, all democracies are introducing and reintroducing various changes to their patterns of education. India is perhaps the only country, to introduce boldly the new system and pattern of education 5+3+3+4; which implies that all children would be enrolled at the age of 3 into the nursery, and an education system that runs for 15 years. This is obviously the right approach, taking into consideration the mental development of young children. It may be prudent to look into online E-Learning as well - catch them young!

School Education is a major transformational recommendation that intrinsically combines education and health to build up the foundation for pursuit of knowledge. The proposed academic structure is 5+3+3+4 years which implies that school education becomes 15 years rather than 12 years hitherto (Table-1).

It is to be noted that currently, Nursery and KG education is in private schools, and not easily accessible to the poor strata of society. In the proposed scheme, the Government will support this

Table 1: Proposed Academic Structure of School Education

Age-duration	**3-6 years (3)**	**6-8 years (2)**	**8-11 years (3)**	**11-14 years (3)**	**14-18 years (4)**
Classes	Nursery & KG	Class 1 & 2	Class 3-5	Class 6-8	Class 9-12
Category	Foundational		Preparatory	Middle	Secondary

early foundation education through '*Anganwadis*'; with the presumption that 85% of brain development is up to the age of 6 years. At these levels education could be predominantly through multimedia, exposing the children to good social habits, through rhymes, singing, pictures, listening to stories, some preliminary reading, and writing skills through the mother tongue/local dialect. At the middle and secondary stages, at the middle and secondary levels, the curricula need to be heavily revamped to make them holistic by integrating Indian knowledge tradition, Indian ethos and Indian languages, along with global demands, perhaps introducing Music, Dance, Drama, and Fine Arts - Blended T-L process is recommended.

The future is going all out with technical advances in every field of activity, and it should be taken that going on-line helps to introduce the student to cognitive thinking and planning. Along with this scheme of the NEP-2020, it is now left to the educators to come along with practices which could expose the student community to think practically on every subject, get the students exposed to hands on experience in every field of activity they intend to choose – internships!

'Innovation-centric Educational Framework', may ensure to meet expectations of the stakeholders – teachers, students, parents, school administration, and industry – to impart enjoyable, interactive, inciting critical thinking, hands-on skills, and discovery based learning, and an affordable value based quality education. One may consider some obstacles in the learning process, such as distractions by way of abundance of information (infomania), stereotyped evaluation system, 'Net Savvy' students often bunk classes, attitudinal mismatch between the learner who is digital born, and the teacher digital immigrants (especially in the rural environment).

Industry finds many graduates weak in basic concepts, with poor communication skills, lack systems thinking and critical thinking, lack innovation and entrepreneurial skills. Industry requires well-grounded practitioner with Traits:

- *Cognitive Knowledge (Know-What)***:** basic mastery of discipline
- *Practical proficiency (Know-how)***:** ability to translate theory into practice
- *Instinctive Perception (Know-why***):** In-depth perception of cause and effect of relationships
- *Achievement Motivation (care-why):* desire to achieve success
- *Inter-Personal Interaction (concern-who):* ability to deal with people for common goal

Society expects well behaved, caring, and helping person with high moral values. Passing out Graduates should have respect to traditional knowledge, cultural values, and sensitive to both local and global issues. The Teaching-learning processes must respond to the above.

Managing Blended Learning

There is need to have judicious mix of online and off-line teaching learning processes, interaction with nature, family, society:

- At primary education levels, human touch is important. Hence, off-line teaching learning may be predominant. Online gaming may be introduced.
- At secondary level, online, offline and peer learning may be in approximate proportion of 30 - 60 – 10.
- In the case of higher education, online, offline and (real + virtual) peer learning may be in approximate proportion of 50 - 30 – 20.
- Virtual labs are becoming reality.

Schools in rural areas may face problems in Internet connectivity. Hence, educational programs on DD channel may be imparted. CIC person may volunteer to help out the school to some extent and give quick feedback to the concerned authorities to help the village schools.

Pedagogy

Important is pedagogy. Linear narrative may not be suitable in online e-learning resources. Teacher need to prepare a set of questions and explain step by step. Off-line teaching must also be interactive, not selective but inclusive, as far as possible. Collaborative learning may be encouraged to explore cross-cultural behaviour. Design thinking skills may be promoted through group projects. Practical training may be through Virtual Labs conceptually, and then real-life laboratory experience will make one confident.

Disjoint Vocational and Academic Streams

At present, vocational and academic streams are disjoint. Vocational education suffers from

social stigma. It would be better to merge these two streams and have an integrated education pattern with requisite respect to both. There is an honors graduate course on Experimental Physics. Hence there may be skill predominant degree courses in engineering from IITs, rather than from a separate skill university. Engineering discipline may learn from Medical Science discipline to integrate theory, practice, and internship.

Evaluation System

The Evaluation system is important to ensure the quality of education. Technical Skills may be assessed through direct tests. The present trend of objective tests through OMR does not consider the skill of presentation, aesthetic handwriting, and thinking process. MCQs (Multiple Choice Questions) at the secondary level, do not test conceptual knowledge. It is easy for teachers to prepare a question paper with MCQs and definition-oriented questions. Preparing a good question paper is more challenging than preparing a lecture. There is a need to orient the school teachers on preparing effective question papers. Some efficacy measures may also be introduced.

Assessment of Behavioural Skills may require preparing rubrics by the teacher. This is normally missing in the present education system. Once CCE was introduced in schools, it kept the teachers busy, and could not be appreciated by the teachers' community. There is a need to have a judicious mix of online and offline evaluation, for both Technical and Behavioural Skills.

Conclusion

With the views expressed above, it is felt that the implementation of the various aspects of the NEP–2020 needs to be studied and deliberated further, being fully implemented, in that the various needs of the different regions of our country are assessed in their perspectives. A change is definitely needed in the entire educational structure being practiced as of now.

References

1. Delors, Jacqous (1996). Delors Report, Delors Commission, France
2. NEP-2020 (2020). Ministry of Education, Government of India. ❑

Teaching Life Skills through Curriculum: Making Education Meaningful

M R Patil* and D B Arolkar**

Education is an important human activity born with the birth of human race. Initially, education was aimed at helping a child to become a good member of his/her tribe or band. There was a marked emphasis upon training for a citizenship as during those days' people were more concerned with the growth of individuals as members of a tribe and the thorough comprehension of its way of life (Arolkar and Patil, 2003). The aim of education during ancient times was not just the acquisition of knowledge as preparation for life in this world, but for a complete realization and liberation of the self. According to Swami Vivekanand, "Education is not the amount of information that we put into your brain and runs riot there, undigested, all your life. We must have a life building, man-making, character-making, assimilation of ideas. If you have assimilated five ideas and make them your life and character, you have more education than any man who has got by heart a whole library. If education is identical with information, the libraries are the greatest sages of the world and encyclopaedias are the greatest Rishis." The inherent message from each statement of Swami Vivekanand on education continues to be relevant in the 21st Century and the real education should aim to accomplish these objectives. The national policy on Education 1986 which was modified in 1992, emphasized on a sustainable improvement in the quality of education to enable all children to achieve the essential levels of education." In 1996, the UNESCO, had declared that a meaningful educational/ learning engagements should rest on the four pillars:

- ***Learning to Know:*** Concerned less with the acquisition of structural knowledge than with the mastery of learning tools.
- ***Learning to Do:*** Confines to be entrepreneurial in the 21stcentury and emphasises on know how to manage oneself, how to set up teams and groups with common work and group management.
- ***Learning to Live Together***: This focuses on a total shift from a self-centeredness to understand other people's reactions by losing at things from their own point of view
- ***Learning to Be:*** This is covered with self-evaluation and acceptance. It means one should evaluate oneself and accept whatever results come. In case of unfavourable results, one should take it as a constructive 'criticism' to improve or to get better results. The four pillars in totality convey that emphasis should shift from certificate acquisition to skill building; societal re-engineering to fit in into the 21st Century realities; less of classroom learning to more of outdoor learning and revisiting indigenous education that promotes partnership and strategic alliances over isolation and individualism.

The demands of the knowledge economy and a knowledge society call for an emphasis on the needs for acquisition of new skills by learners on a regular basis and become lifelong learners. The National Education Policy (NEP) 2020, also emphasises more on recognizing students' capabilities, holistic education, conceptual understanding, creativity and critical thinking, ethics and human values, flexibility, diversity, outstanding research, life skills, employable skills etc. The reviewed literature on the purpose and objective of education clearly conveys that the true education should aim to provide quality education in terms of training children towards making them good members of the society, training for citizenship, life building, character building, mastery of learning tools, living together, value education, outdoor learning, skill building, etc.

Against this background, several questions that need to be addressed are: First and foremost, Is our present system of education meeting the demands and expectations of the society and the industry?; Is the gap between what is being expected from society and industry and what is being taught in educational institutions continues?; What are the determinants/indicators of a quality education?; Are 100% result, scoring 100 out of 100 marks, highest number of distinctions and an excellent student-teacher ratio, the indicators of quality education?; Are the continuous revisions and restructuring of syllabi and an excellent infrastructure,

** Professor, Department of Commerce, Dnyanaprassarak Mandal's College and Research Centre, Assagao, Bardez, Goa-403507. E-mail: drmrpatil1960@gmail.com*

*** Professor and Principal, Dnyanprassarak Mandal's College and Research Centre, Assagao, Bardez-Goa, 403507.*

the indicators of a quality education? Alternatively, is the acquisition of the required knowledge, a set of basic skills and abilities to effectively handle the demands and challenges of the life, are the indicators of quality education? According to the National Association of Software and Services of Companies (NASSCOM), a trade association of IT industry, only about 15 to 20%. of the graduates coming out from our Higher Educational Institutions (HEIs) are employable. In the case of the remaining graduates, there is a wide gap between the skills learnt by the students and the 'skills set' required by the Industry (Rao, 2019). A survey revealed that employers consider the traits like domain knowledge, communication skills, motivation and managerial ability while recruiting. Industries, professional organisations and researchers have focussed on the important soft skills at the work place (Dhar and Dhar, 2019). Under these circumstances, it is felt essential to make a sincere effort with an innovative approach towards teaching life skills through curriculum so as to reduce the gap between knowledge and skills learnt by the students and the knowledge and skills required by the industry and society.

The term life skills refer to the skills one needs to make the most out of life. Any skill that is useful in one's life can be considered as life skill. For example, the skills like reading, writing, speaking, listening, dressing, driving, cleaning, cooking, travelling, swimming, repairing, typing, etc., would certainly help individuals to lead a better and meaningful life. The World Health Organisation (WHO) defines life skills as the abilities for adaptive and positive behaviour that enables individuals to deal effectively with the demands and challenges of everyday life. These life skills are acquired through learning and /or through direct life experiences that enable individuals and groups to effectively handle different issues and problems commonly encountered in daily life. A thorough knowledge of using an accounting tally package effectively can be a skill acquired through learning and practicing. A student, going every day to the library and not getting a place to sit, has started reaching every day the library before anybody arrives can be a skill acquired through life experience.

Life skills are highly essential abilities that help to promote a mental wellbeing and competency in young people as they face realities of life. These skills empower young people to take positive actions to protect themselves and promote a healthy and positive social relationship. With strong life skills, one can explore alternatives, weigh pros and cons and make a rational decisions in solving day today problems of life. Skills are also classified as hard skills and soft skills. Hard skills are teachable ones and these can be learnt from books, apprenticeship and practice. The skills like specific knowledge in mechanical engineering, computer programming, web designing, proficiency in English language, budgeting, accounting etc. are considered to be the hard skills. Soft skills are more of behavioural in nature and closely related to human personality. These skills cannot be taught in schools and colleges, but can be learnt through experiences. For example, human abilities like getting along with others, adjusting with prevailing situation, working on a team, listening to others, making others happy, etc., are considered to be the soft skills.

In today's competitive and highly complex society, people face several challenges/problems at the different stages of their lives. Some of the common problems encountered in the day today life are: poor academic performance, getting a job/work, lack of concentration, lack of confidence, poor communication skills, poor employability skills, high expectations from family and society, occupational stress, lack of social skills, feeling of inferiority and superiority, depression, negativity, short temper, relationship problems, poor career guidance, lack of time management, addiction to mobile and internet, emotions like anger, sadness and anxiety, addiction to alcohol and drugs, home sickness, loneliness, debt pressure, self-esteem, jealous and many others. These problems would obviously make the lives of people more miserable and the growth and progress of them would be highly affected. This would also have an impact on the welfare and well-being of the society. Under these circumstances, the genuine need of the hour in the 21st Century is to enhance the abilities and capabilities of individuals so as to enable them to handle these issues independently with a positive attitude and make their lives happy, meaningful and more comfortable in the society.

Toward this end, the education system comprising right from pre-primary, primary, secondary, higher secondary, college and post-graduate departments of universities indeed play an important role in developing different life skills in individuals so as to make them competent to deal with the day to day problems. But, unfortunately, life skill development is not given much importance. More emphasis has been given to marks, grades and ranks. Hence, the current education system is called as marks oriented and examination oriented. For example, once an exam was conducted on 'How to be successful in swimming?

and one student studied thoroughly the book, how to achieve excellence in swimming written by a National Champion in swimming and the said student secured first rank in the exam. When the student was actually asked to swim, he / she didn't know how to swim, then what is the use of getting the first rank in the examination? The defined curriculum, syllabus based teaching, syllabus-based learning and syllabus-based evaluation system are making our students handicap. The students self-thinking, self-explanation, teaching and learning beyond the syllabus, teaching relevant and useful things other than syllabus are considered out of the syllabus. A student's performance can be evaluated in two ways: application oriented evaluation and information oriented evaluation. This can be illustrated with two types of questions on the same concept viz, Do you think that management is found in every walk of life? Elaborate and, what is management? Discuss its functions. Many times, the former question would be considered out of the syllabus and the latter would be within the syllabus. The present education system by and large, provides facts/figures/information and to some extent knowledge. Hardly attempts are being made to train and develop life skills through the curriculum. As a result, students, when they come with their academic certificates to the real world, they find it very difficult to adjust and cope up with the realities. Hence, it is highly essential to learn and develop the required life skills through the designed curriculum as well as from outside the curriculum so as to lead a better and healthy life. In this regard, the World Health Organisation (WHO) has recommended top ten life skills that need to be inculcated in students during their study period in schools and colleges. These skills are illustrated as under:

Self-awareness Skills

Self-awareness essentially means an insight into one's own strengths, weaknesses, limitations, qualities, aims and objectives, capabilities, character, etc. It is always better to have a thorough understanding about oneself. Many times, we try to know more about others but, we ignore to know about ourselves. This is the most important life skill which certainly guides individual's actions, decisions and behaviour in the society. If individuals make their SWOC analysis, they would surely focus more on their strengths and try to improve over their weaknesses. If the SWOC analysis reveals that a person is good in fine art and not very good in singing then he/she will focus more on becoming an artist rather than trying to become a good singer. That is how self-awareness skill helps people to lead a happy and comfortable life. Once an individual knows his/her capacity and competency, then he/she will always act within their limits. For example, Mr. X is invited by his colleague to grace the occasion of a new house opening ceremony will definitely play the role of a guest not the role of owner of the house as he knows that he is just a guest and he has to play his role as a guest. A student, knowing his weakness in maths and science will not prefer to take admission to science stream. Lack of self-awareness, very often would lead to crisis, unhappiness and unnecessary tensions in life. Hence, individuals always need to understand about themselves thoroughly so as to deal with the different real life situations smoothly and efficiently.

Empathy Skills

Empathy means an understanding and caring for other people's feelings, needs, desires, sadness, problems, etc. It conveys that one should not live for oneself but one should also live for others. One has to recognise and respect the feelings of others. Empathy is one of the good qualities of a good human being. The people who live for themselves will not be remembered by others and the people who live for others will be remembered. The success in life is not money or power but helping others and their remembrance is the success. One has to respect the feelings of members of the family, friends, neighbours, colleagues and others in the society at large. It is rightly said that empathy is seeing with the eyes of another, listening with the ears of another and feeling with the heart of another (anonymous). Empathy tells that how an individual respects and enjoys his/her own achievements, in the same way he/she should enjoy and respect the achievements of neighbours. How the parents love their children and in the same way they should love the children of their neighbour. How a manager enjoys his / her happiness, travelling by a car should equally understand the problems and difficulties of his / her employee who is travelling by the public transportation; how a teacher appreciates the fast learners and in the same way he / she should equally appreciate and understand the difficulties of slow learners. The empathy also helps people to accept both happiness and sadness and good things as well as bad things. Empathy is stronger than sympathy. It is the ability to put oneself in the place of another and understand others feelings.

