



Rs. 30.00

ISSN 0566-2257

# UNIVERSITY NEWS

*A Weekly Journal of Higher Education*

**Association of Indian Universities**

Vol. 58 • No. 31 • August 03-09, 2020

**L N Dahiya and Seema Singh**

Why Does Happiness Elude India?

**Manjulika Srivastava, Manisha Rai and Navita Abrol**

Accreditation of Higher Education Institutions  
Offering Programmes through Open and  
Distance Learning Mode: An Appraisal

**Pradeep Kumar Misra and Prithviraj Singh Chauhan**

Online Teaching and Learning Experiences  
during COVID-19 Lockdowns: Ten Lessons for  
Higher Education Institutions

**Ram Nath Kovind**

Quest for Knowledge Leads to Greater Minds

**Special Address**

*Celebrating  
90  
Years of  
University News*

#Let'sBeatCoronaTogether

ITEMS	In This Issue	PAGE
<b>Articles</b>		
Why Does Happiness Elude India?		3
Accreditation of Higher Education Institutions Offering Programmes through Open and Distance Learning Mode: An Appraisal		10
Online Teaching and Learning Experiences during COVID-19 Lockdowns: Ten Lessons for Higher Education Institutions		20
<b>Special Address</b>		
Utkal University, Bhubaneswar, Odisha		27
<b>CAMPUS NEWS</b>		29
<b>Theses of The Month (Science &amp; Technology)</b>		38
<b>Advertisements</b>		41

**New Subscription Tariff  
(Effective April 01, 2020)**

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

(at residential address only)

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

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

**Editorial Committee Chairperson:**

Dr (Ms) Pankaj Mittal

**Editorial Committee:**

Dr Baljit Singh Sekhon

Dr Amarendra Pani

Dr Youd Vir Singh

**Editor:**

Dr Sistla Rama Devi Pani

**#Let'sBeatCoronaTogether**

# Why Does Happiness Elude India?

L N Dahiya\* and Seema Singh\*\*

Man's quest for happiness is as old as the mankind itself. In other words, the ultimate goal of human activities, all through the human history has been to lead a happy life. Having realized its centrality, the United Nations (UN), on the initiative of Bhutan, devised and introduced a quantifiable Happiness Index<sup>1</sup> (HI) for the first time in 2012, and the first World Happiness Report (WHR), giving happiness index of 156 countries, was released. Since then the WHR, with the exception of 2014, is released every year. The WHR, based primarily on Gallup World Poll<sup>2</sup>, takes into account six key explanatory variables of happiness, including gross domestic product (GDP) per capita, social support, healthy life expectation, freedom to make life choice, generosity, and perception of corruption. The 8<sup>th</sup> WHR has been released recently on 20<sup>th</sup> March 2020, timed to coincide with the UN's annual International Day of Happiness. This report besides these six happiness variables has also focused for the first time on four additional emerging issues viz., environment, rural urban happiness differentials, sustainability and digitization, in relation to human happiness.

To begin with, the 8<sup>th</sup> WHR reveals that there remains a wide variation in the level of happiness among 153 ranking countries (the current WHR includes 153 countries instead of 156 countries as in earlier reports). With a happiness score of 7.809 (on the ladder scale of zero to 10), Finland emerges as the top happy country for the third consecutive year, while Afghanistan, with a very low happiness score of 2.569, is the least happy country on this planet. The gap between the happiest and the least happy country, in terms of average life evaluation, is more than three times.

## India's Happiness Position

India, having close a fifth of global population, and with 3.573 score of happiness quotient, is ranked at a lowly 144 position. It has slipped 4 slots below from last year ranking of 140. Now India is a new entrant to the bottom fifteen group of less happy countries. It has suffered a net loss of -1.216 points in happiness score from 2008-2012 to 2017-2019. Clearly, India is on a declining trend when it comes to happiness. The country ranked 117 in 2015, 118 in 2016, 122 in 2017, 133 in 2018, 140 in 2019 and now at 144 as per the recently released 8<sup>th</sup> WHR, 2020. Not only this, India again, palpably, is far behind its neighbours such as Pakistan (66 rank), Nepal (92 rank), Sri Lanka (130 rank), Bangladesh (107 rank), Myanmar (133 rank), Thailand (54 rank), and China (94 rank) in this respect.

\*Former Professor and Vice Chancellor, M.D. University, Rohtak and Former National President of the Indian Commerce Association. Res: H.No. 1129 Sector-3, Rohtak-124001 (Haryana). E-mail : Indahiya@yahoo.co.in

\*\*Faculty, Institute of Management Studies and Research, M.D. University, Rohtak-124001 (Haryana)

Turning to the happiness level in mega cities of the world, which have been ranked for the first time in the current WHR, Helsinki- the capital city of Finland, with 7.828 happiness score, is on the top. With a low happiness score of 4.11, New Delhi, the capital of India which is one of the most populous cities on this earth with 29.6 million inhabitants, is ranked at 180 place, and is near bottom of the 186 cities evaluated all around the world. While collating, it is amply clear that mega cities of our neighboring countries such as Singapore, Bangkok, Lahore, Beijing, Yangon and Colombo, occupying 49, 56, 122, 134, 165 positions, respectively, are placed better than New Delhi. Most notably, the city and country rankings are essentially identical. Placed poorly in happiness ranking, India needs to introspect seriously as to why does it fare so miserably on the world happiness index. We make an attempt to answer this question in the research paper by examining the underpinning reasons, mainly through the prism of six key explanatory happiness variables, adopted by the UN, as adumbrated earlier.

### **Causes of Low Happiness Examined in India**

#### ***Gross Domestic Product (GDP) Per Capita***

The GDP per capita, a concept propounded by Simon Kuznets, is one of the key quantifiable parameters in the construction of World Happiness Index. According to the World Bank, India ranks at 130 place in GDP (ppp) per capita among 197 countries in 2020. Interestingly, while India's GDP per capita has doubled in last decade, its happiness has gone down year per year. The inverse relationship between the two can be explained in terms of minimum 'threshold income level' that India has not yet achieved to garner a normative level of happiness. Actually, the low per capita income in India hardly leaves the majority of people with sufficient disposal income to make ends meet in the face of galloping inflation. The situation gets aggravated as India continues to be a non-egalitarian country, with burgeoning levels of economic disparities, fuelling further the problem of poor. The gulf between the haves and have nots has widened over the years, and economic inequality remains a challenge, which *per se* is a dominant cause of unhappiness in the society. According to one estimate, India's richest one per cent is four times wealthier than poor 7 per cent. Similarly, a 2019 Oxfam Survey revealed that while top 5 per cent households corner over 38 percent of the country's assets, the bottom 60 per cent possess

merely 13 per cent of the total assets in India. It also accounts for 28 per cent of the 1.3 billion multi-dimensional poor in the world. Remember, poverty does not come alone but brings with it malnutrition, poor health and host of other challenges, which put together make people unhappy.

#### ***Social Support***

Social support and security net are key determinants in happiness indexation. The consistent high level of happiness in Nordic countries : Finland, Denmark, Norway, Iceland and Sweden is due to high quality level of social support by their respective governments and reliable extensive welfare programs, to which citizens have an easy access. People in these countries are more happy, as they trust each other very strongly. Also the shared institutions in these countries care extensively the welfare programs of the people. In social support, these five Nordic countries mentioned above are placed quite high on happiness pedestal, occupying 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 7<sup>th</sup> place, respectively, in that order in the tally of 153 ranking countries. Actually, the government of these countries have been able to convert their wealth into well-being for their people. This is for this reason that the citizens in these countries do not resist even high taxation and other levies. They strongly believe that all such proceeds would be optimally utilized for the welfare of the general public. While juxtaposing, the Indian scene is quite dismal, and is placed at low rank at 142 only in social support in the comity of nations. Due to lack of social support and security net, people's faith and trust has diminished in Indian government. A wide but lame Public Distribution System (PDS), non-transparent economic reforms like demonetization and a hasty implementation of the General Sales Tax (GST), several financial scams resulting in mounting NPAs of banks, woefully low ranking (129) in HDI, indiscriminate privatization and disinvestment even of the profit making public sector units, ongoing agrarian crisis, mounting unemployment and under employment, women and ethnic minority related issues, growing communism and majoritarian politics, false government promises, slugfest, cringing and patronized media, balantant erosion of the power of national level institutions, opening wine shops and mishandling of migrants in the midst of recent lockdown due to COVID-19, all taken together, have diminished faith and trust of people in the government, detracting them from the quest of

happiness and pushing them to adversities, distress and distrust. In sum, strong social environment that provides buffers against social and economic related life challenges, is fragile in India- a great cause of unhappiness among people.