Critical Thinking Skills

Critical thinking is a process that involves an intellectual, logical, and skilful analysis and

interpretation of facts/information before arriving at any opinion or decision. People come across several issues/problems in their day to day life. Critical thinking makes people to think one step ahead and exercise a proper care and caution while taking any action and decision. Many times, people are tempted to take decisions hurriedly without proper thinking and foresightedness. As a result, they happen to face adverse consequences and unnecessary tensions in life. For example, a childhood friend of Mr X has expressed in an angry mood his difficulty that he has a financial problem as he did not go for any work during the lockdown period of COVID-19 virus and managing home has become very difficult but he did not ask him money. Mr X analyses critically different factors that have led to that situation of his friend and also reveals the reality of the problem. Based on the analysis, Mr X decides to provide financial support to his childhood friend. This is what is known as critical thinking. People face many situations/problems like changing of job, accepting another new job, making an appeal to higher court, investing in stock market, asking personal loan from a friend, sharing confidential information with a friend etc. In all these situations, before arriving at any decision, he/she has to critically evaluate each problem in terms of their pros and cons, good and bad effects, benefits, and usefulness and finally what would be the worst possible outcome, etc. This critical thinking life skill guides individual in taking meaningful and effective actions and decisions

Creative Thinking Skills

Creativity means there is something new or original. It is the process of turning new and imaginative ideas into a reality. Creative thinking means looking at something in new or in different ways. It is something thinking out of the box. For example, referring four books on Management for Managers and writing one more book is like thinking within the box. When the same book is written without referring any books, purely based on the past, present and future dynamics of corporate world and author's own experience, would be considered to be a thinking out of the box. It is the ability of individuals to make something new and useful one. Every individual is creative in one or the other way and has a creative thinking ability. People come across several issues, problems and different real life situations in the day to day life. These problems and different life situations are handled differently by different people. It is rightly said that winners don't do different things but, they do things differently. No doubt, out of the box thinking would certainly help people to solve their problems amicably, smoothly and more friendly. This life skill also makes their relationship in the family, at the work place and in the society more healthy and strong. For example, parents, being friendly with their children and guiding them about their studies in such a way that it does not exert any pressure of the study, be happy, whatever best possible, you study, whatever course you like, you join, do not worry even if you pass in pass class, but be a good human being and helpful to others. This friendly approach of the parents to their children is considered to be a creative thinking as against the traditional thinking. Because this innovative approach would certainly build confidence and positive thinking in their life. Similarly, a manager in a company, calling a team of workers and placing before them a small problem that there is pressure of meeting customers' orders within next two days which happen to be the Sunday and Labour Day. What can be done? Could you please guide me in this matter? All the workers willingly and happily told that we will work on both the days and we will meet our customer orders. This is what a creative approach to the prevailing problem is. People face problems like this in every walk of life and therefore, these are to be handled wisely with different innovative ways so as to make their lives more meaningful.

Decision Making Skills

Decision making is an important life skill. Individuals have to take decisions to several day to day problem/issues like choosing a career, choosing an institution, starting a small business, closing down business, changing a job, leaving a job, paying a loan, taking a loan, buying a house, making an investment, selling a property and so on. People have to think thoroughly about the different options that are available to deal with each and every problem and select the best and the most efficient option as a solution to each problem. Arriving at the best option involves problem identification, understanding and gathering sufficient information about the problem, explaining the alternatives, assessing each alternative with regard to its merits and demerits, good and bad effects, long term and short term consequences, choosing the most viable, economical and practical option from the available alternative. For example, an individual has a problem of changing a job. While taking this decision, one has to assess in terms of need for changing a job, availability of alternative job options in hand, good and bad effects of changing a job, short term and long term consequences, future career prospects, terms and conditions of the new job as well as existing job,

difference in the package and many others. After a thorough assessment of these, one can decide whether to remain in the existing job or to take up a new job. The decision-making and action taking are not one and the same. A Frog, sitting on a wall, deciding to jump into pond does not mean that the frog has actually jumped. Similarly, deciding to take a loan does not mean that loan is actually taken. People have to take different major, minor and routine decisions. Very often, we take poor and hasty decisions because of lack of sufficient information, lack of knowledge and poor deliberations. As a result, we suffer and face adverse consequences. While taking a decision, it is highly advisable to seek opinions and guidance from friends, colleagues, seniors and from well-wishers. More importantly, an involvement of the concerned persons in the decision making process is highly essential to enhance chances of success of any decision. While taking a decision, one has to project the worst possible consequences of the decision so that at a later stage, there is no shocking and repenting of the worst effects. In certain cases, decisions are taken on the basis of their relative worth and value and in certain situations, delaying decision-making itself is a decision-making and more important point to be noted in certain cases that after seeking all possible guidance and opinions from others, a final decision should be taken by an individual himself/herself and should not be left to others. A healthy and efficient decision-making would ensure a better and comfortable life problem solving.

Problem Solving Skills

Problem solving skill is an important life skill and this skill has assumed greater importance in the present complex human life environment. Today, we come across several problems at home, at school, at workplace and in every walk of human life in the society. Problem solving skill refers to an ability of an individual/group to describe the problem, understand the inherent cause/reason behind the problem, explore different workable solutions, assess the relative merits and de merits of each solution and thereby choose the most effective and practical solution to address amicably the prevailing problem/issue. The people with problem solving skills are highly recognised in every sphere of economic activity as these people are valued as the problem solvers rather than problem creators. Employers in the corporates prefer to recruit people with problem solving skills and for the job seekers, this skill is a value addition to their resume. Therefore, the job seekers should emphasize their different skills and experiences in their job resume, besides other components.

We face number of day to day problems like water, electricity, internet, health, finance, sound system, traffic, garbage, clashes between family members, conflict between workers, conflict between superiors and subordinates, continuous fall in the company's sales, increasing students drop outs, increasing cyber-crimes, rising bank bad loans and many others. Some problems need an immediate solution and some problems need some breathing space to think and come out with amicable solutions. In order to solve the problems more efficiently and effectively, the problem solver essentially needs some skills like patient listening, creative thinking, convincing, common sense, negotiating and effective communication. Problem solving skill is illustrated with the following:

Water Problem

In a school, there is water problem which needs an immediate solution. In this case, it is clearly understood that the water problem is due to the blockage of pipeline. There are three solutions, explored to address this problem viz. calling the plumber and getting the pipeline repaired, lodging the complaint with the department of water supply and calling the private water tanker to supply the required water immediately. Among three alternatives, the best and the most effective solution under the present scenario is to call the private water tanker to make water available to the school. As the other two solutions would certainly require some time to implement and bring them into practice.

Problem of Power Supply

On the day of online State level entrance exam, there is sudden interruption in the power supply from the electricity department. To resolve this problem, there are three alternative solutions explored viz. installation of solar energy, buying a high capacity generator and third one going to electricity department and explaining the genuine need of immediate supply of power at least till the entrance exam gets over. Among three alternative solutions, third solution is the most appropriate and more practicable to the present situation. The other two solutions will require some more time to do all the procedural formalities and these are not viable in the prevailing circumstances.

Rising Bad Loans of Banks

Rising bad loans of banks ordinarily refers to the loans that are given by the banks to borrowers and the same is not repaid by the borrowers. As a result, bad loans stop earnings for the banks and put the banks under the financial crisis. To resolve this problem of

bad loans, there are three solutions identified viz, take legal actions against the defaulters; give discount/ waive 25% of loans and the third one is to develop an effective loan monitoring system comprising the following components: develop a good rapport with the borrowers; inculcate moral obligation in borrowers; provide a post loan guidance and continuous feedback and follow-up. Among three alternative solutions, the first two are not so viable and practicable. The third one perhaps could be the appropriate solution to address the problem of bad loans in the years to come. The problem solving skill can neither be learnt overnight nor be taught in schools and colleges, but it can be acquired through real life experiences and practices over a period of time. The problem solving examples are just illustrative and not exhaustive ones. These examples would certainly introduce us to problem solving skills.

Effective Communication Skills

Communication skill refers to an ability of a person to convey or share ideas, feelings, thoughts, expressions, opinions and information with another person effectively and these skills have been highly recognised in this global world. The communication skills occupy an important place in every walk of human life like personal, professional, office, trade, industry, banking, insurance, tourism, teaching, learning, research and so on. The effective communication brings people together, close to each other and reduces the communication gaps. The communication maybe oral, written, formal, informal, upward, and downward and it may also be intrapersonal and interpersonal. Without effective communication between and among people across, no single human activity can be carried out/ achieved. Today, what ever the progress and growth, the nation has achieved is because of the effective communication across the people of the nation. The effective communication emphasises more on effective listening. There is difference between communication and effective communication. In case of the former, the message is communicated to another irrespective of whether the receiver understands it or not. For example, a non-stop, one hour lecture on "Intellectual Property Rights" irrespective of whether the audience understands or do not understand the lecture. It is like hearing rather than listening. In case of the latter, the speaker before he/she starts lecturing, prepares a good listening environment, customizes the lecture to meet the audience requirement and connect the audience to the lecture and finally, delivers the lecture in such a way that everyone understands clearly the basics of intellectual property rights. The effective communication emphasises more on several factors.

Active Listening

It refers to giving utmost attention and respect to the speaker. While listening to the speaker, the listener should not deviate his/her attention and remain active to listening. A good listener can be a good leader. For instance, when the speaker is conveying any message, the receiver being busy in talking on a mobile phone or working on laptop clearly shows poor listening and thereby makes communication ineffective. Hence, the listener should ensure active listening to make the communication process more effective.

Avoiding Interruption

Many a times, the speaker is interrupted by the listener. For example, a teacher, while solving the difficulties in maths, the student, interrupting the teacher and asking about the model question bank for the coming exams, would certainly interrupt the communication between the teacher and the student. Therefore, the receiver should ensure that he/she should not disturb in-between till the speaker completes his/ her communication.

Adjusting Communication Style to the Target Audience

This is another essential requisite to effective communication. Style of communication refers to the mode/way of communication with others. Different persons use different styles of communication like oral, written, formal, informal, face to face, one to one, and so on. Over and above, people also use at workplace different mode of communications. For instance, the HR manager, going himself to the subordinate and saying good morning instead of waiting for the subordinate to say good morning, etc. These styles of communication differ from one individual to another individual. In the whole process of communication, individual styles/modes of communication are not much important. Rather, how effectively they communicate with others is more important. The styles and modes of communication also differs in terms of vocabulary, language, volume of voice, tone, words, according to the situations, circumstances, target audience like professionals, seniors, colleagues, friends, workers students, farmers and teachers. The mode of communication is illustrated with one example: In an organisation, the settlement of one employee's medical expenses reimbursement is pending before the two senior subordinate officers under the HR department.

The claim settlement is pending because of the personal ego clash between the two officers, who do not talk each other, do not face each other, do not meet each other, they shout and blame each other. The HR head has to sort out this issue and he can use several styles of communication like issuing an office order, issuing a warning letter, calling both of them in his cabin, HR head himself going to them, meeting personally both the officers, one to one meetings, etc. Among several modes of communications, HR Head, finds, talking separately to both the officers, then calling both the officers in his cabin, appreciating their previous work achievements particularly the settlement of complicated claim cases amicably and then politely requesting both of them to settle the claim to help the employee, is the most effective mode of communication.

Clarity, Simplicity and Audible

The communicator has to be clear in his/her mind about the precise content to be communicated, and for that he/she has to make some groundwork about the matter to be communicated. If the communicator is not prepared, then communication would become ineffective. The communicator has also to give attention to the voice, volume of sound like too loudly, too slowly or moderate, pronunciation, etc. What is more important that the message should be listened actively and clearly by the receiver? Another most important thing the communicator needs to do is that he/she has to be as simple as possible in communication. The quality and effectiveness of communication does not depend upon language and use of idioms and phrases, but it depends upon the quality of understanding by the receiver. How simple, one can communicate is illustrated with one instance: A lecture delivered by the speaker at the workshop on *'*Research Methodology*'* for the teachers organised by the North Maharashtra University, Jalgaon. At the end of the workshop, one of the feedback expressed by the teachers is that "The speaker has explained in English but we have understood in Marathi". The inherent meaning of the feedback is that the lecture was well understood and appreciated by the teachers. This is what the simplicity of communication.

Accepting Critical Feedback

Generally, we like to accept appreciations and recognitions and at the same time we do not like to accept failures and criticisms. We accept happily different occasions of happiness and do not accept unhappiness. One of the greatest quality of human should be to accept happily the criticisms and weaknesses and take them as opportunities to bring an improvement in their personality. To become an effective communicator, one has to be open minded to receive criticisms as a positive feedback so as to strengthen the communication skills. It is always better, soon after we delivered a lecture talks/ speech, should ask immediately our close friends and colleagues, the sincere and honest comments and feedback. Accordingly, we have to bring necessary changes in the future speeches and talks.

Recognising and Respecting the Receiver

Old quote says, "Give Respect and Take Respect." In a society/ an organisation, every human being is important and everyone certainly has one or the other skill or quality and therefore, no one should be ignored and neglected. Respecting and recognising the receiver, definitely ensures effectiveness in communication. In the process of communication, smiling at the receiver, praising his/her work, giving a feeling of belongingness etc., would perhaps enhance his/her attention and concern towards the communicator.

Understanding and Sharing of the Feelings of the Receiver

This is also equally important to improve communication skills. The communicator needs to understand the difficulty/problem, maybe personal/ official and express the concern and moral support to the receiver. Definitely the receiver feels more comfortable and thereby listens very attentively.

Allowing Others to Speak Without Interruption

While conversing with others, allowing others to complete their say without interruption is another important requisite need to be focused. For example, a student expressing his/her difficulty to a teacher, a salesman expressing his/her progress to a sales manager, a bank customer, telling the problem of ATM machine, a patient expressing his/her sickness to a doctor and so on. In all these conversations, either speaker or listener should allow, either of them to complete their communication. If others are not allowed to complete their say, in turn, they will also not respond to the communicator.

Responsiveness

It emphasizes the attention and keenness of the receiver towards his/her communicator. If the receiver is not in a good mood and not responsive then, the communication will be affected.

Staying to the Chosen Topic

Confining to the pre-decided/planned topic/ agenda is an important requirement to ensure effective communication. Many a times, we decide/plan one thing and we start telling another thing. For instance, in a company, a training workshop is planned for the workers on the topic 'Ethics and Code of Conduct' and the speaker switched over to other topic like monetary and non-monetary incentives to the workers, would certainly affect the communication. Take another example that the speaker is invited to address the Final Year Engineering students on the occasion of Farewell Function. If the guest speaker, instead of guiding and advising the students on the topic suiting to the occasion like 'Career Opportunities and Challenges Ahead' starts telling the students about the different regulatory bodies of Engineering Colleges, then the final year students will become upset and lose the interest in listening to the lecture which is not expected at this occasion. Similarly, there is other situation where in the speaker began the speech nicely but finds it difficult to conclude it appropriately. As a result, the speaker may go on talking something which is not relevant, also affects the effectiveness of communication. It is further essential that in the process of conversation, the communicator, preferably avoid the use of the words like 'you are of no use', 'you are good for nothing', 'you are useless', 'you are liability for us', etc. These would certainly upset and affect the attention of the receiver. Sometimes, communicating negative things positively would also enhance the effectiveness of communication. For example, a student after answering his/her oral test, asked the teacher about how was his/her oral test?" The positive answer might be "Yes", it was really nice but, still you can do better instead saying it was very poor. In case of routine and day to day written communication between friends, colleagues, superiors, managers, etc., it is good to avoid the letters/messages using the word like you are warned, you are reminded, you are instructed, etc., instead, some polite or humble words may be used to smoothen the communication. Even, in case of an oral communication, it really makes a difference between the usage "May I please come in Sir" and are you free Sir?" We are sure the several examples illustrated would definitely help towards improving the communication skills.

Inter-personal Relationship Skills

Inter-personal skills are another set of life skills that facilitate an effective social connections or affiliations with others. These skills emphasize an individual's ability to go along with others in different walks of life in the society. In order to lead a better, comfortable and healthy life, one has to know the art of living with others. It is a fact that at home, one has to live amicably with the other members of his/her family viz., parents, sisters, brothers, aunts, uncles, grand-parents and others. At the workplace, he/she has to work with colleagues, superiors, subordinates, and support staff. In a society, he/she has to have a healthy and strong social relationship with neighbours, friends, elders and members of the society at large. It is true that in case of different genuine, real life situations like financial difficulty, medical emergency, family disputes, workplace conflicts, mental depression, and any other emergencies, property, wealth, money, social network platforms of human beings like Facebook, LinkedIn, what Sapp, emails and so on will not come to the actual rescue of human beings, but only people can share and support each other. This is indeed well experienced during the ongoing COVID-19 pandemic from 2020. It is said that "wealth is not a permanent friend but friends are permanent wealth." Hence, it is essential to make and keep a friendly relationship with others to promote the mental and social wellbeing of people. The soft attitude of human beings is one among others which creates a strong relationship.