### ***Healthy Life Expectation***

Healthy life expectancy is yet another decisive variable in happiness dispensation. It is universally acknowledged that good health contributes to happiness. To quote the Dalai lama 'happiness is the highest form of health', is quite true. India is poorly ranked at 105 place in the world in terms of healthy life expectancy. India's record on most global health parameters is, abysmally, unsatisfactory. An overwhelming number of its citizens suffer from several life threatening diseases. For example, India is often called as the diabetes capital of the world. About 4.75 per cent and 6.19 per cent Indians are diagnosed with diabetes and hypertension respectively. Diseases like cardiovascular and obesity are spreading their wings quite rapidly in the country. About 4.5 per cent Indians suffer from depression and another 38 million from anxiety and mental disorder. Similarly, addiction that has assumed alarming proportion is proving a social menace in several Indian states. Also, a large percentage of women in rural and urban slums are anemic. According to the UN's report, nearly 21 per cent Indian children suffer from wasting-a more acute form of malnutrition, and another 213 million people go hungry every night. In addition, apocalyptic climate woes, scarcity of potable water, inadequate sanitation, housing and medical facilities, sedentary life styles of middle and neo-rich classes of people -all taken together accentuate the problem of healthy life expectancy, adding to the misery and unhappiness of the Indian people.

To improve on the happiness score, India's desideratum would be to accelerate its spending on health care sector from the existing 1.28 per cent of GDP to a much higher level. It is embarrassingly lower than the average expenditure by countries clubbed as among the "poorest". In view of the COVID-19 pandemic, which has engulfed the entire globe, the flagship Ayushman Bharat Health Scheme, needs to be strengthened as a better health care system in the country. India's indigenous system of medicine based on Ayurveda must be standardized on priority through rigorous research and lab testing.

Always bear in mind the famous dictum: good health is wealth, and hence a prerequisite for happy living.

### ***Freedom to Make Life Choice***

Freedom and autonomy to make life choices are known to be connected to the well-being and happiness, as these give an individual an opportunity to perform an action selected from two or more available options/choices. India's position is, evidently, not very encouraging in this regard where it is placed at 41 rank out of 100 ranking countries. Lack of opportunities, leading to narrowing down choices in different areas of activities is a big disappointment for Indians. For example, the intervention of state by restricting the freedom of choices into the private affairs of people such as their food, drinks, dresses or sexual preferences, does affect the people happiness negatively. According to the Economist Intelligence Unit, India was ranked 51<sup>st</sup> on democracy index in 2019. The primary cause for democratic regression in India in recent years, has been the erosion of civil liberties as a consequence of discriminatory Citizenship Amendment Act (CAA) 2019, a controversial National Register of Citizens (NRC), and the fluid situation in Jammu and Kashmir, after the abrogation of Article 370 of the constitution, leading to riots and *dharnas*. The issue of Babri Masjid, fortunately, now stands settled after the recent Supreme Court judgment.

Similarly, media which is supposed to guard the peoples' freedom, though strong in presence, is weak on neutrality in India. Most of the media outlets enjoy proximity of politicians, business houses and lobbyists, and more often don't care much of the ethical values required to protect freedom of people. This type of media, appropriately, is called the *godi* media. However, the new brand of media, i.e., social media which has come to stay in India, is more versatile as it is two way speedy conversation, and is expected to play a major role in empowering people in our country. It has made great in-roads into our society. It undoubtedly has helped the society positively on divergent issues impacting our lives, though it has some flip sides as well. In fact, the pros and cons of social media totally depend upon how we use it. It is essential, therefore, to verify sources and truth of social media, rather than taking everything you view as fact.

Further, Indian voters, assured with immense power to shape the government in a most democratic

way without fear and favor, don't have good choice either on the political leadership front, for which they suffer helplessly. This is the reason that the Election Commission of India introduced NOTA to give the voters more freedom in the matter of choosing their representatives. As to the civil societies or civil organizations in India, which are supposed to watch and protect the interest of citizens through collective action and mobilizing to articulate demands and voice concerns at local, national and international levels, are by and large, more often defunct and silent. These civil societies which performed their functions well earlier have found themselves in trouble for the last few years due to expanding terrorism, criminalization, groupism, casteism and communalism, politicization, and other similar threats. Resultantly, these civil societies are dying under their own weight. Admittedly, people in India now definitely have more choices of products and services in the market. But despite the wide range of choices available, the end consumer does not get a better deal for the reason that the quality and utility of the same are not fully assured. Even the edibles such as vegetables, fruits, milk and also medicines are highly spurious, contaminated and unsafe. Market place now has virtually become a *markat* place instead of a genuine business centre.

In brief, freedom to make life choices, in general, is laudable concept as it leads to empowerment of people. But at the same time, it should be born in mind that freedom also needs to be regulated sometimes, particularly, when people turn distracted and careless and start harming and inflicting themselves. For example, the police strict action against the offenders, to restrict free movement of people during lockdown period in the wake of COVID-19 pandemic, by any stretch of imagination, can't be construed as having repressed the people's rights and freedom. Similarly, freezing the inflation linked allowance of the central government employees and pensioners till June 2021, is in line with the current alarming financial situation in the country.

### **Generosity**

Generosity exerts a positive and significant impact on life satisfaction. This is exactly the reason that sometimes even dacoits and burglars could be seen having their booty distributed among

the destitutes and the poor. Generally, happier people are likely to volunteer in community and also donate money. India's record on generosity, despite its informal culture of donations and charity, at any rate, is poor. India's 65 place in the world ranking, and its total donations being just around 0.37 per cent of the GDP as per the Gross Domestic Philanthropic report, is significantly lower than the majority of the countries including our neighbors. Most notably, Myanmar- a small Buddhist state in our neighborhood, emerges as the most generous nation on the earth, occupying the top rank in the third year running in the world. This speaks volume of the people's desire to help fellow beings to live better lives in Myanmar.

Indian people, contrary to the belief held, are not very generous and not found supporting the poor as much as they are supposed to do so. Our record of philanthropy, with few exceptions, is dismal. Our primary instinct is to hoard and multiply our own wealth with little regard to sharing it with the unfortunates. Surprisingly enough, even the mandatory CSR is not willingly honoured by several corporates and business houses. While shirking in their legal and moral duties, the plutocrats resort to conspicuous consumption and vulgar display of their enormous wealth. Glaring examples of such wasteful whopping expenditure are evident from the fat and lavish weddings of the wards of Mukesh Ambani, Subrato Roy of Sahara Parivar, Janardhan Reddy etc. The spending on these marriages was stated to be in the tune of Rs. 724 crore (2018), Rs 552 crore (2004) and Rs 550 crore (2016) in that order. Even when India is reeling under the crisis of COVID-19 pandemic, the rich and wealthy, with few exceptions like Ratan Tata, Azim Premji and Mukesh Ambani, failed to rise to the occasion, in proportion to their richness and capacity. Sadly, the donations made by several MLAs and MPs out of their LADS funds, and not from their own pockets, towards COVID-19 relief fund, is not only, virtually, a shadow donation but unethical as well. Similarly, no political party in India has made any donation towards this relief fund. The fact remains that the rich and corporate in India prefer to donate money to the political parties to win their favor.