The advancement of science and technology and the emergence of different digital modes of communication indeed have greatly affected the people's interpersonal relationship particularly in terms of face to face interactions. As a result, people are becoming more and more technology centric rather people centric. We can develop strong interpersonal skills only when we meet other, be with others and interact with others. Today, even in a family, by and large, children know everyone as uncles and aunts and they hardly know other relations because of their limited exposure in terms of mixing with others, going to relatives' places, going to their native places, staying with grand-parents, etc. Children travelling by public transport, studying in public schools, staying in public hostels, participating in public festivals would certainly develop interpersonal skills like how to adjust with others, how to speak with others, how to negotiate with others, how to respect others and so on. The unique Hindu Undivided Families (HUF's) in the country are regarded to be the best schools to learn interpersonal skills as there are several live examples of HUFs, where in 150 to 200 and more persons are

living together from generations to generation with a common kitchen, common television hall, common floor mill, common farming, common dairy, etc. One such example to cite here is the Narasinganavar family of 182 persons at Lokur Village of Dharwad taluka of Karnataka State (Girish S. Pattanashetti, The Hindu, and 14-10-2006). The family with 182 persons living together really needs lot of adjustments, co-ordination, cooperation, patience, understanding, tolerance, broad minded, politeness, acceptance, etc., between and among the members. All these in other words, are regarded to be people skills and the HUFs as social institutions play a vital role in inculcating interpersonal skills among the members. A continuity and consistency in keeping relations with others without confining to a specific material benefits, would certainly strengthen interpersonal skills of individuals. Keeping relations with others when they are in the different positions and authorities is not the real social connections and the real social connection is one when people come and respect someone who is not in any designated position and authority.

The good habits of people like honest behaviour; free from ego, reservation and zealous; being open to a feedback and constructive criticism; trustworthy; accepting others progress and achievements happily; helping others without any expectations; sharing feelings with others; praying good for others; acceptable to others; respecting and recognising others views and opinions; team work; listening to others and many such habits would obviously improve the people's interpersonal skills. Inculcating such habits in students through a class room teaching- learning process would definitely make education more meaningful and life oriented one.

Coping with Emotions Skills

Emotions are the strong feelings/mental reactions of human beings like anger, fear, happiness, sadness, surprise, jealousy and so on. These emotions are closely associated with human beings and they are quite common in the day today life. These emotions are the results of human relationships, real life situations and different circumstances. Many happenings in life like loss of job, severe accident, poverty, job insecurity, short temper, opinion clash, change in values, change in the system, position and status clash, lack of knowledge, lack of clarity in thoughts, etc., would certainly result in different emotions. In the day to day life, people come into contact with others in different capacities and on different occasions like banker-customer, land lord and tenant, master and servant, teacher-student, seller- buyer, superior-subordinate, driver-conductor and many more relationships. These relationships obviously bring out several emotions either positive or negative, like happiness or sadness, anger or patience. If these emotions are not properly managed then, these would definitely affect the quality of life and worsen the human relationships. Therefore, these emotions are to be properly handled and meaningfully managed. For example, the control over anger, control over language, control over diet, control over expenses, would certainly improve the quality of human life and more importantly, promote healthy and strong human relationships. Handling and coping with emotions is another important life skill that needs to be inculcated in students through the regular teaching-learning process.

The good and bad effects of emotions are illustrated with few examples: 1) A get together party in a hotel, the host of the party shouting and arguing with the supplier because of the delay in taking the orders would certainly increase the anger of the customer and spoil the whole atmosphere of the party. Instead, had the customer handled this emotion/ feeling of anger practically with a positive approach, the customer would have enjoyed the party with all his friends and he would have also maintained a healthy relationship with the hotel;2) A manager, in the consumer super-market, becoming angry and upset with one employee who always reports late and very casual in his work, would definitely affect the performance of the manager in the supermarket and in turn, would also affect the day to day functioning of the store. Had the manger managed this negative emotion wisely and differently with calm and cool mind without getting disturbed, the functioning of the store would not have been affected and the casual employee would have been changed to sincere employee; 3) A teacher in the class,, losing his/her temper and shouting at the students who are making noise and disturbing the class, would have interrupted the teaching –learning process of the whole class and thereby the teacher would have lost the track of his / her teaching. Instead, the teacher would have handled this situation amicably without losing temper, using different modes to tackle the situation like recognising the presence of these students or requesting their attention to the class, guiding and counselling them after the class, etc. Handling this emotion differently, the teacher would have remained cool and calm and would have taught the lesson meaningfully. This is the

advantage of handling emotions carefully and wisely. 4) A person, becoming jealous at the progress and the achievement of the neighbour's son who has figured in the top ten in the All India Medical Entrance Test to PG admissions would obviously make the person totally unhappy, upset and distressed. Instead of becoming jealous had he/she accepted happily the achievement of the neighbours son, he would have really enjoyed the moment and would have maintained a healthy relationship with the neighbour. With the above examples, it is learnt that one should handle emotions positively and prepare to accept the bad and unhappy things in life with the same happiness and joy as one accepts good and happy moments. The good human practices like wishing good for others; helping others without expectations', listening to others, accepting reality, positive thinking, respecting others views and opinions, learning by experience, etc., would certainly improve the skills to handle emotions.

Coping with Stress Skills

Stress is a human feeling which may be due to an emotional or physical strain/pressure/ tension and it is bound to occur in every walk of human life irrespective of man and woman, rich and poor, landlord and tenant, educated and uneducated, superior and subordinate, master and servant, professional and non-professional, leader and follower and so on. The words like stress, crisis, conflicts, resistance, disaster, etc. are seen more in the latter years. In olden days, people hardly used to get a feeling of stress because their wants were limited and people used to be happy with what was available and what was possible within their means. Hardly, they used to think and take stress for the things which were beyond their reach. They used to do manual hard work and used to have hygienic food. People used to strongly believe in 'stretching the legs as far as the bed goes' Simple life style, good habits, joint family system and getting connected to ground realities, etc., had indeed supported them to keep their stress level at minimal.

Today, stress has become a common phenomenon in every walk of life. People take lot of stress with small changes in the pattern of life like a movement from rural to urban places, joint family to nuclear family, change in income level, change in working hours, change in friend circle, change in job, change in the working shift, etc. On the other hand, ever increasing human desires, high expectations, cut throat competitions, comparison, strong demonstration effect, rising ego and jealously, multiple obligations, etc., have further increased the level stress. For example, a student who scored 90% at his/her 12th Science, still not happy and takes lot of stress because he/she could not score 99%. Like this, our expectations and desires go beyond our ability and this would obviously cause more stress. The factors like indiscipline in life, fear of insecurity, lack of confidence, lack of knowledge, lack of support, loneliness, short temper, impatience, aggressiveness, and others also cause stress.

The prolonged and continuous stress is not good and it would affect the health and thereby people fall sick and suffer badly. Stress up to certain level can be accepted and beyond that it should be managed skilfully. Keeping oneself cool, polite, matured, patient, disciplined, proactive, relaxed etc., would certainly support to manage effectively different types of stress which may be physical, mental, emotional, chronic, etc. Over and above, physical exercise, yoga and meditation, laughter, positive thinking, being happy with what is available, listening to others, good hobbies, etc., also help to reduce the level of stress. Considering the genuine need of effective stress management, it is essential to introduce students to stress handling skills through the course curriculum so as to ensure better and healthy life.

Conclusion

Today, teaching and learning, the prescribed course curriculum leading to a particular degree alone will not meet the ever changing needs and expectations of industry and society. Over and above, it is highly essential to teach and train students in different life skills so as to enhance their abilities to handle different real life situations/challenges in a very efficient manner. The education system really needs to be transformed from more academic degree/ examination oriented to a practical /life oriented education. The new education policy (NEP) 2020, has also emphasized outcome based curriculum, vocationalzation, experiential learning, learners centric and more practical oriented education system. Need of the hour today is to increase the students learning rather mere teaching the syllabus. More importantly, students need to be taught about "How to think rather what to think". Towards this end, teaching and training students in different life skills through the course curriculum would certainly make education system more effective and meaningful.

❑

Promoting Quality, Research and Internationalization in Higher Education

Ajit Mulajkar* and Naresh Pinamkar**

Learning involves modifying behaviour and forming habits. 'Learning' is almost synonymous with 'living'.

S. Stansfeld Sargent

In a world deluged by irrelevant information, clarity is power.

Yuval Noah Harari

Education can provide the best service for the creation of a good society; a society which is aware of not only its rights but also about its duties and responsibilities towards the world as a whole. Book learning is an essential part of education. According to Sargent, "Intelligence is not identical with book learning, yet most educated men and women are intelligent. Intelligence is not a guarantee of success, but unsuccessful people often are not so intelligent." This statement underlines the importance of education and book learning.

Yuval Noah Harari says that today's world is deluged by irrelevant information. It is true that clarity is power, but having clarity is a big challenge. Here, one has to learn from Francis Bacon: "Some books are to be tasted, others to be swallowed, and some few to be chewed and digested." In the modern context, the books are synonymous with data. So, one has to be prudent while selecting the books for reading. Bacon Says, "Read not to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider."

"Humans have two types of abilities—physical and cognitive. In the past, machines competed with humans mainly in raw physical abilities, while humans retained an immense edge over machines in cognition. Earlier, the as the manual jobs in agriculture and industry were automated, new service jobs emerged that required the kind of cognitive skills that only humans possessed: learning, analysing, communicating and above all understanding human emotions. However, AI is now beginning to outperform humans in more and more of these skills, including in the understanding of human emotions. It means that AI can easily outperform human beings even in the tasks which are especially reserved for humans.

The New Education Policy—2020 (NEP—2020) says, "Imaginative and flexible curricular structures will enable creative combinations of disciplines for study, thus, removing currently prevalent rigid boundaries and creating new possibilities for life-long learning." It is high time to reconsider the curriculum and syllabi that we have been using for developing cognitive abilities of humans. Doing with the same is like competing with AI which is far beyond human capacity. AI has revolutionized everything Humans cannot compete with AI and it is proved by a number of things and the best example is the Stockfish's defeat by Google's Alpha Zero program. Then the question comes what we can do?. And the answer is instead of competing with AI, we should focus our attention on servicing and leveraging AI. In the long run, no job will remain absolutely safe from automation. The NEP 2020 rightly says that there must be:

- Emphasis on conceptual understanding rather than rote learning and learning-for-examinations;
- Creativity and critical thinking to encourage logical decision-making and innovation;
- Ethics, and Human and Constitutional values like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice should be inculcated through education.

Twenty-first century and the new normal after the pandemic caused by COVID-19 taught us that rote learning is the past and experience-based learning is the present which has certain amount of futurity. And the best thing is that NEP–2020 talks about bringing "synergy in curriculum across all levels of education from early childhood care and education to school education to higher education…"

Quality Education

Attempts are made by a number of scholars to define education, but it is very difficult to define it. It

** Assistant Professor & Head Department of English Maharashtra Mahavidyalaya, Nilanga Maharashtra 413521. Email: ammulajkar@gmail.com*

*** Assistant Professor, Department of English Maharashtra Mahavidyalaya, Nilanga Maharashtra 413521. Email: nareshpinamkar@gmail.com*

is rather an abstract concept that gets modified as per the situation and context in which it is used. However, Merriam Webster dictionary defines quality as "peculiar and essential character" or "degree of excellence". It makes one point clear that the quality is to be understood rather than defined. However, it has been made scalable. National Assessment Accreditation Council (NAAC) is entrusted with the responsibility of quality assessment of HEIs.

Schools

Schools are the feeders of Higher Education (HE). If the feeders are improved quality wise, there shall be quality in HE. If corrections and modifications are made only at HE level, without ameliorating the quality at school level and without refinement and upgrading quality measures; quality in HE is not possible. In this case, the base will justify the top. All the acts and attempts to bring quality in HE are like putting Plaster of Paris (POP) on the cracked ceiling in the summer. The rainy season will bring the reality on the surface. The common sense of engineering is that every pyramid requires a good and solid base. And in the pyramid of education, school education is at the base and HE is at the top. Therefore, amendment—for qualitative changes in school education is the first step to bring quality in HE. Then, all the changes made in HE to attain quality in HE will sustain for a longer time.

According to Sargent, another major environmental factor affecting IQ is the home in which a child lives." Attempts are to be made for making parents aware about keeping healthy atmosphere at homes. It is not the case with the professionals, but those who are illiterate or serving the nation physically. Because it is found in the study that the "Average intelligence in children of professional parents is high. Generally, at schools and at homes the intelligence of students is wrongly decided on the basis of his/her a knowledge of certain thing/subject. But in the study, it is found that "It is impossible to predict general intelligence from a knowledge of special aptitudes, and vice versa." So, it may not be proper to be judgemental about the learners without understanding them completely.

Enrolment

India's efforts at universal education, particularly with the passage of the Right to Education Act (2009), achieved a shot in the arm especially at the level of the primary school. The country is nearing 100% GER at primary stage. But as the enrolment progresses to middle and secondary levels, it falls progressively and stands at less than 55 per cent at the senior secondary schools. In other words, every second student who is eligible to pursue education, drops out by the times he or she moves to the 10+2 levels. This remains a challenge that the country needs to address soon.

According to U-DISE 2016-17 data, about 19.6% of students belong to Scheduled Castes at the primary level, but this fraction falls to 17.3% at the higher secondary level. These enrolment drop-offs are more severe for Scheduled Tribes students (10.6% to 6.8%), and differently-abled children (1.1% to 0.25%), with even greater declines for female students within each of these categories. The decline in enrolment in higher education is even steeper."

Research

Research has been given an important place in NEP–2020. Although, each research study has its own specific purpose, the general "purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has been not discovered yet. The NEP–2020 says, "Knowledge creation and research are critical in growing and sustaining a large and vibrant economy, uplifting society, and continuously inspiring a nation to achieve even greater heights." The policy focuses on research and emphasises the role of research in making India a knowledge superpower.

The NEP–2020 envisions a complete overhaul and re-energising of the higher education system in India to overcome these challenges and thereby deliver high-quality higher education, with equity and inclusion. "The policy's vision includes the following key changes to the current system: (d) revamping curriculum, pedagogy, assessment, and student support for enhanced student experiences; … (f) establishment of a National Research Foundation to fund outstanding peer-reviewed research and to actively seed research in universities and colleges; …"

Higher Education

Part II of the NEP–2020 deals with HE in India. The NEP–2020 talks about creating "Knowledge of India" which will include knowledge from ancient India and its contributions to modern India and its successes and challenges, and a clear sense of India's future aspirations with regard to education, health, environment, etc. This goal can be attained through good research and high-quality HE. NAAC gives

emphasis on research in its Quality Indicator Framework (QIF) by devoting Criterion III entirely to Research, Innovations and Extension. As per the guidelines of UGC, faculties in HE are asked about research both at entry level as well as while promoting to higher level through performance based appraisal system (PBAS) and career advancement scheme (CAS). The main thrust of the NEP–2020, is to end the fragmentation of HE "by transforming higher education institutions into large multidisciplinary universities, colleges, and HEI clusters/Knowledge Hubs, each of which will aim to have 3,000 or more students.

Teacher-student Ratio

Teacher-student ratio is an important concern in HE. As per the UGC guidelines, the teacher-student ratio in India is for UG it is 1:30, and for it is PG 1:20 and for Research 1:12. At present, more than 1050 universities and more than 50,000 colleges across the country catering HE to nearly about 3,00,00,000 students with merely 2,00,000 teachers. Hence, the teacher-student ratio is 3,00, 00,000 /2, 00,000 = 1:150 approximately.

Teacher Workload Pattern (weekly)

Table-1: Workload of Teachers

Designation	UG	PG
Assistant Professor	20	18
Associate Professor	18	16
Professor	16	12
Senior Professor (only at universities)	Nil	08

Research Supervisors for Ph. D.: The allotment of the Research Students to the Research Supervisors for Ph.D. is as follows:

Table-2: Allotment of Research Students to Research Supervisors for Ph.D.

Designation of Teacher	Max. No. of Research Student allotted
Assistant Professor	04
Associate Professors	08
Professors	12

The above format is not followed in all institutions; it varies from state-to-state as per the provisions in respective State Universities Act. In the NAAC Manual for Affiliated colleges updated on 17/12/2019, Quantitative Metric No. 2.2.2 which has weightage of 20 points reads as "Student: Full Time Teacher Ratio (Data for the latest completed academic year on Total number of Students enrolled in the Institution : Total number of full-time teachers in the Institution. It is important to note here that the power of recruiting teachers is not entirely vested in the hands of the institution. Even then the Teacher : Student Ratio is very important criteria for assessment of institutions.

NAAC asks for teacher-student ratio, but neither the institution nor NAAC can do anything to improve this parameter, for it depends upon the Government policy. Of course, it is in the NEP–2020. Teachers are at the centre of the NEP–2020 at policy level, but in reality, there is a vacuum. It is high time to fill up this space to achieve the goal of NEP an important metric for quality in teaching and learning in the institution, but both NAAC and the HEI can do nothing. The Government has to take an affirmative action to bring the right proportion in teacher-student ratio. There is an urgent need to recruit adequate number of faculties to improve the quality of teaching and research as envisioned 2020. The student-teacher ratio as expected by NAAC is to be fulfilled by both the Governments, for education is a concurrent subject. If the main thrust of the policy is to end the fragmentation in HE then this problem will also to be addressed to some extent.