Since charity boosts happiness, government needs to encourage spirit of generosity and create the environment in which a strong civil society can flourish, allowing people to reach out those

less fortunates. Rules and procedures regarding donations, through most trusted platforms, for noble causes like health, education, natural calamity and similar other social issues, be streamlined and monitored. In order to bolster support from the potential donors, it is necessary to provide information about the collected funds and its proper utilization. Donors should also be inspired to allow donations without any hassles, to improve the lot of targeted group. Most of the educational and medical institutions in the country could be born and developed with this strategy of charity, boosting happiness to all concerned. Also, tax exemption on donations for specified relief funds and charitable institutions, which tend to mitigate the suffering and sorrow of deprived people, be further relaxed and extended to enhance overall well-being and happiness in the country.

### ***Corruption***

Corruption tends to have a devastating impact on collective happiness. It involves the misuse or abuse of public office for a private gains in the form of bribery, extortion, cronyism, nepotism, patronage, graft and embezzlement. India is ranked at 73<sup>rd</sup> place as per WHR 2019, and 80<sup>th</sup> place out of 180 countries in their corruption perception index by the Transparency International Report of the same year. According to this report, 7 out of 10 people in India have to pay a bribe to access public services. Corruption in society is pervasive from the lowest to the richest. Numerous financial scams like Commonwealth Games Scam, Coalgate Scam, 2G Spectrum Scam, IPL Scam, Agusta Westland Chopper Scam, PNB Scam, Adarsh Housing Society Scam, Vyapam Scam, Satyam Scam and Rafale deal (now clean chit from S.C.), to mention a few, having colossal financial implications, explain vividly the saga of corruption in the country in recent past. Even the government launched entitlement core schemes and programs such as MGNREGA, National Rural Health Mission scheme (NRHM), Old Age Pension scheme, Students Stipend and Scholarship scheme, have become major dens of corruption in the country. Also, the funding of expensive elections and donations to political parties by the corporates and others to gain favour is at the core of political corruption. A recently launched Electoral Bond scheme in January, 2018, to benefit the eligible political parties in India, could lead to an influx of the black money in politics. According to the Civil

Rights Society, the concept of donor's "anonymity" in the scheme threatens the very spirit of democracy and amounts to money laundering. The Election Commission of India as well as the RBI, have also not fully approved the scheme in its present form.

The major factors contributing in rising corruption in India are: low degree of transparency and accountability, strong political monopolized bureaucracy, extravagance and greed of the rich, weak civil participation against corruption and low political clarity. Because of the high nexus between the politicians and the bureaucrats, we witness high ranking barons, politicians and bureaucrats getting away scot free after defrauding huge public money, and depositing this black money in the Swiss and other foreign banks.

In an effort to curb all sorts of corruption, Indian government, in recent years, has rightly taken several steps like introducing Comprehensive Goods and Service Tax (GST), amending RTI Act for transparency, right to public service legislation, anti-corruption laws, encouraging anti-corruption organizations, making digital transaction mandatory to beneficiaries covered under all welfare schemes, closing international loopholes in transactions etc. Despite all these measures, corruption is not only surviving but also thriving in India, as stated, due to the strong nexus between bureaucracy, politicians, criminals, and at times, even the judiciary. Given the situation, only a serious approach to the problem of rampant corruption can be workable to bolster India's ranking in happiness index in the global context.

### **Other Happiness Variables Explored**

Besides the six key variables impacting happiness discussed above, the 8<sup>th</sup> WHR also explored, for the first time, the relationship between happiness and four other emerging issues of environment, rural-urban, migration, sustainable development and digitization. Since a detailed analysis of these is beyond the scope of the paper, only broad findings are highlighted. The report brings out vividly that an overwhelming number of people/respondents in 160 countries revealed the preferences for the environmental (natural) protection and the urgency to combat global warming over economic growth. It augurs well that the people worldwide now recognize the importance of natural environment and its protection for their combined well-being. As to the rural-urban happiness differentials,

report revealed that on an average, world's urban population is happier than rural population for better economic prospects and amenities in the former. However, in many western countries, people living in rural areas are reported happier because of high degree of community attractions, clean environment and housing affordability. The rural-urban happiness puzzle seems equally to be relevant in India, where woes of overcrowded cities have begun to raise their ugly head exposing people to all sort of negativities in the midst of fast urbanization due to mass exodus of rural population. Even then only a comprehensive survey would reveal the true picture of rural-urban happiness differentials in India. Further, a strong positive correlation between human happiness and sustainable development goals (SDG-17) is observed. No doubt, some SD goals would put an extra stress and tension on nations, particularly, the developing ones like India, in maintaining a balance between human development, environment, ecology and the growth, in the coming years. On digital media, it is reported that though digitization does enhance well-being of the people in several ways, but at times, its negativities also work in tandem with general happiness and well-being, particularly, among the adolescents, who are 'almost constantly' on-line. Both the pros and cons of digitization are amply visible in India as elsewhere. The need of the hour is to use it judiciously and avoid its traps.

### **Policy Implications**

Some broad policy implications are given here.

- An obsession with GDP as a yardstick to measure the growth of nation is no guarantee to happiness, as the shortcomings of this growth model are well-known. For example, Finland which is placed at 22<sup>nd</sup> rank in GDP per capita income, is the happiest country. The marked inverse relationship between richness and happiness is also observed in several other countries including USA. The lesson, therefore, is loud and clear that money doesn't always buy happiness.
- In the light of the experience, the desideratum for India would be to convert her wealth into the well-being and happiness of the people by creating robust social foundation and generating trust and goodwill among people, as is the case of Nordic countries, which are constantly happiest

despite cold and hostile climate for most of the year.

- In order to improve national happiness quotient, government of India needs to lay special focus on numerous small and marginal farmers (over 86per cent), labour in unorganised sector (over 94per cent), unemployed youth, health, education and environmental related sectors, strengthening judiciary and providing urban amenities in rural areas to check mass exodus. Extending adequate social security, financial stability, opportunities and meeting their basic necessities, would also go a long way in improving happiness of less endowed people in India.
- Pruning all extravagant expenditure on politicians, bureaucrats, unnecessary subsidies, and also speedy and strict actions against economic, social and political offenders will push the agenda of happiness in right direction of the country. Stabilizing burgeoning population through legislation would also fit well in the present scenario, as India's sheer number of people is one major cause of her low happiness.
- In order to promote and provide a big push to the issue of happiness, India may create a separate "Happiness Ministry" at the centre as done in several countries including UAE, Bhutan and Venezuela. Also happiness related contents be incorporated, in a structured way, to the existing curricula at school and college levels to benefit huge number of 315 million students in India. The Delhi Government has recently made a beginning in the direction with government schools. This would equip the students with enlarged information required to understand skillfully the whole gamut of happiness in their early years and to help cushion vicissitudes and other pressures of modern day domestic society.
- More conclusive research is required to seek a link between happiness and some emerging challenges like natural environment and climatic change, rural-urban migration, sustainable development goals and digitization to devise a more meaningful strategy of happiness.
- Happiness is largely an innate thing. Happiness is not getting all you want, it is about enjoying all you have by eschewing the culture of conspicuous consumerism, demand push demonstrative effect,

envy, jealousy and cut throat competition. Alas, we are seeking happiness in wrong directions and wrong places.

- Lastly, the replenishment of nature in all possible ways, simple living with love, compassion, honesty and respect without greed and luxuries, are great lessons to mankind to derive physical, intellectual and spiritual happiness. India also needs to emulate Bhutan- a tiny hill state in her neighborhood, in pursuance of the goal of happiness by devising a more holistic model of gross national happiness and wellbeing. Hopefully, India with these steps could likely report better happiness record in coming 2021, and the subsequent years.

## Conclusion

India is placed on a lowly 144<sup>th</sup> rank in a Global Happiness Index of 153 countries and is one of the least happy countries in the world. While collating, India is much less happy than our neighbouring countries. India typically experienced continuous decline in happiness quotient since the release of first WHR in 2012. This is due to some combinations of economic, social and political aberrations, as reflected in six key happiness variables, reporting low and very low values. Indian impressive growth of GDP per capita, notwithstanding, during last several years, national happiness score has slid down, largely due to persistent poverty and widening income inequalities in the country. Most importantly, people living in more equal societies are reported happier.

## Notes

1. Happiness Index: Happiness Index is an indexation of happiness based on Gallup World Poll's results, that was first used in the World Happiness Report 2012. In this survey the respondents from 156 countries across the globe, were asked to rate their happiness on a scale from zero to 10. The happiness index of each country is calculated by averaging the survey report of the respondents.
2. Gallup World Poll: The World Happiness Report sources its data from the Gallup World Poll. Gallup- an organization named after an American pioneer G.H

Gallup, interviews approximately 1,000 citizens from per country each year in over 150 countries around the world, which represent 98 per cent of the adult world population. Those people aged 15 and older are asked the same set of questions in their own language to provide comparable results. The enormous amount of data is used by the Global Happiness Council, in combination with other data sources- to construct the World Happiness Report. In a ladder scale of 0 to 10, zero represents the worst possible and 10 represents the best possible life or happiness. It may be noted that in case of 'corruption' variable, a higher rank means a lower percentage frequency of corruption. In all other five variables, a higher rank standing for better performance.

## References

1. Aknin, L.B., Sandstrom, G.M., and Dunn, E.W. (2012). Giving Leads to Happiness in Young Children, *PLOS ONE* 7(6), e 39211
2. Atkinson, A.B. (2015). *Inequality: What Can Be Done?* Cambridge, Harvard University Press
3. Berry, B.J.L, Okulicz-Kozaryn, A. (2009). Dissatisfaction with City Life: A New Look at Some Old Questions, *Cities*, 26, 117-124
4. Berron, F., Clinch, J.P. and Ferreira, S. (2008). Happiness Geography and the Environment; *Ecological Economics*, 65, 386-396
5. Dahiya, L.N, and Singh Seema (2019). The Evolution of Happiness Index: An Overview, *University News*, Vol 57 No 24 June 17-23,
6. Goff, L., Helliwell, J, and Mayraz, G. (2018). Inequality of Subjective Well-being as a Comprehensive Measure of Inequality, *Economic Enquiry*
7. Helliwell, J.F, et al., (2018). Empirical Linkages Between Good Governance and National Well-being, *Journal of Comparative Economics*, 46(4).
8. Seink, C. (2014). The French Unhappiness Puzzle: The Cultural Dimension of Happiness, *Journal of Economic Behaviour and Organization*, 106, 379-401.
9. Twenge, J.M, Park, H. (2019). The Decline of Adult Activities Among US Adolescents, 1976-2016: *Child Development*, 90, 638-654.
10. *World Happiness Report, 2019 and 2020*, edited by John F. Helliwell and others, published by Sustainable Development Solutions Network, released by United Nations, New York. □



# Accreditation of Higher Education Institutions Offering Programmes through Open and Distance Learning Mode: An Appraisal

Manjulika Srivastava\*, Manisha Rai\*\* and Navita Abrol\*\*\*

Accreditation of all higher educational institutions (HEIs) is made mandatory including the HEIs offering programmes through Open and Distance Learning (ODL) mode (Government of India, 2013; 2017). To meet this demand, the National Assessment and Accreditation Council (NAAC), has come up with schemes on Assessment and Accreditation (A&A) especially for HEIs offering programmes through ODL mode, namely Open Universities (OUs) and Directorates of Distance Education (DDEs) functioning under Dual mode Universities (NAAC, 2019).

This paper attempts to discuss the salient features of the NAAC's very first Scheme for assessment and accreditation of OUs and DDEs and how it is in line with the Scheme for regular conventional universities by keeping the zest of ODL alive (NAAC, 2017).

Widespread proliferation of the Higher Educational Institutions (HEIs) has led to concern over the quality of education being imparted by such institutions. To address this concern, the National Policy on Education (Government of India, 1986) and the Programme of Action (Government of India, 1992) pressed for setting up an independent national accreditation agency. Against this backdrop, the National Assessment and Accreditation Council (NAAC) was established in 1994 as an autonomous institution of the University Grants Commission (UGC) with its Head Quarters in Bengaluru. NAAC is the central agency entrusted with the accreditation of HEIs offering general education as well as professional programmes and has been entrusted with this mammoth task of quality assurance

in higher education in one of the largest higher education systems of the world. The accreditation of technical programmes is done by National Board of Accreditation (NBA) (AICTE, 2020) and that of teacher education is done by National Council of Teacher Education (NCTE, 2020).

The NAAC envisions, "To make quality the defining element of higher education in India through a combination of self and external quality evaluation, promotion and sustenance initiatives". NAAC has devised its mission in order to achieve its vision (NAAC, 2020a):

- To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programmes or projects;
- To stimulate the academic environment for promotion of quality of teaching-learning and research in higher education institutions;
- To encourage self-evaluation, accountability, autonomy and innovations in higher education;
- To undertake quality-related research studies, consultancy and training programmes, and
- To collaborate with other stakeholders of higher education for quality evaluation, promotion and sustenance.

NAAC carries out its functions through its General Council (GC) and Executive Committee (EC) and other academic, advisory and administrative sub-committees, comprising educational administrators, policy makers and senior academicians from a cross-section of Indian higher education system. Senior academics of undoubted integrity and proven competence from all over the country are taken in various consultative committees to steer the policy framework for accreditation of higher educational institutions. These committees provide the necessary inputs for establishing and strengthening the processes. Apart from this, NAAC is also creating a large pool of experts known as assessors across the subjects by conducting and sponsoring various

\*Professor and Director, Centre for Internal Quality Assurance, Indira Gandhi National Open University, Maidan Garhi, New Delhi-110068. E-mail: manjulika@ignou.ac.in

\*\*Research Scholar, Staff Training and Research Institute of Distance Education, Indira Gandhi National Open University, Maidan Garhi, New Delhi-110068. E-mail: manishavachaspati@gmail.com

\*\*\*Assistant Director, Centre for Internal Quality Assurance, Indira Gandhi National Open University, Maidan Garhi, New Delhi-110068. E-mail: navita@ignou.ac.in

orientation programmes across the country from time to time (NAAC, 2020a).

### **Objectives of the Study**

This study has been undertaken with the following objectives:

- To outline the process of assessment and accreditation of HEIs by NAAC;
- To state the need for assessment and accreditation of HEIs offering ODL programmes;
- To study the Schemes developed by NAAC for assessment and accreditation of ODL HEIs; and
- To highlight the metrics specifically related to ODL system.

### **Methodology**

The study is based on the Manuals developed by NAAC for assessment and accreditation of conventional Universities; Open Universities and Dual Mode Universities. In this study, document analysis was employed as the research method. Tools were developed for the thematic analysis of the seven criteria adopted by NAAC for assessment of HEIs, i.e. Curricular Aspects; Teaching - Learning & Evaluation; Research, Innovations & Extension; Infrastructure and Learning Resources; Student Support and Progression; Governance, Leadership and Management; and Institutional Values & Best Practices (NAAC, 2019). The documented data were analysed to find out the metrics adopted specifically for ODL HEIs, as representative of the unique features of the ODL system. Descriptive analysis was used to report the outcomes of the study and graphical presentations to explicitly highlight the findings.