Internationalization

Internationalization in education is essential in this era of globalization. And the advice given by Jawaharlal Nehru to his daughter comes to guide us. "If we want to know something about the story of this world of ours we must think of all the countries and all the peoples that have inhabited it, and not merely of one little country where we may have been born. In this regard it is worth to note what Friedman says, "Globalization 3.0 is going to be more and more driven not only by individuals but also by much more diverse—non-Western, non-white—group of individuals. Individuals from every corner of the flat world are being empowered." Internet and the new normal has not only provided an opportunity but also created general trend to learn distantly and differently. And as Friedman rightly puts "anything that can be digitized can be outsourced." There are a number of reasons why India can be the best educational destination for students across the globe but there are many things which HEIs have to focus on for attracting international students. Some of the facilities of Indian HEIs to attract foreign students are presented below.

Potential Faculty

HEIs with potential faculties and good programmes will attract foreign students to come here for studies.

Affordable Education

Cost of education and cost of living are the two

basic and most important reasons that make India the best destination for education. The cost of education and cost of living are much affordable as compared to other countries like US and UK.Popular educational hubs like UK and US attract a number of students across the globe, but they are too costly, therefore India emerges as the best next option for the foreign students.

Student-friendly Cities

India is home to about 400 student-friendly cities—Bengaluru, Delhi, Mumbai, Pune etc. that offer high-quality education through a number of colleges and universities.

International Residential Facilities

Some universities provide international residential facilities to the foreign students to make them feel at home.

Popular Programmes

The diversified and large education system in India provides an array of degree programmes in variety of fields such as Engineering, Medicine, Law, Management and Humanities. The degree programmes like B. B. A., M.B.A, M. B. B. S., B. Tech has been attracting a number of international students.

Scholarships

The Government of India provides a range of scholarships to the foreign students. It is also one of the reasons of attracting the best talent form a number of countries. Students of different nationality can get the benefit of a variety of non-government funding schemes such as General Scholarship Scheme, Commonwealth Scholarship Scheme, ICCR Scholarship Scheme, SAARC Scholarship Scheme, AYSUH Scholarship Scheme, Bhutan Scholarship Scheme, etc.

Top States

Karnataka, Maharashtra, Tamil Nadu, Delhi and NCR, Andhra Pradesh and Telangana are some of the states which attract more foreign students.

Bringing quality in education and research is a way forward to internalization in HE. And the NEP–2020 has not only pointed the major problems currently faced by the higher education system in India, but also gave viable recommendations to address.

Conclusion

Quality is not a thing that can be acquired overnight. To achieve it, one has to start from the beginning; and in education it starts with primary education. To attain the goal of high-quality higher education, the focus should begin from school education only. If we consider curriculum as the body of education, then its effective delivery is the spirit. Designing curriculum is like policy making and its delivery in the classroom is like its implementation; and to achieve the goal of high quality in HE, both the ends should be good.

Unless the teacher-student ratio is improved as per the standards, effective quality cannot be achieved. Without reducing the load of teaching and providing opportunities along with good funding to the good researchers, good research will not be possible. To create 'knowledge of India', as envisioned in NEP–2020, good researchers should be promoted with good funding, without discriminating as university teacher or college teachers. It is this knowledge that can make India not only self-reliant, but also knowledge hub that can attract a number of foreign students and make India ready a popular destination for higher education.

References

1. Bacon, Francis (2008). The Essays of Francis Bacon, *https://www.stmarys-ca.edu/.../default/files/attachments/files/Essays.pdf* .
2. Chandra, Nimesh (2021). Status of School Education in India—A Report, *Careers, 360* 12 11 2019: 41.
3. Friedman, Thomas L. (2021). *World is Flat*. First. London: Penguin Books, 2006.
4. Harari, Yuval Noah (2021). 21 Lessons for the 21st Century. London: Jonathan Cape, an imprint of Vintage, 2018.
5. —. 21 Lessons for the 21st Century . London: Jonathan Cape, an imprint of Vintage, 2018.
6. —. 21 Lessons for the 21st Century . 978187330672, vols. 2018: Jonathan Cape, an imprint of Vintage, London.
7. Ministry of Education (2020). National Education Policy -2020, Ministry of Education, Govt. of India, *https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final...*
8. Murthy, C (2013). Research Methodology. Delhi: Vrinda Publications.
9. *www.naac.gov.in/images/docs/Manuals/Affiliated_UG-PG_Colleges-new-17dec19.pdf>*.
10. Nehru, Jawaharlal (2004). *Letters from a Father to His Daughter*. New Delhi: Puffin Books, 2004.
11. Peri, Maheshwer (2021). Top Reasons to Study in India, *Careers 360* 01 09 2019: 14.
12. —. Top Reasons to Study in India, *Careers 360* 01 09 2019: 14-15.
13. Sargent, S. Stansfeld (2021). *The Basic of the Great Psychologists*. Philadelphia: The Blakiston Company, 1947.
14. —. The Basic of the Great Psychologists, Philadelphia: The Blakiston Compan, 1947. ❑

Impact of Digital India Scheme on Education and Employment

Sunil M Gawande*, Pravin S Mohite and Masood Ul Hassan*****

Digital India (DI) is a scheme initiated by the Indian Government. The main goal of this scheme is to make India digitally technologically enabled. It also ensures that government services are electronically accessible to citizens by improving both online infrastructure and Network connectivity. Digital India's dream is the creation of inclusion of electronics facilities, goods, manufacturing and job-oriented schemes etc. Digital innovations, including mobile apps and cloud computing, are causing a massive role for economic growth and digitally empowered Indian citizens nationwide.

In the last decade, the digital industry has emerged as a vital economic sector for India. In the late 1990s and early 2000, the boom of the IT / ITES-based service sector, which was the major driver of economic growth, laid the foundation for a digital ecosystem in the country. The digital sector is continuing to grow on the basis of underlying telecommunications infrastructure and a digital services ecosystem. India's government acknowledged this fact when the Digital India initiatives were launched in 2015.

The Digital age has rightly been called the 21st century. The Internet is bringing about such a substantial change in our lives, as we depend on the use of technology even to complete simple tasks. Many of us don't even know the world before digital technology evolved. Connecting to World Wide Web (WWW) from anywhere in the world is easy. This study aims to review the new government of India offering the digital India in sector of education in the last few years and their impact on modern India.

** Assistant Professor, School of Education, Central University of Kashmir Green Campus, Near Govt. Degree College Ganderbal, (J&K) -191131 . E-mail: sunilgawande99@gmail.com*

***Research Officer, Maharashtra State Bureau of Text-Book Production and Curriculum Research (Balbharti), SenapatiBapat Road, Pune-411004 (MS). E-mail: pravinmohite717@gmail.com*

****Assistant Professor, School of Education, Central University of Kashmir Green Campus, Near Govt. Degree College Ganderbal, (J&K)-191131. E-mail: ulmasood4@gmail.com*

Digital India Movement

Digital India is a movement initiated by the Government of India to ensure that the services offered by the Government are given access electronically to people by enhancing online infrastructure and through Internet access or making the nation digitally empowered through technology. The project includes proposals to link remote areas to Internet high speed networks. Digital India is composed of three core components: secure and reliable digital infrastructure growth, digital government services delivery and universal digital literacy. Launched by Indian Prime Minister Shri Narendra Modi on 1st July 2015, it is both enabler and recipient of other main Indian government initiatives, such as BharatNet, Make in India, Start-up India and Stand-up India, industrial corridors, Bharatmala, Sagarmala, etc. The logo of Digital India is given in Fig-1.

As of 31 December 2018, India had a population of 130 crore (1.3 billion), 123 crore (1.23 billion) Aadhaar digital biometric identification cards, 121 crore (1.21 billion) mobile phones, 44.6 crore (446 million) smartphones, 56 crore (560 million) internet users, up from 481 million people (35% of the total population of the country) in December 2017, and 51% growth in e-commerce.

The impact indicators system assesses the digital initiative on four main elements:

- ***Reach and Inclusion*** indicates the increase in the overall target community benefiting from the schemes.

Fig 1: Logo of Digital India

- ***Financial and time savings*** indicate the increase in money and time savings for the beneficiaries and the GOI via scheme implementation.
- ***Quality, accuracy and transparency*** indicate improvement in the efficiency and accountability of processes for citizens.
- ***Development of opportunities*** indicates the effect of implementation of schemes on welfare and employment creation.

Pillars of Digital India

In the Prime Minister Shri Narendra Modi's Digital India Week-long launch ceremony, top Indian and foreign CEOs committed to investing Rs 4.5 lakh crore towards this initiative. The CEOs said the investments would be used to produce mobile phones and internet devices across India at an affordable cost that would help create employment in India as well as reduce the cost of importing them from abroad. 9 Key points of Digital India Programme are given in Figure-2 and Table -1.

Impact of Digital India

Digital India initiative had following impact on the country:

- Broadband in 2.5 lakh towns, universal mobile service
- Net Zero Imports by 2020
- 400,000 Public Internet access points
- Wi-Fi in 2.5 lakh colleges, all universities; Free Wi-Fi hotspots for people
- Digital Inclusion: 1.7 Cr qualified in IT, Telecom and Telecommunications Jobs
- Job creation: Direct 1.7 Cr. Or at least the Indirect 8.5 Cr.
- E-Governance & E-Services: government-wide
- India to lead IT services – healthcare, education, banking
- Digitally empowered citizens – public cloud, internet access

Activities of Digital India Programme

The Government of India has embarked on the following activities under the scheme (Fig 3).

1. The Digital Locker Program aims at reducing the use of paper work and allowing for the exchange of e-documents through agencies. The e-document sharing will be concluded through registered repositories, thus guaranteeing the validity of the online documents.
2. MyGov.in is used by a "Discuss," "Do" and "Disseminate" approach as a forum for citizen participation in governance. The platform 'MyGov.in' would foster 2-way communication between citizens and government.
3. Swachh Bharat Mission (SBM) Mobile app will engage people and government organizations to achieve the Swachh Bharat Mission objectives.

Fig-2: Nine Pillars of Digital India

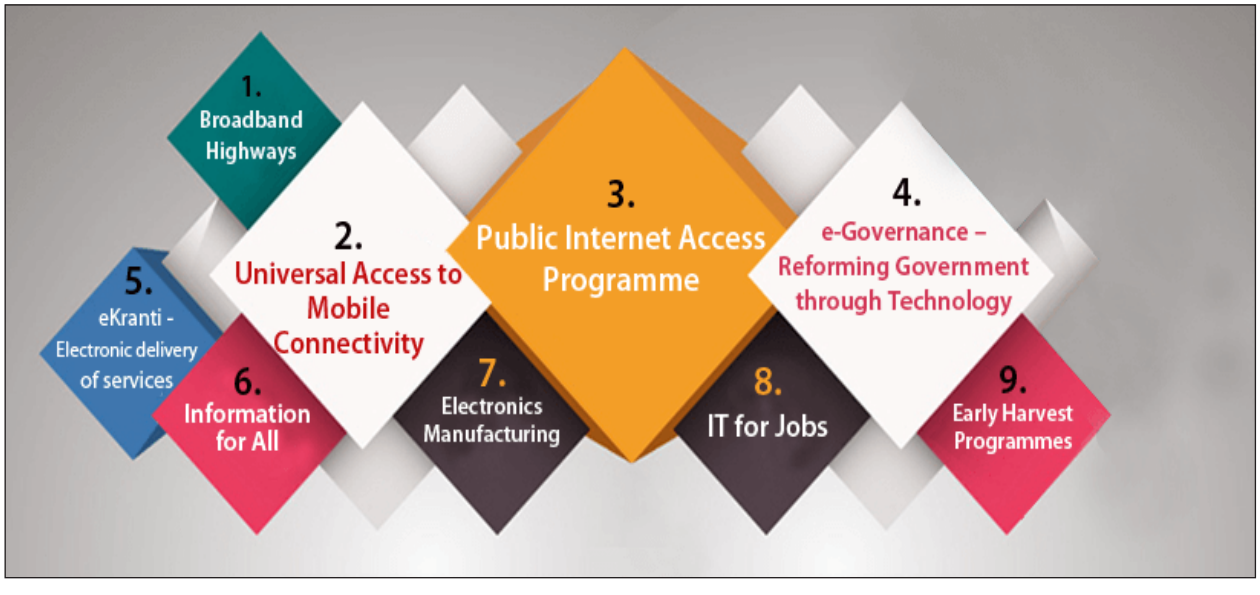

Table 1: Features of Nine Pillars of Digital India

Nine Pillars of Digital India	Features of Programme
• **Broadband highways**	5 billion high speed broadband highways linking all villages, government agencies, universities, research and development institutions. The National Optical Fiber Network (NOFN) initiative, sponsored by the Universal Service Obligation Fund, has set the stage for countries to provide broadband access.
• **Universal Access to Phone**	Focus on network expansion, and fill the country's communication gaps. Altogether, there will be 42,300 uncovered villages in the country to have universal mobile connectivity.
• **Public Internet Access Progrmme**	The two sub-components of the Open Internet Access System are Community Service Centres (CSC) and Post Offices as multi-service centres. One CSC per Gram Panchayat and made viable, multi-functional endpoints for government and business service delivery. This is planned to turn 150,000 Post Offices into multi-service centres.
• **E-Governance**	Department of Electronics and Information Technology (DeitY) and Department of Administrative Reforms and Public Complaints (DARPG) have formulated the National e-Governance Strategy (NeGP). Under the NeGP project, there are several different initiatives from central government as well as state-governments to ensure that government services are accessible electronically to citizens.
• **e-Kranti**	The e-Kranti initiative provides services to the citizens digitally. The government has allocated ' 5 billion for the e-Kranti project, which includes multiple sub-level projects are: • **Education Technology-e Education** (all schools will be connected to broadband. Free Wi-Fi will be provided in all high schools). • **Technology for Health– e-Healthcare** (E-Healthcare will cover online medical consultation, online medical records, online medicine supply, pan-India patient information exchange) • **Technology for farmers** (Facilitate farmers to access real-time price information, online input ordering and online cash, loan and mobile banking relief payment). • **Technology for Security** (mobile-based emergency services and disaster-related services can be distributed to people in real time) • **Technology for Financial Inclusion** (Mobile Banking, Micro-ATM system and CSCs / Post Offices can be used to improve financial inclusion) • **Technology for Justice** (Interoperable Criminal Justice System Leveraging e-Courts, e-Police, e-Jail and e-Prosecution) • **Technology for Planning** (National GIS Mission Mode Project to promote GIS-based decision-making for project planning, conceptualization, design and development) • **Technology for Cyber Security** (National Coordination Centre for Cyber Security would be formed to ensure safe and protected cyber space within the country)
• **Information for All**	The open data platform and online hosting of information & documents would make it easier for people to access information freely and easily.
• **Electronics Manufacturing**	Focus areas – Big Ticket Items FABS, Fab-less design, Set top boxes, VSATs, Mobiles, Smart Energy meters, Micro-ATMs.
• **IT for Jobs**	Within 5 years, 10 billion (1 crore) students from smaller towns and villages will be qualified for employment in the IT field. In growing north-eastern state, BPOs would be developed to facilitate ICT growth allowed in those states. 0.3 Million (3 lakh) service providers would be trained as part of skills development, 0.5 million (5 lakh) rural employees would be trained by Telecom Service Providers (TSPs).
• **Early Harvest Programmes**	IT Message Network, Government Greetings to be e-Greetings, Biometric attendance, Wi-Fi in All Universities, Secure Government Email Design, Standardize Government Email Design, Public Wi-Fi hotspots, School Books to be eBooks, SMS-based weather updates, disaster alerts, National Portal for Lost & Found children.

Fig 3: Digital India Initiative: Services Launched So Far Under this Programme

4. The e-Sign system would require people to sign a document digitally electronically via the Aadhaar authentication.

5. The Online Registration System (ORS) was introduced under the application for an e-Hospital. This application offers required services such as online registration, fee and appointment payments, online medical reports, online blood availability enquiries, etc.

6. National Scholarships Portal is a one-stop scholarship solution from applying, verifying, sanctioning and disbursing to end recipients for each of the GOI's grants.

7. DeitY has agreed to an initiative called the Digitize India Platform (DIP) to digitize records on a wide scale to enable effective delivery of services to the citizens.

8. India's Government has taken an initiative, viz. Bharat Net high speed digital highway connecting all of the country's 2.5 lakh Gram Panchayats. It will also be the first rural Broadband communication project with optical fibre in the world.

9. BSNL will lead Next Generation Network (NGN) to replace exchanges that are 30 years old, an IP-based platform for service delivery Such as voice, information, mixed media / video and packet-switched communications.

10. BSNL has commenced large scale deployment of Wi-Fi hotspots all over the world. The user can latch their mobile devices on the BSNL Wi-Fi network.

11. It is crucial to provide permeating connectivity in order to provide smooth services electronically and advance the way in which people and authorities encounter one another. The ' broadband highways ' is launched as one of the foundations of Government of India .Although availability is one principle, the other is empowering citizens and facilitating smooth transmission of services.

Initiatives of Digital India for School Education

Some of the initiatives in terms of school education highlighted by digitalindia.gov.in website are:

E-Basta:-To be associated with the Government's Digital India initiative, this project was planned to make school books free, user-friendly and easy to use. The digital format of e-Basta books is available. e-Bastas are readable and can be used on tablets and laptops. The key concept is to bring together various publishers and schools at the same stand. The students from all over the world can easily access the e-Basta app. The appropriate content is chosen by the schools and the teachers. In the portal the publishers upload and manage the content.