### **Accreditation Process of NAAC**

NAAC initially adopted the same methodology like other international agencies, namely that of self-evaluation combined with peer review based on pre-determined criteria for assessment of the HEI. It was a four step process that commenced in 1998: (i) Identifying pre-determined criteria for assessment; (ii) Preparation and submission of Self-Study Report by the HEI; (iii) Site visit by peer team to validate the Report and submit its recommendations to NAAC; and (iv) Final decision of the Executive Committee of the NAAC and declaration of grade awarded to the HEI. There were ten pre-determined criteria adopted by NAAC, namely: “Goals and objectives; Curriculum design and review; Teaching-

learning and evaluation; Research and publications; Consultancy and extension activities; Organization and management; Infrastructure facilities; Support services; Student feedback and counselling; and Generation and management of financial resources – that cover all the functions of a higher education institution were considered as the base for assessment. Under each of the ten parameters, the best practices expected of an institution were identified. They were called “criterion statements”. Based on the field experience, the ten parameters were reduced to seven criteria, namely: Curricular Aspects; Teaching-learning and Evaluation; Research, Consultancy and Extension; Infrastructure and Learning Resources; Student Support and Progression; Organization and Management; and Healthy Practices. Further to spell out the focus of each criterion, “key aspects” of functioning were identified and weightages were allotted. At that time the major role of the peer team was not only to prepare the Report but also finalize the scores and recommend the grade which was based on total score of 100 points and on a five point scale; which was subsequently revised to 1000 points (NAAC, 2004; Venkatesh, 2013). The initial Scheme launched by NAAC was voluntary and therefore not many HEIs came forward for assessment and accreditation (Stella, 2002). However with the Gazette notification of the Government of India, assessment and accreditation was made mandatory and was also linked to funding (Government of India, 2013). With the increase in demand, and to bring in more objectivity in the process, NAAC completely overhauled the system of assessment and accreditation which was launched in July in 2017. The NAAC process of assessment and accreditation today is ICT based and formulated on the principle of self-disclosure and transparency. The criteria for assessment of HEIs has been revised which are as follows: Curricular Aspects; Teaching-Learning and Evaluation; Research, Innovations and Extension; Infrastructure and Learning Resources; Student Support and Progression; Governance, Leadership and Management; and Institutional Values and Best Practices. The revised process is presented here.

#### ***Step 1: Submission of Institutional Information for Quality Assessment (IIQA)***

A HEI has to apply for assessment and accreditation by filling up the IIQA format on online portal available on NAAC website with specific amount of fee. IIQA will be assessed by NAAC and

only after it is accepted the HEI can move forward to the next step. In case of rejection, HEI gets two more chances to apply within a year.

### Step 2 : Submission of Self Study Report (SSR)

NAAC gives direction to HEI to fill the SSR within 30 days of acceptance of IIQA. SSR has to be filled on online portal along with all the desired documents and web-links. The SSR format has to be followed strictly. Once the SSR is submitted on NAAC portal, an auto generated link is sent to HEI registered email from where the pdf format of SSR can be downloaded. HEI has to upload this SSR on its website. If SSR could not be submitted within 30 days then the HEI has to apply afresh from step 1. The fees submitted for IIQA will not be refunded.

### Step 3: Assessment of Quantitative Metrics

Once the SSR submitted by the HEI, NAAC will assess all the metrics. The 70 per cent of total metrics related to quantitative aspects are Quantitative Metrics ( $Q_nM$ ) which consist of institutional data and are verified and validated by the DVV team of NAAC and the process is called as Data Validation and Verification (DVV) process. In case of any doubts or confusion on the data or documents provided by the institution, the team may ask for clarifications. NAAC can take maximum 30 days to complete the process of Data Validation and Verification (DVV). On completion of DVV process, a DVV Deviation report is generated. The Deviation report decides next step of the process. Score of 30 per cent or more is called pre-qualifier which makes the institution eligible for Peer Team Visit. In case, if the score is less than 30 per cent then the HEI has to apply afresh by submitting the IIQA and its fees again but only after six months from the day of declaration of pre-qualification status.

### Step 4: Student Satisfaction Survey (SSS) by NAAC

SSS is conducted by the NAAC simultaneously with DVV process. The survey will be conducted by sending the questionnaire to learners through online mode. The response of either 10 per cent of the total learner population or 500 (for conventional Universities)/5000 (for OUs/ DDE) in number (whichever is lesser) will be considered for assessment. In case of less response than the prescribed number this metric will not be considered for assessment.

### Step 5 : Assessment of Qualitative Metrics

The remaining 30 per cent Qualitative Metrics ( $Q_qM$ ) are assessed by the Peer Team (comprise of 2-5 experts) during their visit to the institution. The Head Quarters of the University; (in case of OUs one or two Regional Centres and one or two Learner Support Centres) will be visited by the peer team. The details of the visiting team are highly confidential and all the payments to peer team is made by NAAC.

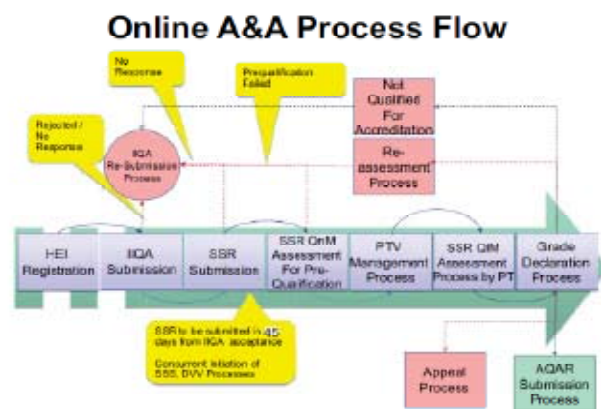
### Result of Assessment Process: NAAC Accreditation Outcome

The final result of assessment and accreditation process comprises of three reports, these are as follows:

- A. **Peer Team Report (PTR)** is divided into four sections i.e. 1. General information of the institution, 2 peer team evaluation of qualitative metrics 3 SWOC analysis and 4 recommendations to improve the quality.
- B. **System Generated Quality Profile** is a graphical representation of statistical scores of quantitative metrics ( $Q_nM$ ).
- C. **University Grade Sheet** is compilation of the scores of  $Q_qM$ ,  $Q_nM$  and SSS.

All these three reports compiled and named as NAAC Accreditation Outcome document. It is mandatory for the HEI to display it on their institutional website apart from NAAC hosting it on its website. The NAAC accreditation outcome and all the documents related to process for example: SSR, Peer Team Report, AQAR, Certificate of NAAC and

Fig 1: Online Assessment and Accreditation Process



Source: NAAC website. (<http://naac.gov.in/images/docs/Flowcharts-of-A-and-A-process.pdf>)

Accreditation documents etc., need to be uploaded on the institutional website for easy access by its stakeholders.

### **Need for Accreditation of ODL HEIs**

Open and Distance Learning (ODL) is a rapidly developing global phenomenon. It has its beginnings in India over five decades ago with introduction of correspondence courses by the then Correspondence Course Institutes (CCIs) (renamed as Directorates of Distance Education (DDE)) established in conventional Universities. Till the establishment of Open Universities (OUs) in the 1980s the system existed only in the Dual Mode Universities (DMUs). Single mode Open Universities (OUs) that are only offering programmes through ODL mode and because of their inherent flexibility and openness with regard to entry and exit, choice and combination of courses, policy of credit transfer, etc. are able to reach out to larger numbers. In 2018-19, HEIs offering programmes through ODL mode, are 15 single mode Open Universities (OUs) and 110 Directorates of Distance Education (DDEs) functioning under conventional Universities known as Dual Mode Universities (UGC, 2019). The ODL HEIs, particularly the Open Universities are making a significant contribution to the Gross Enrollment Ratio (GER) of the country as their total enrollment accounts for 10.62 per cent of the total enrollment in Higher Education (MHRD, 2019).

Since the field of ODL is expanding very fast, it is always necessary to have a check on the quality aspects of the programmes being offered through this mode and therefore the need for benchmarks to ensure the quality of these programmes. Also, in order to maintain parity with the HEIs operating through the regular mode, the accreditation of ODL HEIs is important and necessary. Providing quality higher education to a growing population has become a mammoth task for planners of most of the countries. This problem gets compounded by the varied socio-economic set up of the learners, who cannot be accommodated in the conventional universities offering education through on-campus mode. Also, there is an ever-increasing demand of knowledge updating and/or up-gradation for the working people. Accreditation of ODL HEIs will provide recognition to the credentials awarded by OUs and DDEs and also create equivalence of ODL awards (degrees) with that of conventional universities (Srivastava, 2016).

### **Statutory Requirement**

In accordance with the University Grants Commission (Open and Distance Learning) Regulations, 2017 notified vide Gazette Notification dated 23<sup>rd</sup> June, 2017, it will be mandatory for a University offering programmes in ODL mode to comply with University Grants Commission (Mandatory Assessment and Accreditation of Higher Educational Institutions) Regulations, 2012 and apply for assessment and accreditation of the programmes offered by it in ODL mode. Further, as per the UGC (ODL) Regulations, a pre-condition for all HEIs offering programmes through ODL mode is that they must obtain recognition for offering the same under Regulation 3, in sub-regulation (1) clause (viii) and that the Higher Educational Institution (HEI) has valid accreditation from NAAC and has completed five years of existence. Provided that this sub-regulation shall not be applicable to OUs till the time they become eligible for NAAC accreditation shall be mandatory for OUs to get NAAC accreditation within one year of their becoming eligible for the same (Government of India, 2017).

### **Development of Schemes for ODL HEIs**

In December 2017, the University Grants Commission (UGC) had directed the NAAC “to formulate criteria and processes” for accreditation of Open Universities on a priority basis. NAAC in consultation with the UGC constituted a National Task Force (NTF) comprising experts drawn from Open and Distance Learning (ODL) system. In fulfillment of the need for stakeholder participation, a National Consultative Group (NCG) was constituted by NAAC and a meeting of the NCG was held on 4<sup>th</sup> May, 2018. The members of the NCG deliberated on the framework for Assessment and Accreditation of ODL HEIs. It was decided that there should be two Units of assessment and accreditation, namely: Open Universities (OUs) and Directorates of Distance Education (DDE) attached to conventional Universities. The assessment and accreditation of ODL HEIs would follow the same system developed by NAAC, for conventional HEIs. The current weightages for the seven criteria need to be modified so that they represent the ODL system properly but without changing the overall score to 1000 points in order to maintain parity between the two systems. The Key Indicators under each criterion would focus on

ODL system and its multifarious activities and new metrics under each of them need to be framed to represent the unique features of the ODL system and wherever required even the existing metrics could be tweaked.

### Manual for Open Universities

Accordingly the National Task Force developed a Manual for Open Universities by making the existing Manual for Universities as the base and modifying the weightages for the seven criteria so that they represent the ODL system properly. The Key Indicators under each Criterion mainly focus on ODL system and its multifarious activities. In fact 60 new metrics have been created specifically to represent the ODL system, which has replaced or simply tweaked some of the existing metrics for Universities; without altering the overall score of 1000 points (NAAC, 2019).

### Manual for Dual Mode Universities

Presently, The Assessment and Accreditation (A&A) by NAAC does not include Directorate of Distance Education (DDE) functioning at the parent University. DDE are not evaluated by the peer team that visits the HEI for accreditation of the conventional University/ College. Since the methodology and functioning of DDEs are different from conventional Universities, it was emphasised that when NAAC undertakes accreditation of dual mode Universities, by including inputs from the DDE as a separate unit which should be obtained and evaluated. Hence NAAC has come up with a separate Manual for Dual Mode Universities (DMUs). The Manual for DMUs carries a weightage of only 100 points representing the DDE out of the total 1000 points for the DMU (NAAC, 2020b).

### Assessment Process and Quality Indicator Framework (QIF)

To accommodate the variety of ODL institutions, these are divided under two broad categories: Open Universities (OU) and Dual Mode Universities having Directorates of Distance Education (DDEs) attached to them.

As already mentioned, the NAAC has devised seven criteria for assessment and accreditation of all HEIs. The criteria for assessment of institutions have been devised in such a way such that it reflects not only the academic but also their administrative functioning along with emerging issues. These seven criteria consist of a few key indicators and the key indicators are further expanded into metrics. The performance of an institution is assessed on the seven criteria sub-divided into several key indicators to arrive at a final score. The seven criteria consist of 130 metrics in the Self Study Report to be submitted by an OU and metrics to be submitted by a DDE working under a DMU. The metrics are of two kinds, viz. quantitative and qualitative. The Quantitative Metrics (QnM) require quantifiable facts and figures and Qualitative Metrics (QIM) require descriptive attributes.

The distribution of qualitative and quantitative metrics and number of key indicators across seven criteria, as reflected in the Manuals for Universities (NAAC, 2020c); Open Universities (NAAC, 2019) and Dual Mode universities (NAAC, 2020b) is given below in Table 1.

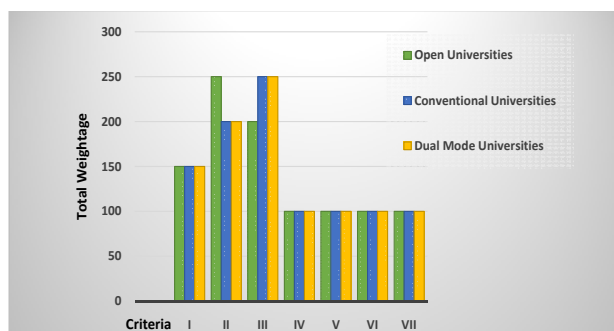
The distribution of weightages across key indicators across seven criteria for Universities,

**Table 1: Comparison of Distribution of Metrics and KIs across Criteria for Open Universities, Conventional Universities, Colleges and Dual Mode Universities**

Type of HEIs	Open Universities	Universities	Dual Mode Universities	
			University	Directorate of Distance Education
Criteria	7	7	7	
Key Indicators (KIs)	32	34	34	
Qualitative Metrics (QIM)	40	36	36	8
Quantitative Metrics (QnM)	90	79	79	17
Total Metrics (QIM + QnM)	130	115	115	25
<b>Total Score</b>	<b>1000</b>	<b>1000</b>	<b>900</b>	<b>100</b>

Source: Manuals for Universities (NAAC, 2020c); Open Universities (NAAC, 2019) and Dual Mode universities (NAAC, 2020b).

**Fig 2: Criteria Wise Weightages of Three Types of Universities**



Open Universities and Dual Mode Universities are presented below in Figure 2 and details are given in Table 2. The key indicators and criteria have been given separate weightages in the different type of HEIs, which clearly reflect the unique characteristics of the two educational systems.

It is seen from study of the above tables that the number of metrics has been distributed differently amongst different types of HEIs. Though the assessment criteria are same in all cases but there is variation in the weightages as well as the key indicators, but the overall score is the same.

### Need for Contextualization

Unlike the conventional system, the ODL system is a technology mediated mode of education, in which education is imparted to students at a

distance at their own spaces and is not a classroom based system of oral and group based education. It contains two basic elements: (i) physical separation of the teacher and the student and also (ii) the changed role of a teacher who may or may not meet the students and is primarily involved in developing the study material using a media mix to develop self-learning material (SLM) and tools of continuous and terminal evaluation. Teachers may meet with the students for selected tasks such as counselling, tutoring or solving students' problems in limited face to face counselling sessions. Today with the use of ICT the student teacher interaction can even take place in cyberspace with no requirement of meeting face to face.

In such a system the students are also not a homogeneous lot or physically located on a campus. Students enrolled in ODL HEIs are heterogeneous as there are no age restrictions and are dispersed; and who are for geographical, economic or social reasons not willing or unable to make use of conventional classroom based provision of education offered by conventional universities.