Saransh: - On 2 November 2014, the Saransh-CBSE Board launched an e-facility called ' Saransh ' for CBSE affiliated schools. It helps schools assess their performance so they can compare it to other CBSE schools at different levels. With the aid of this online facility, schools can identify areas of enhancement

in students, teachers, so curriculum and focus on the necessary improvements. This also offers performance in academic and extra-curricular activities for both the overall and individual students.

E-Pathshala- It is a NCERT-developed app. This app is the gateway for a number of standard textbooks, audios and videos. It targets a wide audience and also bridges the digital divide between urban and rural areas. It has various accessibility options. It can be accessed on laptops or desktops via mobiles (android or IOS) or web platforms.

Shaala Siddhi:- It's a platform created by the National Institute of Planning and Administration in Education. It aims to assess the schools for achieving the target of sustainable development. Students will also make wise choices to achieve their goals by contrasting their results with the requirements set out in the Schools Standards and Framework for Assessment.

e-Education-:- India aims to connect all of India's schools through Wi- and broadband services. It again means that all the students, whether urban or rural, are able to access state-of - the-art facilities and reacquaint themselves with the latest technologies.

Conclusion

Digital India is a broad umbrella program that will restructure and re-focus numerous existing schemes to bring about transformative impact. The Digital India vision is intended to transform our nation into a digital economy with citizen and business participation. The initiative would ensure that government resources and information are accessible on any computer that is easy to use, transparent, and highly usable and secure everywhere, anywhere. The Digital India program is only the start of a digital revolution, once properly implemented it will open up many new opportunities for the citizens. It is one of Indian government's highly ambitious programmes, and is closely supervised by India's Hon'ble Prime Minister Shri Narendra Modi. The programme is a multi-ministry system, including members of the central cabinet, governments of state, etc. Various major corporations such as Microsoft, Google and Fujitsu will now agree to be a partner and enable the Digital India project to succeed. Although the direction of the Digital India system has many barriers, one of the big ones is electricity. But this issue will be resolved soon as pressure will be placed on local leaders to get electricity in their village when the Digital India system runs in nearby villages. Also, as Telecom Minister Ravi Shankar Prasad said while addressing students at Shri Ram College of Commerce, it will open gates for opportunities: "IT generates employment for around 3 million (30 lakh) people. If Digital India becomes a reality, 50 million (five crore) plus people can be offered jobs.

References

1. Tomer, Akash(2018). Reforming Education through Digitisation, *Digital Learning Magazine*, 12. Available at: *https://digitallearning.eletsonline.com/2018/07/reforming-education-through-digitisation/* (Retrieved on 27-02-2020).
2. Singh, Neelam and Singh, Himanshu (2017). Education Sector and It is one of the Hurdles in Digital India, *International Journal of Economics, Commerce and Business Management.*
3. *http://www.niab.org.in/DIW/DigitalIndiaPresentation.pdf*, Retrieved February 10, 2020.
4. *https://cms.iamai.in/Content/ResearchPapers/b945325c-beb4-4848-8ff1041cb571f535.pdf* , Retrieved February 13, 2020.
5. *https://www.ijser.org/researchpaper/Impact-of-Digital-India-by-2019.pdf* , Retrieved February 13, 2020.
6. *https://digitalindia.gov.in/content/programme-pillars* , Retrieved February 16, 2020.
7. *https://en.wikipedia.org/wiki/Digital_India*, Retrieved March 08, 2020.
8. *https://www.quora.com/How-is-Digital-India-changing-the-education-system-1,* Retrieved March 10, 2020.
9. *https://www.ijrte.org/wp-content/uploads/papers/v7i6s5/F11910476S519.pdf,* Retrieved March 12, 2020.

❑

Escalating Nation towards Technosciences

Gagandeep Kang, Microbiologist and Virologist, The Wellcome Trust Research Laboratory, Christian Medical College, Vellore, Tamil Nadu and the first Indian Woman Scientist to be elected as a Fellow of the Royal Society delivered the Convocation Address at the 10th Convocation Ceremony of the Indraprastha Institute of Information Technology, Delhi on October 16, 2021. She said, "To plan ahead, identify what is critical, what the risks and threats are and understand their impact, allows for thinking about ways of mitigation and minimising poor outcomes. If we have thought through what problems we might encounter in the future, we can also think about solutions. We remove fear by creating a path to handling what might be the dangers and risks of failures." Excerpts

This is a very special occasion. It may not be exactly the one that you had expected when your batch mates and you started on your journey of education here. After years of hard work and effort, you have achieved what you set out to do. Except for a few of you, the path to this success will not have been easy. My congratulations to all those who are receiving their degrees today, with a special appreciation to those who have distinguished themselves and received awards and prizes.

It is, of course, a matter of great privilege to be from IIIT-Delhi which describes cutting edge research as part of its institutional DNA. The mission is focused obviously on excellence in Information Technology, both in terms of in education and research. But very importantly, to also be innovators who are socially relevant. So if the goal of your education here is to prepare you for outstanding work and citizenship, then what are the factors we need to thinking about?

In discovery and in application, science and technology do respond to societal and global challenges. In my own field of medicine, engineering and technological advances, including in information technology, most lately have played a major role in discoveries and their clinical translation since the invention of x-rays by Roentgen in 1895. Since then, medical technologies from a range of scientific disciplines have led to improvements in health care, starting with molecular approaches to imaging, to what is currently becoming more and more important--in artificial intelligence and machine learning—which have applications in identifying and monitoring disease and predicting its outcomes.

Ground-breaking inventions, not just in medicine, but in every field of science, technology and engineering, in the past century and in this one, have changed the ways in which life sciences and other sciences work together to address major challenges in medicine and health care. This year health has, of course, been central. The pivotal events of 2020 continuing into 2021, have required us to mobilize the scientific, engineering and medical communities to work together in accelerated and creative new ways to address the COVID-19 pandemic and to develop interdisciplinary approaches to solving problems. And we have needed to do these very, very rapidly and holding ourselves to rigorous standards. In India, in particular, we have had a number of challenges because of the infrastructure that we have had to deal with. Primary healthcare was not a priority for India, although on paper, we have an excellent system for delivering care. Most recently the government had conceptualized *Ayushman Bharat* as a start to deliver healthcare to those in our society who were not served or are inadequately served. This did not meet the purpose that was there on paper, but we have a new opportunity now through the National Digital Health Mission, announced just a few days ago, to try to truly address inequity. And time and our joint efforts will show what we are committed to, and capable of.

When we look back on the last year and look to the future, the question arises, did we really do a good job? How much damage did happen? And what does the future hold for us? In many ways, we got lucky. The fact that we have poor infrastructure at primary care was countered by the fact that this was a virus, that while it infected a lot of people, did not necessarily result in severe disease and mortality in the majority who got infected. However, because of the large numbers of people who were infected, we did have our health systems overwhelmed. We had issues that could have been solved through

better logistic planning and through better supply systems.

We had outstanding successes in what Indian medical systems were able to do and in how society and industry responded. If we look at the examples of where we were in terms of production of personal protective equipment and ventilators, we were able to meet the challenges of those rapidly and with a relative ease. But we had failures as well, and those failures were evident in Delhi less than six months ago. The pictures that we saw, what was displayed on the media, the kind of panic that was engendered—some of it could have been done away with. If we look at the requirements that were sold to us as rational treatment, hydroxychloroquine, remdesivir, convalescent plasma, a lot of people tried to do their best to help other people in need, and then these were largely wasted efforts. Could we have done better? Yes, of course, we could have.

Could we have countered some of what was communicated in media that was not based on science? We could have and we tried to. Speaking truth to power is not simple, and especially not simple in the context of a pandemic.

Nonetheless we all survived, with losses, and very serious losses for many. But we are in a stage today where we can look to the future. A lot of questions remain. Will there be a third wave? Are we done? What does the future of our society look like? What is it that we can do that allows us to build a better society for the future generations to come?

India is a relatively young country and you are one of the first generations, for some of whom at least, whose grandparents may have been born after India became independent. When we look around us, we see successes and we see how we define success. It worries me that in many ways, our definitions of success seem to depend on power and on wealth. We look around us and we can see a lot of problems as well. If we look at rankings, of India's place in the world—we find that for many things that matter for individuals, and particularly for someone like me in the health sector, the health indicators like life-expectancy, infant and maternal mortality, human development indices, education, transparency, we rank well below other countries that also became independent in the 20th Century. But there are things that have changed and we have come a long way in the past 75 years. When I joined medical college, infant mortality was 125 per 1000 live births and now it is less than a third of that, life expectancy has gone by 14 years, the literacy rate has gone up by 30%. In the past few years, wherever we look, our world has changed quite dramatically and mostly for the better—we just do not always see the upward trajectory.

But in India and for the world, we do have a long way to go—and that places a responsibility on the faculty and on you, to build abilities and skills that allow for the transformation of students to enable them to contribute to society. The merging of foundational knowledge of the leading ideas that shape our world view, with the ability to think which is required for making informed estimates and inferences resulting in intelligent decisions, is the basis of education. To all the graduating students, you will be part of that changing India. And for you, I have three messages.

The first is to build your scientific temper. One thing that we have seen all too often in the past year is a belief in what science tells us is unsupported by evidence. This has been particularly true in medicine. I mentioned the need for remdesvir and convalescent plasma a little while ago, but we also had the proposal that traditional medicines could play a large role in preventing and treating COVID-19. We know for a fact that many of these are untested interventions and should not have been embraced either by our leadership or by individuals. We rely on scientists and doctors to tell us what is and is not appropriate and it is a sad fact that in many situations, we were found wanting. There was no need for the prescriptions that we saw—of 17 or 18 different drugs being given to people who could be managed at home. Oxygen was used for people who did not require it. We were told stories of what was happening in private hospitals, and thereby because private hospitals were not available to much of the population we had people struggle for public services. All of this because we did not follow a unified, evidence-driven, science based approach to the COVID-19 pandemic.

Will we do this again in the future? I think it is for all of us to decide whether we are willing to accept what is called eminence based medicine

rather than evidence based medicine. I hope we will go for the latter. This is true in medicine, but it is also true in every field—to think critically, to evaluate the evidence allows us to make informed decisions, allows us to think about what a better tomorrow is likely to bring. If we follow the science, including the uncertainties of science and discovery, I think we will find our way there.

The second message I have, is to think about embracing the struggle. Your abilities and skills are foundational to building your careers and to changing the world. As scholars of technology and creativity, you have the tools to change every field of knowledge and application. The problem really is that when our society expects us to succeed all the time, then we tend to pick problems that are likely to be solved easily.

Look at today for you—today is a day of great success, but new relationships, new knowledge, new products, new approaches do not miraculously appear. Almost everything that is new and valuable require iteration, learning from what did not work. These insights come only after a failure. Accepting and learning from those insights is key to succeeding in every project and in life. Think of the opportunities that you'll miss if you let your failures stop you. This is why I say—embrace the struggle. When we struggle, when we fail, is exactly when we grow.

My third message to you is to empathise. When we look at what is defined as success, it is frequently about power, and frequently about wealth or what we own. And this worries me about our society. If we define empathy, and I quote here from Dan Pink, it is, "the ability to imagine yourself in someone else's position and to intuit what that person is feeling—to stand in their shoes, to see with their eyes, to feel with their hearts—it is a stunning act of imaginative derring-do, the ultimate virtual reality, climbing into another's mind to experience the world from that person's perspective." I think we can do this, if we can understand what it is to walk a mile in other people's shoes, we will understand what is it that we need to do to help not just ourselves, but society as well. When I think about my own life, and what I value as my achievements and my opportunities, it really is what I have done to help others.

What constitutes success for me, as the world sees it, does not matter. What I have able to do to help other people really what does matter. That is what I value and I hope you will too.

Finally, I think one of the things that are important for all students, to think about and prepare for, is what is it that you will do to be ready for the future. And for that it is important to understand that there is never any way to be completely safe, no foolproof way to live life. To plan ahead, identify what is critical, what the risks and threats are and understand their impact, allows for thinking about ways of mitigation and minimising poor outcomes. If we have thought through what problems we might encounter in the future, we can also think about solutions. We remove fear by creating a path to handling what might be the dangers and risks of failures.

To end, I want all of us together to thank our parents and our teachers, all of those who support us and build us up and keep us going as we set out to become contributors to society, and good people in our personal and professional lives. There is no question that there will be challenges to come, but with the strong base of your education and upbringing, you are well positioned to take on the future. I wish you all that is good in the world.

Jai Hind!

CAMPUS NEWS

NAAC Conference on A Paradigm Shift for Quality Sustenance in Higher Education

A two-day NAAC sponsored virtual National Conference on 'A Paradigm Shift for Quality Sustenance in Higher Education through Accreditation' was organized by the Internal Quality Assurance Cell and Department of Civil Engineering, K D K College of Engineering, Nagpur with technical support of Government College of Engineering, Nagpur, Institution of Engineers (I), Nagpur Local Center, Indian Concrete Institution, Nagpur Center, and Indian Water Works Association, Nagpur Chapter, recently. More than 250 participants across the country participated in the conference.

The Chief Guest of the Inaugural Session was Dr. Pramod Pabrekar, Senior Consultant, *Rashtriya Uchhata Shiksha Abhiyaan* (RUSA), Government of Maharashtra. The conference began with a formal inauguration. Dr. D P Singh, Principal, K D K College of Engineering welcomed the gathering. In his opening remarks, Dr. Avinash Badar, Conference Chair, acknowledged the National Assessment and Accreditation Council (NAAC) for financial assistance to the college for organizing the event. The Convener of the event, Dr. Valsson Varghese presented a brief note about the conference.

Dr Pramod Pabrekar, in his deliberation on 'Quality Sustenance in Higher Education through Accreditation' narrated how it is important to face the NAAC peer team visit. He informed the gathering that without accreditation any institution cannot nominate its faculty members on the Board of Studies, Academic and Management Council. Even the disbursal of scholarship has been linked to accreditation. Therefore, the accreditation inculcates the quality culture in HEI. For sustenance of quality in HEI, Dr Pabrekar, out of his rich experience in academics and as a consultant of RUSA, suggested that teacher's training, vibrant IQAC, Research culture and collaboration, academic and other audits in the institution, structured feedback and strong students' support system are the key parameters to achieve quality and its sustainability in HEI.

Dr. Leena Gahane, in her keynote address on 'A Paradigm Shift for Quality Sustenance in Higher Education through Accreditation' threw light on the quality sustenance in HEI and opined that institutional policies, a framework for quality evaluation and its benchmarking, skill development, collaborative learning, syllabus up-gradation, audits of infrastructure including ICT facilitation, academic audits, research and innovations, and vibrant IQAC are the backbones. The institution must comply with the desired requirement to bring quality culture and strive for its sustenance. She also stressed that getting accreditation is the first step and maintaining its standards upwardly is the key to achieving quality.

Dr. Indrani Bhaduri, during her deliberation on 'Quality Sustenance in HEI **:** A Stakeholder's Perspective' attracted everyone's attention to the stakeholders' perspective on quality sustenance in HEI. She spelled out a few provisions of the National Education Policy of India, NEP-2020 concerning HEI that the multidisciplinary universities will enable students to have holistic growth and all-round development. Dr. Bhaduri informed that research-intensive, teaching-intensive, and degree-granting autonomous colleges are the three categories of the institutes recommended by the NEP-2020.

Dr Preeti Bajaj focused on structured data management for accreditation. She elaborated how the data in large universities and institutions can be assimilated, managed, and produced for accreditation purposes. She emphasized how the data pertaining to the students, faculties and support staff should collected through back office system and repository be maintained. Right from the entry of students or staff in the university or institute until they leave the campus, the data entered in one format in the ERP and can retrieved as and when required. Later, the documents need to be certified by the concern dean of in-charge of the respective section.

Research articles received were reviewed and selected for presentation. The Conference proceeding containing articles unveiled by the hands of Guests. Many articles were excellent research with the quality deliverance and its sustenance in higher education. The presentation from the delegates invoked good responses.

Dr. Kavitha Kartikeyan, Associate Professors, Prince Shri Venkateshwara Padmavathy Engineering

College, Ponmar, Chennai had presented her research article titled 'Culture of Quality through IQAC: A Case Study on Accelerating Growth and Performance in PSVP Engineering College' and adjudged as the best paper by the Session Chair, Dr. S M Malode, and Session Co-Chair, Prof. M N Umare. Similarly, the article presented by Mr. Ashay Shende, Research Scholar, Lovely Professional University, Punjab on 'Going to New Classroom (Online): Challenges and Opportunities in Developing Countries' was adjudged as Second Best Paper.

The Valedictory Function was conducted after the paper presentation session. Dr. Sachin Solanki Assistant Director, Directorate of Technical Education, Nagpur was Chief Guest, while Dr. Preeti Bajaj Vice Chancellor Galgotia University, Greater Noida was Guest of Honor. Dr. Solanki appreciated the efforts taken by KDK College of Engineering by arranging a very apt topic on 'Quality Education'. The event ended with a warm note of arranging similar events in the future.