In ODL all communication between the teacher and the taught takes place by the use of one or a number of technological media such as print, electronic media and modern technologies using Internet and World Wide Web including Social media.

**Table 2: Distribution of Weightages across Key Indicators under 7 Criteria for Universities, Open Universities and Dual Mode Universities**

Name of Criteria	Open Universities	Conventional Universities		Dual Mode Universities
		Current Scheme	Previous Scheme	
1. Curricular Aspects	150	150	150	150
2. Teaching Learning and Evaluation	250	200	250	200
3. Research Innovations and Extension	200	250	150	250
4. Infrastructure and Learning Resources	100	100	150	100
5. Student Support and Progression	100	100	100	100
6. Governance, Leadership and Management (Organization and Management)*	100	100	100	100
7. Institutional Values and Best Practices. (Healthy Practices)*	100	100	100	100
<b>Total Score:</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>

\* Criteria name in previous Scheme

Source: Manuals for Universities (NAAC, 2020c); Open Universities (NAAC, 2019) and Dual Mode universities (NAAC, 2020b)

Another distinguishing feature is the industrialization of the teaching process for reproduction of large quantities of SLM and its distribution to dispersed learners.

In view of the above the infrastructure and physical space requirements of ODL institutions are quite different from the conventional universities who require huge physical campuses to provide classroom based education. ODL HEIs require more technological interventions and usage in all their operations hence they need to have media production centres and be well equipped with ICT facilities.

As the ODL system emerged with the objective to democratize Higher Education to the masses, there is no fixed intake in terms of number of seats unlike the conventional system where the intake is fixed. Hence the system caters to very large number of students sometimes the figures could be mind boggling.

ODL is a flexible system in terms of entry and exit and also with lesser no restrictions with regard to selection of courses, freedom to pursue studies at one's own pace, place and time; unlike the rigidities of the conventional system.

Therefore the parameters to assess and accredit the ODL HEIs need to reflect its unique features listed above.

### Commonalities between Conventional and ODL HEIs

The only commonalities between the two systems of education are regarding the recruitment, qualifications, promotions and service conditions of their teaching and non-teaching staff which has to be strictly as per UGC Regulations.

Secondly, since both the systems are offering formal education leading to award of degrees/ diplomas and certificates, the nature, type and minimum duration of programmes too are similar including adhering to UGC Regulations pertaining nomenclature of the degrees awarded.

### Overview of Criteria -wise Metrics

The criteria wise details of the metrics under each criterion have been summarized as under. The distribution of metrics criterion wise is given below in Figure 3 for OUs and in Figure 4 for DMUs.

### Criterion I: Curricular Aspects

This is the most important criteria for evaluation of an institution as the credibility of an institution is directly influenced by the content and delivery mechanism of the curricula. This assumes further significance in case of ODL institutions as 'Openness' is their hallmark. Through this character and philosophy they achieve their mission of 'reaching the unreached'. This openness warrants that the ODL institutions devise their course curricula and delivery mechanism differently than the conventional HEIs. Their instructional design is unique and differs from the conventional teaching greatly. The academic flexibility is unmatched in the case of ODL HEIs. The above criterion aims to assess the quality of the HEI under question whether its curriculum is in tune with the emerging national and global trends in program delivery. Accordingly, this criterion has been split into the following key indicators:

- Curriculum Planning, Design and Development
- Academic Flexibility
- Curriculum Enrichment
- Feedback System

Fig3: Distribution of Metrics across the Criteria for Open Universities

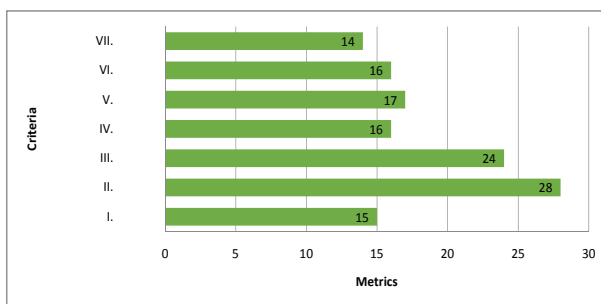
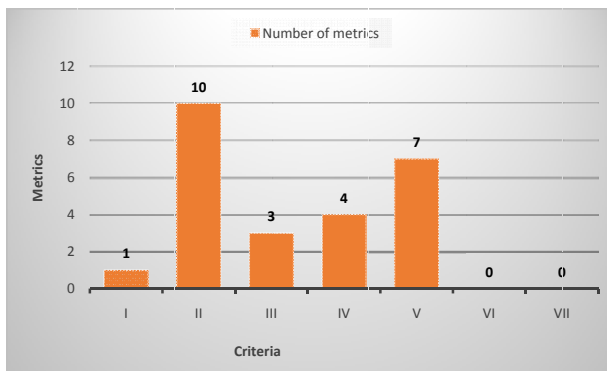


Fig 4: Distribution of Metrics across the Criteria for DDEs





Metrics related to flexibility in terms of enabling provision of lateral entry and credit transfer; modular approach; have been included. Since it is a technology enabled system of education, there is a metric on use of electronic media and digital components such as MOOCs and OERs in the curriculum design. Also SLM adoption/adaptation is another unique feature of ODL system. Therefore a metrics related to such practices have been included under this criterion.

### ***Criterion II: Teaching Learning and Evaluation***

This criterion pertains to the efforts of the ODL HEIs to reach out to the large sections of the society and serve the learners of diverse backgrounds and abilities through effective teaching-learning experiences. An institution should design its programs such that it is suitable mix of interactive media components. The learners too need to be engaged in various activities, e.g. discussions and interaction through face to face tutorial /counselling sessions, seminars, project work, presentations, experiments, practicum, internship, webinars, etc. that develop their knowledge and skills in cognitive, affective and psychomotor domains. This in turn probes the adequacy, competence as well as the continuous professional development of the human resource that handles the programmes of study. This consists of following key indicators:

- Learner Enrolment
- Catering to Learner Diversity
- Teaching-Learning Process
- Teachers and other Academics- Profile and Quality
- Evaluation Process and Reforms
- Learner Performance and Learning Outcomes
- Learner Satisfaction Survey

As OUs and DDE are expected to reach out to the larger segments of the society therefore have learners of different backgrounds and abilities. There are metrics related to their reaching out to the marginalized and disadvantaged sections of society including employed persons. Development of SLMs has also been covered, being the mainstay of the ODL system, in different media, namely print, audio/ video, including the digitization of SLMs. The curriculum is mainly transacted through activities like discussions and interaction through face to face tutorial/counselling sessions, seminars, project work, presentations, experiments, practicum,

internship, webinars, etc. Therefore there metrics on the mechanism of providing counselling support to the learners and the number of counselling sessions conducted, experience of academic counsellors, and the methods employed for formative assessment. Student satisfaction survey has been included for both OUs and DDE learners.

### ***Criterion III: Research, Innovations and Extension***

This criterion probes the atmosphere of research activities in the University under accreditation. In an ODL HEI, the learners, teachers and other academic staff undertake systematic research to contribute to the development of the ODL system. Therefore, this criterion requires information on the policies, practices and outcome of the institution with reference to research, innovations and extension. The key indicators are:

- Promotion of Research and Facilities
- Resource Mobilization for Research
- Innovation Ecosystem
- Research Publications and Awards
- Consultancy
- Extension Activities
- Collaboration

Under this criterion, a metric was included that reflected on the workshops conducted for innovative practices which an important dimension of ODL. Also under publications a specific metric on publications by the faculty in the area of ODL has been added, as for any system to improve and grow a periodic review is essential.