Virtual International Conference on Innovation and Research in Science and Technology

A two-day Virtual International Conference on 'Innovation and Research in Science and Technology for Sustainable Development' is being organised by the School of Science, OP Jindal University, Raigarh, Chhattisgarh on May 27-28, 2022.

Frontiers of knowledge are expanding very fast. Science and technologies are no exception. They are dynamic, expanding bodies of knowledge, and cover ever-new domains of experience. In such a progressive society, science can play a truly liberating role, helping people escape from the vicious cycle of poverty, ignorance, and superstition. The conference is themed around the numerous outstanding results and new difficulties in the applied sciences and technology as well as management and humanities sectors. This event aims at bringing researchers, specialists, designers, and students from all fields of applied sciences and technology and provides a global panel for the dissemination of primary study conclusions, new approaches, and developmental practices that focus on both principles and application. The Conference aims at providing a premier interdisciplinary platform to present and discuss the most recent sustainable innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the field of Science and Technology. Distinguished speakers from academia and industries will deliver keynote speeches on Applied Sciences, Recent Technologies, Disaster Management, and other fields related to Management and Humanities, etc. The Tracks of the programme are:

Applied Sciences

- Chemistry.
- Physics.
- Geological Sciences.
- Ecology and Management.
- Microbiology.
- Mathematics.
- Biology.
- Biotechnology.
- Material Sciences.
- Environmental Science.
- Air Pollution.
- Water Pollution.
- Effects On Global Flora and Fauna.
- Global Warming.
- Greenhouse Gases.
- Renewable Sciences.

Engineering and Technology

- Electrical Engineering.
- Computer Engineering.
- Mechanical Engineering.
- Industrial Engineering.
- Process Engineering.
- Structural Engineering.
- Nano-engineering.
- Manufacturing Engineering.
- Materials Engineering.
- Electronic Engineering.
- Energy Engineering
- Environmental Engineering.

Disaster Management

- Climate Change.
- Environment and Ecosystems.
- Food Security & Agriculture, and Water.
- Capacity Development.
- Community-based DRR.
- Gender, Human Mobility.
- Disaster Analysis.
- Disaster Monitoring and Mitigation.

- Emergency Preparedness.
- Risk Mitigation.
- Community Recovery and Resilience.
- Socio-economic Issues.
- Public Health Risk.2

Other Themes

- Recent Trends in Science Innovation and Research.
- Scientific Knowledge and Skill Development.
- ICT for Quality Science Education.
- Language and Science Education.
- Resources for Science Education.
- Knowledge Management.
- Innovative Pedagogies for Effective Teaching-learning of Science.
- Alternative Frameworks in Science.
- Advancement in Science and its Utility.
- Ancient Indian Scientific Knowledge and its Relevance in Modern Time.
- Science Curriculum for Life-long Learning and Value Development.
- Science Education for Sustainable Development.
- Status of Science Education in India and other Countries.
- Science, Technology and Society Perspectives.
- Educational Leadership, Management and Emerging Technologies.
- Learning Management Systems.

For further details, contact Convener, Dr. Ankur Rastogi, Associate Professor (Chemistry), School of Science, OP Jindal University, OP Jindal Knowledge Park, Punjipathra Raigarh, Chhattisgarh–496109, Mobile No: 9755927688, E-mail: *ankur.rastogi@opju.ac.in.* For updates, log on to: *www. https://jgu.edu.in/*

National Conference on Pedagogy for Higher Education

A One-day National Conference on 'Pedagogy for Higher Education' is being organized by the MKSSS's Cummins College of Engineering for Women, Pune, Maharashtra on June 25, 2022. The academics and scholars may participate in the event to meet and exchange ideas and views. The Conference will allow exploration and dissemination of the experiences of outcome-based education in higher education, develop a shared research agenda that creates an interdisciplinary discussion, heightens intercultural awareness, makes new contacts, and facilitate collaborations across disciplinary borders. Since its founding in 2018, *the Pedagogy Cell* of Cummins College of Engineering for Women, Pune has brought faculty and ideas together in many events such as FDPs, workshops, CCEW's Digest to promote and celebrate interdisciplinary study and underline its importance during teaching and evaluation. The student-centric use of pedagogies for teaching and evaluation experiences from different domains viz. Engineering, Pharmacy, B.Sc., B.Ed., BBA, BCA, BJMC, BFA, BHM, BHSc., Agriculture, Physics, Chemistry, Maths, etc. can shared in the form of case study based papers. The Topics of the events are:

Teaching-learning and Evaluation

- Project and Problem Based Learning (PjBL/ PrBL).
- Active Learning Strategies/Pedagogy.
- Evaluation/Assessment Strategies/Pedagogy.
- Innovative Cumulative / Formative Assessment/ Evaluation.

Educational Structures and Syllabus

- Stakeholders' Feedback and Content Design.
- Community, Society for Content Development.
- Industry/Domain Experts and Partial/Full Content Delivery.

Outcome Based Education (OBE)

- OBE and Pedagogy.
- OBE and Accreditations [NBA/NAAC].
- OBE and Education 4.0.
- OBE and Best Practices.

National Education Policy (NEP)

- NEP and Accreditations [NBA/NAAC].
- NEP and Pedagogy.
- NEP and Outcome Attainment.
- Innovation and Technology for Higher Education.

For further details, contact Coordinators, Dr. Chhaya Gosavi and/ or Prof. Mahendra Deore, MKSSS's Cummins College of Engineering for Women, Pune- 411052 (Maharashtra), E-mail: *chhaya.gosavi@cumminscollege.in/ mahendra.deore@cumminscollege.in/ pedagogycell@cumminscollege.in.* For updates, log on to*: www.cumminscollege.org* ❑

ANVESHAN-National Student Research Convention (2021-22)

Anveshan: National Student Research Convention (2021) one of the most important and pioneering activities of the Association of Indian Universities (AIU), New Delhi was organised in collaboration with Academy of Maritime Education and Training (AMET) University during March 27-28, 2022. Dr. Amarendra Pani, Joint Director and Head, Research Division, Association of Indian Universities was the Chief Convenor while Dr. D. Rajasekar, Dean, Research, AMET University was the Convener of the *Anveshan.* Dr Usha Rai Negi, Assistant Director, Research was the AIU Coordinator of the Event. The projects were invited under five categories, (i) Agriculture, (ii) Basic Sciences, (iii) Engineering and Technology, (iv) Health Sciences and Allied subjects and (v) Social Sciences, Humanities, Commerce, Management and Law. Around 200 students pursuing undergraduate to Ph.D. level programmes along with their team managers/mentors from different universities of India participated in the event.

The two-day convention was inaugurated by Dr. J Ramachandran, Chancellor of AMET University, Mr. M Mahesh Kumar, Deputy Mayor, Greater Chennai Corporation, Dr. Rajesh Ramachandran, Pro Chancellor, Col. Dr. G. Thiruvasagam, President of Association of Indian Universities and Vice Chancellor of AMET University, Dr. (Mrs.) Pankaj Mittal , Secretary General, AIU, Dr. Amarendra Pani, Joint Director and Head, Research, Association of Indian Universities, Dr. R. Srinivasan, Member Secretary, TNSCST, Dr M. Jayaprakashvel, Registrar of Academy of Maritime Education and Training (AMET) University were the dignitaries who graced the occasion.

The Inauguration of the Convention commenced with recitation of university song followed by lighting the ceremonial lamp by the dignitaries. Dr M. Jayaprakashvel, Registrar of Academy of Maritime Education and Training (AMET) extended a warm welcome to the invited guests, dignitaries, participating student researchers and their team mentors.

The Chief Guest of the Inaugural Session, Mr. Mahesh Kumar, Deputy Mayor praised AMET University for being the best University for Maritime Education and also requested the management for their further expansion into the southern regions of Tamil Nadu and across the country. He conveyed his best wishes to all the participants and research scholars who had participated in the event. Followed by which a report on 'Addressing the Needs of Differently-abled Persons in Higher Education Institutions- Strategies for Implementations' published by the Association of Indian Universities was released by the honourable Mayor.

Dr. J Ramachandran, Chancellor, Academy of Maritime Education and Training (AMET) University, delivered the inaugural address where he mentioned about the successful history and merits of AMET University. While appreciating Association of Indian Universities for allocating the National Research Convention to AMET University, he said that the Research convention brings the young and innovative minds from all over the country under the same platform. Each researcher can contribute the ideas and have valuable insights from the research projects presented by their fellow presenters.

Dr. (Mrs.) Pankaj Mittal, Secretary General, Association of Indian Universities (AIU), in her Special Address mentioned that she was overwhelmed to see a lot of students from various parts of the country. She observed that the country has to invest more towards research activities and research policies, Similarly, a great involvement from the side of students is required as India has the largest student population and it could even become the research hub.

Addressing the student researchers and invited guests, Dr. Rajesh Ramachandran, Pro Chancellor, Academy of Maritime Education and Training (AMET) Universit quoted, "Research is about creating new knowledge through innovation."

While delivering the Presidential Address, Col. Dr. G. Thiruvasagam, President, Association of Indian Universities (AIU) and Vice Chancellor, Academy of Maritime Education and Training (AMET) University observed, "Objective of a research should be socially relevant and its output must be given back to the public.

Dr Amarendra Pani, Joint Director and Head, Research, Association of Indian Universities (AIU) provided a brief background and history of the AIU explaining how it was established primarily to promote coordination and connectivity between the universities and recognize interuniversity degrees. The Research Division of AIU as a part of capacity building activities regularly organizes various seminars and conferences for strengthening Indian higher education, further he stated that to contextualize the quality of research, two concepts are to be followed, the first would be Epistemology which means the theory of knowledge, especially with regards to its methods, validity, and scope and the distinction between justified belief and opinion. Secondly, Metaphysics is the nature of ultimate reality.

The Guest of Honour, Dr. R. Srinivasan, Member Secretary, TNSCST emphasized that the concentration on Inter Disciplinary Activities during the development of a research or project is to be focused upon. He also shared an exclusive information that TNSCST has selected AMET University to be one of the Patent Information Centre across the country. The Inaugural Function ended with a Vote of Thanks proposed by Dr. D. Rajasekar, Convener, Dean, Research, AMET University.

The Inaugural Session was followed by Poster display of the projects and parallel Power Point presentation with Question-Answer by the participants of various categories. Assessment of the projects was done by a panel of experts drawn from various disciplines on various criteria. The 25 projects from Agriculture, 15 projects from Basic & Applied Science, 29 projects from Engineering & Technology, 12 projects from Social Science and 24 projects from Health Science were presented by the participants.

The participants from 42 Universities covering various states of the country, where 12 Universities from North, 11 Universities from South, 5 Universities from Central, 5 Universities from East, 9 Universities from West, and officials of AMET and students were present during the event. A total of 105 projects with 285 participants actively took part in *ANVESHAN* 2021-2022.

The participants (individual or group) were given 10 minutes for the overall 'Podium Presentation', out of which, 7 minutes was allocated for PPT presentation (inclusive of model demonstration) and 3 minutes for Question-and-Answer Session. Apart from the above criteria, 'Scope of Commercialization' of the projects was considered as an additional merit.

The project evaluation was conducted in two phases a) Display and in-situ presentation and b) detailed presentation on the project. The judges were chosen from various research and academic institutions and industries. The projects were evaluated based on the parameters such as innovation, uniqueness, usefulness to society and presentation skills of the participants.

The best five projects (one each from each category) were chosen from each category and recommended for the final presentation at the national level for gold medal. In addition to this, two best projects were selected from each zone for consolation prizes. The various sessions of *ANVESHAN* –National Student Research Convention were highly successful in terms of unveiling of innovative ideas from students.

On the Second day of the event i.e., March 28, 2022, the Valedictory Function commenced by 11 AM. Dr. Deepa Rajesh, Executive Director welcomed the audience and congratulated the students to be the part of this esteemed event i.e. *Anveshan* 2021-22.

Col. Dr. G. Thiruvasagam, President of AIU and Vice Chancellor, rendered the Presidential Address and shared his valuable knowledge with the participants and motivated them.

Dr. R. Velraj, Vice Chancellor, Anna University, cherished himself to be a part of this Student Research Convention and virtually rendered the valedictory address where he quoted, "All research aspirants must imbibe few processes such as identifying correct research topics for business development, correct data collection based on application orient topics, researches must be translated and patented for project development.

Chief Guest of the Valedictory Session, Dr. Rajesh Ramachandran, Pro Chancellor of AMET University rendered his address and motivated the participants. Following which, participants shared their valuable feedback and experience about the entire execution of the event.

Apart from the first, second and third positions in each category, two best projects from each zone and Prof. S. K. Mukherjee Gold Medal for the best project adjudged in the convention were awarded.

In the concluding address, Ms. V. Sangeetha Albin, Joint Registrar, AMET University, appreciated all the team members of the Organizing Committee of AMET University. She expressed her sincere thanks to all the people who directly or indirectly supported in making the event a huge success. Following is the details of the projects winning the various positions in different categories.

Category: Agriculture Sciences and Allied Fields

S. No.	Position	Title of the Project	Name of Student & University	Project Type
1	First	*Adopting Bio-Reinforcement Techniques for The Stabilization of Bench Terraces and Irrigation Channels*	**Diya Rosen Giju, M A Venkiteswaran, and Mushalovini M** SRM Institute of Science and Technology, Kanchipuram, Tamil Nadu	Group
2	Second	*Development of Bioconsortium Having Rice Plant Growth Potentialential*	**Gargi Das** Jadavpur University, Kolkata, West Bengal	Individual
3	Third	*Rapid Compost Machine*	**Pooja Dilipbhai Solanki, Patel Dhruvkumar Kamleshbhai and Nipun Bindal** Ganpat University, Mehasana, Gujarat	Group

Category: Basic Sciences

S.No.	Position	Title of the Project	Student Name & University	Project Type
1	First	*Li-Koff: A Cost- Effective Method for Diagnosis of Nitrosamines*	**Somya Sharma** Manav Rachna International Institute of Research and Studies, Faridabad, Haryana	Individual
2	Second	*Smart Cooker Whistle with Alarm and Counter*	**Sanket Sadashiv Kumbhar** Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad, Maharashtra	Individual
3	Third	*A Colorimetric and Fluorometric Based Dual Readout Approach for Effective Heparin Sensing*	**Shrishti Pramod Pandey** Amity University, Mumbai, Maharashtra	Individual

Category: Engineering & Technology

S.No.	Position	Title of the Project	Student Name & University	Project Type
1	First	*Wireless Power Transmission with Advanced Electromagnetic Field Detector*	**Anurag Ramrao Lambor, Shashank Satish Kulkarni, and Amarnath Kumar** Indian Institute of Technology Guwahati, Assam	Group
2	Second	*Charging Port Locating System Using 4 D of Robotic Manipulator for Automatic Charging Station*	**Soham Manoj Parlikar** SRM Institute of Science and Technology, Kattankulathur, Kanchipuram, Tamil Nadu	Individual
3	Third	*Indigenous Upper Air Sounding System*	**Jatin Kishor Bhosale, Pavan Vishvesh Jangam and Rinkesh Sante** University of Mumbai,Mumbai, Maharashtra	Group

Category: Health Sciences and Allied Subjects, Pharmacy, Nutrition, etc.

S.No.	Position	Title of the Project	Student Name & University	Project Type
1	First	*An Innovative Dressing System for Diabetic Wounds*	**Gavaskar Amey Dnyanesh, Gargi Nikam and Mohd Faizan Mujawar** Savitri Bai Phule Pune University, Pune, Maharashtra	Group
2	Second	*Novel Rapid Action Blood Stain Remover*	**Disha Kirankumar Jain Priya Singh and Nipun Pankaj Panchal** University of Mumbai Mumbai, Maharashtra	Group
3	Third	*Development And User Acceptability Testing of Health Heart Mobile Application- A Tool for Cardiovascular Risk Modification Among Type 2 Diabetes Mellitus Patients*	**Prithviraj Maruti Erande** MGM University, Aurangabad Maharashtra	Individual

Category: Social Sciences, Humanities, Commerce and Law

S.No.	Position	Title of the Project	Student Name & University	Project Type
1	First	**First Prize - Disqualified because of not following the Rules/Procedure**		
2	Second	*Rural Occupational Structure and Vulnerability in Indian Sundarbans: An Assessment Study with Special Reference to Livelihood of Fisher Households*	**Sharanya Banerjee** Jadavpur University, Kolkata West Bengal	Individual
3	Third	*An Econometric Analysis of Women Empowerment and Economic Growth in India*	**Aneesha Jain** IIS (Deemed to be University) Jaipur	Individual

ZONE WISE (Best Two Prizes)

ZONE	Zonal Best Project	Zonal Best Project
WEST	**Student Name:Patel Priyanka Mahesh** **Project Title:** *Investigation Of Ice Sheet Mass Balance Using Multi - Sensor Space Borne Data.* **University:** Ganpat University, Mahasana, Gujarat	**Student Name: Swapnajit Vijay Mulik** **Project Title:** *Square Facets Nanobars Mof-Derived Co3o4@Co/N-Doped Cnt Based Nahi Composites for Highly Efficient Super Capacitor Performances* **University:** Shivaji University, Kolhapur, Maharashtra
EAST	**Student Name: Unanda Waikhom** **Project Title:** *Identification of Effective Papain-Like Protease (Plpro) Inhibitors to Neutralize Sars-Cov-2 Through Suppression of Replication* **University:** North Eastern Hill University, Shillong, Meghalaya	**Student Name: Md. Faizal Karim and Krishnav Rajbanshi** **Project Title:** *Segmentation of Roads from Satellite Images* **University:** National Institute of Technology, Silchar, Assam
NORTH	**Student Name: Devanshi Rajpurohit, and Neha Chauhan** **Project Title:** *App Based Intelligent Packaging Film* **University:** Manav Rachna International Institute of Research and Studies, Faridabad, Haryana	**Student Name: Prakhar Saxena** **Project Title:** *Tech Agro* **University:** Lovely Professional University, Jalandhar, Punjab
SOUTH	**Student Name**: **Yathish UG** **Project Title:** *Natural Peptide from Fish Waste: A Potent Drug Candidate for Antihypertensive Activity* **University:** NITTE (Deemed to Be University) Mangaluru, Karnataka	**Student Name: Adithya S** **Project Title:** Predictive Analysis on Survival of An ICU Patient **University:** Mangalore University, Mangaluru, Karnataka
CENTRAL	**Student Name: Bhumika Ubnare, Aman Prajapati, and Amit Kushwaha** **Project Title:** *A Sweet Path which Leads to Prosperity* **University:** A.K.S University, Satna, Madhya Pradesh	**Student Name: Shruti Dubey** **Project Title:** *Document Specification of Spec-Doc* **University:** Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh

GOLD MEDAL

PROF SANAT KUMAR MUKHERJEE GOLD MEDAL

1. **Mr Anurag Ramrao Lambor**
2. **Shashank Satish Kulkarni**
3. **Amarnath Kumar**

Title: Wireless Power Transmission with Advanced Electromagnetic Field Detector

Category: Engineering and Technology

University/Institution: Indian Institute of Technology, Guwahati, Assam.

THESES OF THE MONTH

SOCIAL SCIENCES
A List of doctoral theses accepted by Indian Universities
(Notifications received in AIU during the month of Feb-March, 2022)

Business Administration

1. Gautam, Veena. **Merger and acquisitions in Indian banking: An empirical study of select issues**. (Prof. Sultan Singh), Department of Business Administration, Chaudhary Devi Lal University, Sirsa.

Commerce

1. Annie, Bhateja. **An analytical study on financial performance of selected nationalized banks with special reference to economic value added**. (Dr. S.N. Vyas), Faculty of Commerce and Management, Tantia University, Sri Ganganagar.

2. Bageshwar, Anurag. **Anusuchit jati kee mahilaoan ke swarojgar srijan mein Bhartiye State Bank kee bhumika ka adhyayan: Madhya Pradesh ke Indore Jile ke vishesh sandarbh mein varsh 2012 se 2017 tak**. (Dr. Aaditye Lunawat and Dr. Vishal Purohit), Department of Commerce, Dr B R Ambedkar University of Social Sciences, Indore.

3. Gulgulia, Aruna. **Analysis of financial performance of ceramic industries in Bikaner.** (Dr. S.N. Vyas), Faculty of Commerce and Management, Tantia University,Sri Ganganagar.

4. Kampally, Shanker. **Performance analysis of Mudra: A study on financial assistance to MSMEs**. (Prof. M Yadagiri), Department of Commerce, Telangana University, Nizamabad.

5. Kumar Tok. **Economic disparity of rural people in Arunachal Pradesh: A comparative study between Papum Pare and Lower Subansiri Districts**. (Dr. Philip Modi and Dr. R K Mandal), Faculty of Commerce & Management Studies, Rajiv Gandhi University, Itanagar.

6. Meenakshi. **Goods and Services Tax Act: Implementation and implications in Haryana State**. (Prof. Surinder Singh), Department of Commerce & Management, Chaudhary Devi Lal University, Sirsa.

7. Nagarjuna, Sunkara. **Employability skills of management graduates (Perceptions of employers, educators and MBA students in selected districts of Andhra Pradesh, India**. (Dr. A Kanaka Durga), Department of Commerce and Business Administration, Acharya Nagarjuna University, Nagarjuna Nagar.

Economics

1. Basumatary, Ringcher. **Dependence on forest resources and its impact on biodiversity conservation: A study of Kokrajhar District**. (Prof. Manjit Das), Department of Economics, Bodoland University, Kokrajhar.

2. Begum, Gulshanara. **livelihood sustainability of rural women through livestock enterprises: An analytical study in Goalpara District of Assam**. (Dr. Ratneswar Debnath), Department of Economics, Bodoland University, Kokrajhar.

3. Dev, Dharmendra Narayan. **A critical study of spatio-temporal disparities in rural development of Assam**. (Dr. Ratneswar Debnath), Department of Economics, Bodoland University, Kokrajhar.

4. Kanti Devi. **Innovation and exclusions in health sector: A study of old age persons in Uttar Pradesh**. (Prof. N M P Verma), Department of Economics, Babasaheb Bhim Rao Ambedkar University, Lucknow.

5. Paul, Jogomaya. **Role of micro-entrepreneurship in empowering women: A comparative study of Dhubri District and Lokrajhar District of Assam**. (Dr. Mridula Devi), Department of Economics, Bodoland University, Kokrajhar.

6. Sheikh, Shahjahan Ali. **Displacement and livelihood changes in erosion affected Char Areas in Assam: A socio economic study of Dhubri District**. (Dr. Kanchan Datta), Department of Economics, University of North Bengal, Darjeeling.

7. Sumista. **Problems and prospects of horticulture in Haryana: A study of selected fruit crops**. (Dr. Rohtas), Department of Economics, Chaudhary Devi Lal University, Sirsa.

Education

1. Das, Saroj Kumar. **Academic stress among able - bodied and differently abled secondary school students in relation to their personality hardiness and resilience**. (Dr. Ramana Sood and Dr. Sushama Sharma), Department of Education, Kurukshetra University, Kurukshetra.

2. Lalchuangkima, Reuben. **An experimental study on the impact of music training on creativity, attitude and**

achievement in music. (Prof H Malsawmi), Department of Education, Mizoram University, Aizawl.

3. Lalhmangaihzuali. **Environmental knowledge, attitude and activities of college students in Mizoram**. (Prof. Lynda Zohmingliani), Department of Education, Mizoram University, Aizawl.

4. Rao, N Nageswara. **A study on cognitive styles, study habits and academic achievement of secondary school students**. (Dr. D Rita Suguna Sundari), Department of Education, Acharya Nagarjuna University, Nagarjuna Nagar.

5. Sarada, Modepalli. **A study on perspectives of persons with intellectual disabilities on their employment rediness in twin cities of Telangana State**. (Dr. D Rita Suguna Sundari), Department of Education, Acharya Nagarjuna University, Nagarjuna Nagar.

6. Solanki Tara, M. **A study of family's educational environment in relation to certain variables**. (Dr. Minalba Jadeja), Department of Education, Children's University, Gandhinagar.

7. Suhasini, A. **A study on emotional intelligence and role efficacy of secondary school teachers**. (Prof. D Bhaskara Rao), Department of Education, Acharya Nagarjuna University, Nagarjuna Nagar.

8. Vanlalhmangaihi. **Personal values of Mizo, Naga and Khasi students at Higher Secondary Level: A cross cultural study**. (Prof.Lalhmasai Chuaungo), Department of Education, Mizoram University, Aizawl.

Journalism & Mass Communication

1. Pandey, Aalok Kumar. **AIDS niyantran mein sanchar madhyamoan ka upyog: Ek adhyayan (Uttar Pradesh ke Sultanpur Janpad ke vishesh sandarbh mein)**. (Dr. Ranjan Singh), Department of Mass Communication, Makhanlal Chaturvedi National University of Journalism and Communication, Bhopal.

2. Suman. **Exploring agenda setting function of Hindi newspapers: A Study with Reference to 2019 Lok Sabha Elections in Haryana**. (Dr. Bindu Sharma), Department of Journalism & Mass Communication, Kurukshetra University, Kurukshetra.

Law

1. Alok Kumar. **Judicial accountability in India: An analytical study**. (Dr. Vagish Upadhayay), ICFAI Law School, The ICFAI University, Dehradun.

2. Bahuguna, Shalini. **Legal rights of inmates and correctional programs: A critical study with specific reference to Uttarakhand**. (Dr. Ashish Kumar Singhal), ICFAI Law School, The ICFAI University, Dehradun.

3. Gond, Ajit Kumar. **Biodiversity laws: An analytical study with special reference to access and benefit sharing**. (Dr. Anis Ahmad), Department of Law, Babasaheb Bhim Rao Ambedkar University, Lucknow.

4. Kharola, Monica. **Tibetan refugees in India: A socio legal study with special reference to Uttarakhand**. (Dr. Yugal Kishore), ICFAI Law School, The ICFAI University, Dehradun.

5. Kusum Lata. **Hindu Women's Right to Property: A socio - legal study in special reference to the Hindu Succession (Amendment) Act, 2005**. (Dr. C. R. Jilova), Department of Law, Kurukshetra University, Kurukshetra.

6. Rana, Preeti. **Constitutional and legal framework of child rights in India: A critical study**. (Prof. A Lakshminath and Dr. S P Singh), Department of Law, Chanakya National Law University, Patna.

7. Sandeep Kaur. **Concept of Penology and Actuarism in Indian Criminal Jurisprudence: An analytical and comparative study**. (Dr. Saurabh Garg), Faculty of Law, Tantia University,Sri Ganganagar.

8. Seema Devi. **The Pre-Conception and Pre - Natal Diagnostic Techniques (Prohibition of Sex - Selection) Act, 1994 to Stop Female Foeticide in India: A critical study**. (Dr. Krishna Aggarwal), Department of Law, Kurukshetra University, Kurukshetra.

9. Suneel Kumar. **Schematic expounding of scientific evidence: With special reference to admissibility and probative value of forensic evidence in Indian criminal justice system**. (Dr. Susanta Kumar Shadangi), ICFAI Law School, The ICFAI University, Dehradun.

10. Swami, Bhawna. **Human trafficking in India purpose for prostitution: A critical efficacy under socio-legal framework**. (Dr. Kaptan Chand), Faculty of Law, Tantia University,Sri Ganganagar.

11. Tiwari, Brij Bhushan. **An analytical study of Right to Information in public institutions: With Reference to official secrecy and Constitution of India**. (Dr. Kaptan Chand), Faculty of Law, Tantia University, Sri Ganganagar.

12. Tripathi, Vibha. **Gender justice in Muslim Personal Law with special reference to divorce**. (Prof. Sudarshan Verma and Dr. Sangeeta Krishna), Department of Law, Babasaheb Bhim Rao Ambedkar University, Lucknow.

Library & Information Science

1. Dhiwar, Geeta Dadu. **Electronic resource management by management institutes affiliated to Savitribai Phule Pune University: A critical study**. (Dr. Shubhada Nagarkar), Department of Library and Information Science, S.N.D.T. Women's University, Mumbai.

Management

1. Agarwal, Pankhuri. **A study of investment preference and tax planning with reference to**

Moradabad and Bareilly. (Prof. Vipin Jain and Dr. Surabhi Goyal), Department of Management, Teerthanker Mahaveer University, Moradabad.

2. Barua, Arunav. **Moderating effect of ethics in corporate governance and corporate social responsibility**. (Dr. Sangeeta Tripathi), Department of Management, Assam Don Bosco University, Guwahati.

3. Bhaskar, Preeti. **Employees perspectives on adoption of e-government and its impact on job performance: A study of e-districts in Uttarakhand**. (Dr. Puneet Kumar Gupta), ICFAI Business School, The ICFAI University, Dehradun.

4. Bhati, Indira. **Impact of behavioural factors and government policies on women entrepreneurship in Haryana State**. (Dr. Nipun Aggarwal), Department of Management, Maharishi Markandeshwar University, Ambala.

5. John, Parvis. **Free and Compulsory Education Act 2009: The impact and challenges on the schools in Manipur**. (Dr. R K Behera), Department of Management Studies, ICFAI University, Dimapur.

6. Kata, Anilambica. **A study on office ergonomic factors affecting employee performance: An exploratory study on ITES-BPO**. (Dr. V Srinivasa Prasad), Department of Human Resource Management, Acharya Nagarjuna University, Nagarjuna Nagar.

7. Mishra, Deepti. **Challenges faced by working women in IT sector**. (Dr. Ipseeta Satpathy), Department of Management, Kalinga Institute of Industrial Technology, Bhubaneswar.

8. Pongen, Aosenla. **Tourism industry and its economic impact on the economic development of Nagaland: A study**. (Dr. GN Bag), Department of Management Studies, ICFAI University, Nagaland.

9. Raheja, Sandeep. **Effectiveness of training programs on employee performance adopted by five star hotels of Delhi (NCR)**. (Dr. Mahesh Uniyal), Department of Management, Maharishi Markandeshwar University, Ambala.

10. Royte, Ronald Lalnunmawia. **Financial management of Churches in Mizoram: A comparative study of Baptist and Presbyterian Church**. (Prof. E Nixon Singh and Dr. K Lalromawia), Department of Management, Mizoram University, Aizawl.

11. Saighal, Bhavna. **Measuring the impact of office environment on the performance level of employees in IT sector in India**. (Prof. M K Bhat and Prof. M P Singh), Department of Management, Teerthanker Mahaveer University, Moradabad.

12. Sharma, Meenakshi. **Institutional investing and its impact on Indian stock market return and volatility**. (Dr. Anil Kumar Mittal), Department of Management, Kurukshetra University, Kurukshetra.

13. Trivedi, Yogendrakumar Manaharlal. **Emergent framework of leadership from the Rigveda**. (Dr. Margie Parikh), Department of Management, Gujarat University, Ahmedabad.

14. Verma, Shweta. **Impact of working capital management on corporate profitability with special reference to firms constituting S & P BSE indices**. Department of Management, Shree Guru Gobind Singh Tricentenary University, Gurugram.

Physical Education & Sports

1. Dasi, Suresh. **Effects of PNF stretching and own body exercises on selected biomotor abilities, and cardio-respiratory fitness variables among softball players**. (Dr. P P S Paul Kumar), Department of Physical Education, Yoga and Sports, Acharya Nagarjuna University, Nagarjuna Nagar.

2. Kavita. **Study of emotional maturity, anxiety and aggression among physical education and social science teachers**. (Prof. Ravinder Pal Ahlawat), Department of Physical Education, Chaudhary Devi Lal University, Sirsa.

3. Varanasi, Vasudeva Rao. **Effect different training packages on selected physical physiological and psychological variables on Indian Institute of Technology Tirupati students**. (Dr. P Johnson), Department of Physical Education and Sports Sciences, Acharya Nagarjuna University, Nagarjuna Nagar.

Political Science

1. Baro, Samarjit. **Autonomy movement of the Bodos with special reference to the District of Baksa and Udalguri of BTAD Assam (1987-2019)**. (Dr. Jyotiraj Pathak), Department of Political Science, Bodoland University, Kokrajhar.

2. Rao, S Someswara. **Towards cooperative federalism: The legal perspective**. (Prof M Ravi Sekhar), Department of Political Science, Acharya Nagarjuna University, Nagarjuna Nagar.

3. Vunnam, Rahul Kumar. **Panchayat finances and development in India: A study of Guntur District in Andhra Pradesh**. (Prof. K Chandra Kumar), Department of Political Science, Acharya Nagarjuna University, Nagarjuna Nagar.

Psychology

1. Bhatu, Manisha Devayat. **A psychological study of job satisfaction, job involvement and mental health of industrial employees**. (Dr. R C Parmar), Department of Psychology, Saurashtra University, Rajkot.

2. Meniya, Poonamben Chandulal. **A study of physically handicap children in family adjustment, social adjustment and mental health in higher secondary school student**. (Dr. Tarlika L Zalawadia), Department of Psychology, Saurashtra University, Rajkot.

3. Saxena, Satishkumar B. **Death anxiety, stress and social adjustment of HIV distressed patients in relation to their gender, education and marital status**. (Dr. Ashok N Prajapati), Department of Psychology, Children's University, Gandhinagar.

Public Administration

1. Kuljeet. **Problem of water pollution in Faridabad City: A study of role of Haryana Pollution Control Board**. (Dr. Pardeep Sachdeva), Department of Public Administration, Kurukshetra University, Kurukshetra.

2. Pooja. **Role of the Haryana Lokayukta in redressal of public grievances: A study**. (Prof. Sultan Singh), Department of Public Administration, Chaudhary Devi Lal University, Sirsa.

3. Sanjay. **Emerging trends of municipal leadership: A study of selected municipal bodies in Haryana**. (Dr. Rajesh Kumar), Department of Public Administration, Kurukshetra University, Kurukshetra.

Social Work

1. Boddapati, Hari Babu. **Midday meal programme in Andhra Pradesh an impact study in upper primary schools of Prakasam District**. (Dr. P Venkata Rao), Department of Social Work, Acharya Nagarjuna University, Nagarjuna Nagar.

2. Chand, Gian. **Workers' attrition in textile industry in Haryana: An appraisal**. (Dr. Ramesh Kumar Bhardwaj), Department of Social Work, Kurukshetra University, Kurukshetra.

3. Dominic, PT. **A participatory action research to understand farmers suicide in India: A case study in Wayanad District Kerala**. (Dr. Sr Molly K), Department of Social Work, Assam Don Bosco University, Guwahati.

4. Jalluri, Seetaramayya. **A study on problems of dalit women agricultural labourers in West Godavari**. (Dr. V Venkateswarlu), Department of Social Work, Acharya Nagarjuna University, Nagarjuna Nagar.

5. Kondru, Ramanayya. **Educational status and empowerment of tribal people through developmental programmes in Andhra Pradesh: An empirical study of ITDA-Paravathipuram in Vizianagaram District**. (Dr. V Venkateswarlu), Department of Social Work, Acharya Nagarjuna University, Nagarjuna Nagar.

6. Lalruatkimi. **Self help groups and empowerment of urban women in Mizoram**. (Prof Kanagaraj Easwaran), Department of Social Work, Mizoram University, Aizawl.

7. Tenali, Nagendra Rao. **Entrepreneurship development training programmes among schedule caste communities: A case study of Andhrapradesh Scheduled Caste Cooperative Finance Corporation in Prakasam District**. (Dr. P Venkata Rao), Department of Social Work, Acharya Nagarjuna University, Nagarjuna Nagar.

Sociology

1. Mall, Vijay Laxmi. **Sociology and human-animal interaction: A study of Lucknow**. (Prof.B B Malik), Department of Sociology, Babasaheb Bhim Rao Ambedkar University, Lucknow.

2. Rane, Mamta. **Khadey Suraksha Adhiniyam ka garibi evam kuposhan unmulan par prabhav ka samajshastriye adhyayan: Madhya Pradsh ke Badwani Jile ke chyenit gramoan ke sandarbh mein**. (Prof. R D Maurya), Department of Sociology, Dr B R Ambedkar University of Social Sciences, Indore.

3. Singh, Akanksha Kumari Sunilkumar. **Assessment of quality of life of elderly people in old age homes in Ahmedabad**. (Dr. Chandrika Raval), Department of Sociology, Gujarat University, Ahmedabad.

4. Sinha, Priti. **Moral values adjustment and academic achievement of high school students of working and non working mothers**. (Dr. Thomas Perumalil S J), The School of Educational Training and Research, Aryabhatta Knowledge University, Patna.

5. Solanki, Kirti Chunilal. **A comparative study of a female teacher working in a primary school: In the context of Ahmedabad Urban and rural**. (Dr. Subhashbhai Pandar), Department of Sociology, Gujarat Vidyapith, Ahmedabad.

6. Talluri, Narasiimmha Rao. **Living conditions of alcohol addicts in rural areas: A case study in Prakasam District of Andhra Pradesh**. (Dr V Venkateswarlu), Department of Sociology, Acharya Nagarjuna University, Nagarjuna Nagar.

7. Tepan, Bhawna. **Mahilaoan mein badte apradhoan ke karan samaj mein unka samayojan kee samasya kee isththi ka samajshastriye adhyayan: M.P. ke pramukh Indore Mahila Jail ke sandarbh**. (Prof. R D Maurya), Department of Sociology, Dr B R Ambedkar University of Social Sciences, Indore.

Tourism & Hospitality Services

1. Kurma, Sankara Rao. **A study on leisure tourism and its impact on environment sustainability with reference to Visakhapatnam District of Andhra Pradesh**. (Dr. P Purnachandra Rao), Department of Tourism and Hospitality Management, Acharya Nagarjuna University, Nagarjuna Nagar.

❑

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR
(Affiliated to Mahatma Gandhi University, Kottayam,
Re-Accredited By NAAC)
Ernakulam, Kerala 683542
Mob : 9446438500 ● Phone: 0484 2522723
Email: mtcwpbrrecruitment@gmail.com, mtcwpbr@yahoo.in

WANTED

Applications are invited from eligible candidates for the following posts. Age and Qualifications as per UGC/ University/Govt. rules. Apply **within 30 days** in the prescribed form which can be had from the college office on payment of Rs. 1500/- (1600/- by post)

Assistant Professors

Open	**Community**
Mathematics-3	Mathematics-1
	Hindi-1

The post will be treated as open, in the absence of sufficient applications from the members of the Mar Thoma Syrian Church. So candidates belonging to the general category may also apply. Late applications will be summarily rejected.

Sd/-
Manager

Concept
Since 1974

Mental Health: Psycho-Social Perspectives

Edited by
Aradhana Shukla | Anubhuti Dubey

Volume-1: Issues and Interventions
2015 | 978-93-5125-169-9
XVIII+345 | ₹ 1200

Volume-2: Multigroup Analysis
2015 | 978-93-5125-170-5
XVIII+322 | ₹ 1200

Volume-3: Strength of Human Resources
2017 | 978-93-5125-171-2
XVIII+326 | ₹ 1200

Volume-4: Therapeutic Applications
2017 | 978-93-5125-172-9
XVIII+302 | ₹ 1200

Volume-5: Adolescents & Children Mental Health
2021 | 978-93-5439-017-3
XX+372 | ₹ 1600

Volume-6: Women Mental Health
2021 | 978-93-5439-025-8
XVIII+350 | ₹ 1600

CONCEPT PUBLISHING COMPANY (P) LTD.
A/15&16, Commercial Block, Mohan Garden, New Delhi-110 059
Ph. : +91-11-41101460 *Email:* publishing@conceptpub.com *Website :* www.conceptpub.com
Showroom: Building No. 4788-90, Street No. 23, Ansari Road, Darya Ganj, New Delhi-110 002 *Ph.* 23272187

USIEF

The United States – India Educational Foundation (USIEF)

invites applications for the post of

Regional Officer, Hyderabad

The Regional Officer oversees USIEF programs and activities in the Hyderabad region and helps in developing a robust network of contacts at educational institutions and other stakeholders.

This is a full-time position based in Hyderabad.

Last date of receipt of applications is **by 23:59 hrs on May 10, 2022**.

For details login to
https://www.usief.org.in/careerhyderabad.aspx

Habib Educational and Welfare Society's

M.S. COLLEGE OF LAW

REQUIRES FOR MUMBRA & WADA

ASSISTANT PROFESSOR
16 POSTS - LL.M. / PH.D.

CLERK
4 POSTS - MUST BE A GRADUATE

Apply to :
111 Habib Educational Complex,
M.H. Mohani Road, Kausa, Mumbra,
Thane - 400 612.

khan.khurshid112@gmail.com OR
president.hews@gmail.com

Contact No.: 9773222227

DON BOSCO COLLEGE

M.G Road, Panjim, Goa 403001

(Self-financing programs affiliated to Goa University)

Ph. No. 0832 2421929, 2221986
Email: collegeoffice@donboscogoa.ac.in

VACANCIES

Interested candidates are requested to send their application form with CV and self-attested copies of certificates.

SL No	Contract Basis	Nos	SL No	Contract Basis	Nos
1	Computer Application	4	7	Environmental Studies	1
2	Physical Education	3	8	Librarian	1
3	Social Work	3	9	Law (Lecture Basis)	1
4	Mass Communication	3	10	History (Lecture Basis)	1
5	English	2	11	Psychology (Lecture Basis)	1
6	Business Management (Gen-3,T&T-3)	6			

Essential Qualification for Assistant Professor:-

For Post 1-11

Minimum 55% marks at Bachelor and Master Degree or its equivalent grade and a good academic record except for post 6 who require 60%. All other requirements as prescribed by UGC, Goa University and Govt. of Goa. For details log in to **https://donboscogoa.ac.in.**

The format of the application form is available at **https://donboscogoa.ac.in/resources/62639cc489a1e.docx** and should reach the Director **within 20 days.**

Director

Mandesh Vikas Bahuudheshiy v Sanshodhan Sanstha, Sangola
Mandesh Mahavidyalaya, Junoni
Tal. Sangoala, Dist. Solapur
Phone No: 8888045095 /9011616261
Email id: mandeshcollege09@gmail.com

WANTED

(Permanent Non-grant)

Applications are invited from eligible candidates for the following Non-Grant post.

Sr. No	Designation	Total post	Reservation
1)	**Principal**	01 full Time	Open to all

Notes

1) Education qualifications & pay Scale etc. are as per UGC norms, Govt. of Maharashtra & Solapur University, Solapur rules issued from time to time.
2) Short listed candidates will be advised to qualify post of the Principal ARS (Academic Research Score) by the committee constituted for the said purpose by PAHS University, Solapur before interviews.
3) Reserved candidates, who are domiciled out of Maharashtra State will be treated as open category candidates.
4) Reserved candidates are advised to send copy of their application to the **teacherapproval@sus.ac.in.**
5) Application received after the last date will not be considered. The college will not be responsible for postal delay, if any.
6) Those who are in service should apply through proper channel.
7) T.A.D.A will not be paid for attending the interview.
8) Apply giving full particulars **within 30 days** from the data of publication of this Advertisement to the undersigned.

President
Place : Junoni
Date : 25/04/2022
Mandesh Vikas Bahuudheshiy v Sanshodhan Sanstha, Sangola

MAR ATHANASIUS COLLEGE ASSOCIATION

KOTHAMANGALAM, KERALA – 686 666

Phone : 0485-2822326, Web : macollegeassociation.org

WANTED

Applications are invited from competent and eligible candidates for appointment to the following vacancy in the Government Aided College under this Education Agency.

MAR ATHANASIUS COLLEGE (AUTONOMOUS), KOTHAMANGALAM

PRINCIPAL (Direct Selection)

Qualifications, Scale of pay and Age will be as per norms prescribed by the UGC, M.G. University and the Government of Kerala. Application Form and other details can be had from the **Secretary, Mar Athanasius College Association, Kothamangalam-686 666, Kerala** on payment of Rs. 2500/-. Application completed in all respect should reach the office of the Secretary **with 30 days** from the date of publication of this notification.

Date : 26/04/2022 **SECRETARY**

ATTENTION ADVERTISERS

Advertisers are requested to send their text matter at following Email IDs:

1. advtun@aiu.ac.in

2. publicationsales@aiu.ac.in

Text matter may be sent in MS-Word document file OR in PDF file in original (as per Mechanical Data/Size of the Advertisement).

All the correspondence may be addressed to the **Under Secretary (Publication & Sales),** Association of Indian Universities, AIU House, 16 Comrade Indrajeet Gupta Marg, New Delhi-110002.

Mob: 09818621761

Phone Office: 91-11-23230059, Extn. 208/213.

SHIKSHAN PRASARAK MANDAL BANDA
RAOSAHEB GOGATE COLLEGE OF COMMERCE AND SMT.
SARASWATIBAI GANSHET WALKE COLLEGE OF ARTS, BANDA

Tal. Sawantwadi, Dist. Sindhudurg, M.S. 416511

APPLICATIONS ARE INVITED FOR THE FOLLOWING POST OF

PRINCIPAL

FROM THE ACADEMIC YEAR 2021-22

AIDED

This advertisement is approved subject to the final declaration in the Writ Petition No. 12051/2015.

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

Reservation for women will be as per University Circular No. BCC/16/74/1998 dated 10th March,1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/ICC/2019-20/05 dated 5th July, 2019.

Candidates having knowledge of Marathi will be preferred.

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

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

Applications with full details should reach the **CHAIRMAN, SHIKSHAN PRASARAK MANDAL**, BANDA, RAOSAHEB GOGATE COLLEGE OF COMMERCE AND SMT. SARASWATIBAI GANSHET WALKE COLLEGE OF ARTS, BANDA, Tal. Sawantwadi, Dist. Sindhudurg, M.S. 416511, **within 15 days** from the date of publication of this advertisement. **This is University approved advertisement.**

Sd/-
CHAIRMAN

Shri Yashwant Shikshan Prasarak Mandal's
Vasantidevi Patil Institute of Pharmacy (B. Pharmacy), Kodoli
Kodoli, Tal. Panhala, Dist. Kolhapur (Maharashtra) 416 114
(Affiliated to Shivaji University , Kolhapur)

(Non-Grant Basis)

W A N T E D

Applications are invited from eligible candidates for the following posts:

Sr. No.	Name of posts	Total Posts	Open Posts	Reserved Posts
A.	**Principal**	01	01	--
B.	**Professor**			
1	Pharmaceutics	01	01	--
C.	**Associate Professor**			**--**
1	Pharmaceutical Chemistry	01	01	--
2	Pharmaceutics	01	01	--
3	Pharmacology	01	01	--
4	Pharmacognosy	01	01	--
D.	**Assistant Professor**			
1	Pharmaceutical Chemistry	03	(01#)	01-SC, 01-OBC
2	Pharmaceutical Analysis	01	01	--
3	Pharmaceutics	04	01(01*)	01-SC, 01-OBC
4	Pharmacology	02	01	01-SC

Out of Sanction Posts Three, One post is already filled from open category.
*Out of sanction Posts Four, One post is already filled from open category.

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

Place: Kodoli
Date: 02/04/2022

Secretary
Shri Yashwant Shikshan Prasark Mandal
Kodoli,Tal.Panhala, Dist.Kolhapur

Licenced to post without prepayment under WPP No. U(C)-109/2021-23 Postal Regd. No. DL (C)-05/1241/2021-23
UNIVERSITY NEWS 60 (18) May 02-08, 2022 Regd. No. RNI-7180/1963
Published on Monday: 02-05-2022 No. of Pages 44 including covers Posted at LPC Delhi RMS, Delhi-6 on Tuesday/Wednesday every week

Banjara Education Society's

LATE BAPUSAHEB PATIL EKAMBEKAR GRAMIN COLLEGE,

HANEGAON, TQ. DEGLOOR, DIST. NANDED

WANTED

Applications are invited for the post of Principal (Granted) to be filled in **Banjara Education Society's LATE BAPUSAHEB PATIL EKAMBEKAR GRAMIN COLLEGE, HANEGAON, Tq. Degloor, Dist. Nanded (Maharashtra).** Eligible candidates should submit their application along with all necessary documents **within fifteen days** from the date of publication of the Advertisement by **Registered** post only.

Sr. No.	Name of the Post (Designation)	No. of Post	Reservation
1	Principal	One (01)	Unreserved

Educational Qualification:

A. Eligibilities:-

1. A Master Degree with at least 55% marks (or an equivalent grade a point scale wherever grading system is followed) by a recognized University.
2. A Ph. D. Degree in concerned/allied/relevant discipline (S) in the institution concerned with evidence of published work and research guidelines.
3. Professor/Associate Professor with a total experience of fifteen years of teaching/research/administration in Universities, College and other institutions of higher education.
4. A minimum of 10 research publication in peer reviewed or UGC listed journals.
5. A minimum of 110 research score as per Appendix II, Table 2 of UGC regulations 2018.
6. **Academic Eligibility and other rules Regulations as per UGC Regulation 18th July, 2018 and Govt. Resolution No. Misc-2018/C.R. 56/UNI-1 dated 08 March, 2019.**

B. Tenure:-

A college Principal shall be appointed for a period of five years, extendable for another term of five years on the basis of performance assessment by a committee appointed by the University, constituted as per these Rules.

Salary & Allowances:

Pay Scales as per the UGC, State Government of Maharashtra & Swami Ramanand Teerth Marathwada University Rules from time to time.

7th Pay Scale: Academic Level – 13 A (131400-217100)

Note:-

1. Prescribed application form is available on the University website **(www.srtmun.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 documents should be attached with the application form.
5. The vacant posts are being filled under the decision of Hon. High Court, Aurangabad Bench Petition No. 12051/2015.
6. The original Certificate must be provided at the time of interview.

Correspondence Address:
The President
Banjara Education Society's
Late Bapusaheb Patil Ekambekar Gramin College, Nanded-Bidar Highway-163-A,
Hanegaon, Tq. Degloor, Dist. Nanded (Maharashtra) 431741

Sd/-
Secretary
Mr. Pandharinathji Lobhichand Rathod

Sd/-
President
Mr. Ramraoji Lobhichand Rathod

Edited, Printed and Published by Dr Sistla Rama Devi Pani, on behalf of the Association of Indian Universities, AIU House, 16 Comrade Indrajit Gupta Marg (Kotla Marg), New Delhi-110 002. Phones: 23230059 (6 Lines). Fax: 011-23232131, E-Mail : sgoffice@aiu.ac.in, advtun@aiu.ac.in, publicationsales@aiu.ac.in, subsun@aiu.ac.in (for subscription), unaiu89@gmail.com, universitynews@aiu.ac.in, Website: http://www.aiu.ac.in
Printed by Chandu Press, D-97, Shakarpur, Delhi-110 092 Phone: 42448841, chandupress@gmail.com