### ***Criterion IV: Infrastructure and Learning Resources***

The importance of available physical and IT infrastructure on the effectiveness of the functioning of an ODL institution cannot be over-emphasized. Learning resources too are crucial for the learners to facilitate in their learning endeavor. Thus, this criterion attempts to gauge how every constituent of the institution- learners, teachers, other academics and non-academic staff- benefit from the infrastructural facilities. The key indicators in this criterion are:

- Physical Facilities
- IT Infrastructure
- Learning Resources



To facilitate teacher learning process availability of physical infrastructure and learning resources are very essential, but in ODL system the requirements are different and use of ICT in most operations is an ideal situation. Also infrastructural arrangements made for learner support has been included, such as the availability of ICT at Regional Centres (RCs), Learner Support Centres (LSCs) and total learners allocated to these LSCs. There is a separate metric on academic counselling as an important learning resource just as the library is identified as an important learning resource.

#### ***Criterion V: Learner Support and Progression***

Despite all the essential components for an institution, viz. infrastructure, human resource and well-formulated curricula, etc., it is the learners who really transform an institution into an academic institution. It is the performance of the learners which get reflected outside. Therefore, under this criterion, the efforts of an ODL institution to facilitate the holistic development of its learners and academic progression have been covered. This is gauged in the following three key indicators:

- Learner Support
- Learner Progression
- Alumni Engagement

Areas that are typical to ODL system such as dispatch of study materials; pre- admission counselling; post admission counselling services; attending to learners' queries; student tracking through submission of assignments, registering in the term end examinations, appearing in the examinations and finally successfully completing the degree programme, have been included under this criterion.

#### ***Criterion VI: Governance, Leadership and Management***

Under this criterion, the factors pertaining to effective functioning of an ODL, viz. policies and practices evolved in the areas of planning human resources, recruitment, training, incentives, avenues and mechanisms for promotion, financial management, resource mobilization and overall efforts to establish quality assurance mechanisms within the institution, etc., are assessed. Quality of management, leaders and the stakeholders of an institution, reflect the quality of an institution. This criterion is measured in following key indicators:

- Institutional Vision and Leadership
- Strategy Development and Deployment
- Faculty Development / Empowerment Strategies
- Financial Management and Resource Mobilization
- Internal Quality Assurance System

Under this criterion the only addition is a metric on percentage of expenditure ploughed back into learner support services.

In the manual for DMU there are no metrics related to DDE under this criterion.

#### ***Criterion VII: Institutional Values and Best Practices***

This criterion measures how the ODL institution under assessment tackles the changes in the educational system of the country and how it responds to the emerging challenges and pressing issues. It also assesses how an institution responds to its mandatory obligations like empowerment and inclusion, environmental consciousness and sustainability, and professional ethics. The mechanisms adopted to address these issues are often unique to an institution. Best practices developed over a time in anyone aspect of its functioning- academic, administrative or organizational, becomes the recognizable attribute of an institution. This aspect is assessed with the help of the following key indicators:

- Institutional Values and Social Responsibilities
- Best Practices
- Institutional Distinctiveness

The only addition made is the metric on empowerment of the marginalized sections.

In the manual for DMU there are no metrics related to DDE under this criterion

#### **Conclusion**

In order to maintain parity between the conventional and ODL HEIs, out of the total 130 metrics in the Manual for OUs only 60 metrics have been tweaked or replaced of the Manual for conventional Universities. In any case as OUs are universities the metrics developed for the conventional universities are also applicable to them.

Ultimately, proper assessment of quality of the ODL HEIs and their programmes can ensure academic as well as commercial success of the programmes.

This will also help the aspirant learners in making the right choice. Accreditation will serve the institutions to invest in programmes more prudently. This shall lead to betterment of the overall quality of higher education.

## References

1. All India Council for Technical Education (2020). *Introduction of NBA*, Retrieved on 4<sup>th</sup> April, 2020 from: <https://www.nbaind.org/about>
2. Government of India (1986). *National Policy on Education – 1986*, New Delhi: Ministry of Human Resource Development, New Delhi, May, pp. 48, Retrieved on 12<sup>th</sup> April, 2020 from: [https://mhrd.gov.in/sites/upload\\_files/mhrd/files/upload\\_document/npe.pdf](https://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/npe.pdf)
3. Government of India (1992). *Programme of Action-1992*, New Delhi: Ministry of Human Resource Development, Retrieved on 12<sup>th</sup> April, 2020 from: [https://mhrd.gov.in/sites/upload\\_files/mhrd/files/document-reports/POA\\_1992.pdf](https://mhrd.gov.in/sites/upload_files/mhrd/files/document-reports/POA_1992.pdf)
4. Government of India (2013). Mandatory Assessment and Accreditation of Higher Education Institutions Regulations 2012 (25<sup>th</sup> January), *The Gazette of India*, Part III, Section 4, Retrieved on 15<sup>th</sup> April, 2020 from: [https://www.ugc.ac.in/pdfnews/8541429\\_English.PDF](https://www.ugc.ac.in/pdfnews/8541429_English.PDF)
5. Government of India (2017). University Grants Commission (Open and Distance Learning) Regulations, 2017, (23<sup>rd</sup> June) *Gazette of India*, Extraordinary, Part III, Section -4. Retrieved on 12<sup>th</sup> April, 2020 from: [https://www.google.com/url?sa=t&source=web&rct=j&url=https://ugc.ac.in/oldpdf/regulations/distance\\_per\\_cent2520education\\_per\\_cent2520regulations.pdf&ved=2ahUKEwic4bmOoujoAhXFV3wKHUUYD-UQFjACegQIBRAC&usg=AOvVaw28l3ijhz7MGoRj-j7n1faK](https://www.google.com/url?sa=t&source=web&rct=j&url=https://ugc.ac.in/oldpdf/regulations/distance_per_cent2520education_per_cent2520regulations.pdf&ved=2ahUKEwic4bmOoujoAhXFV3wKHUUYD-UQFjACegQIBRAC&usg=AOvVaw28l3ijhz7MGoRj-j7n1faK)
6. Ministry of Human Resource Development (MHRD). (2019). *All India Survey of Higher Education - 2018-19*, New Delhi: MHRD, Department of Higher Education, August, Retrieved on 14<sup>th</sup> April 2020 from: <http://aishe.nic.in/aishe/viewDocument.action;jsessionid=AFE3A7B23805B9F4A7AA45E95D4F871E?documentId=262>
7. National Assessment & Accreditation Council (NAAC) (2004). *NAAC A Decade of Dedication to Quality Assurance*, Bangalore: NAAC, December, Retrieved on 15<sup>th</sup> May 2020 from: [http://naac.gov.in/docs/Books/NAAC\\_per\\_cent20A\\_per\\_cent20Decade\\_per\\_cent20of\\_per\\_cent20Dedication\\_per\\_cent20to\\_per\\_cent20Quality\\_per\\_cent20Assurance.pdf](http://naac.gov.in/docs/Books/NAAC_per_cent20A_per_cent20Decade_per_cent20of_per_cent20Dedication_per_cent20to_per_cent20Quality_per_cent20Assurance.pdf)
8. National Assessment & Accreditation Council (NAAC) (2019). *NAAC Institutional Accreditation Manual: Self Study Report Open Universities*, Bengaluru: NAAC, December, Retrieved on 11<sup>th</sup> May, 2020 from: <http://www.naac.gov.in/images/docs/Manuals/OpenUniversity-Manual-11-12-2019.pdf>
9. NAAC (2020a). *National Assessment & Accreditation Council: Website*, Bengaluru: NAAC, Retrieved on 15<sup>th</sup> April, 2020 from: <http://naac.gov.in/>
10. NAAC (2020b). *NAAC Institutional Accreditation Manual for Self Study Report: Dual Mode Universities*, Bengaluru: NAAC, February, Retrieved on 17<sup>th</sup> April, 2020. from: <http://www.naac.gov.in/images/docs/Manuals/final-Dual-Mode-University-Manual-7feb2020.pdf>
11. NAAC (2020c). *NAAC Institutional Accreditation Manual for Self Study Report: Universities*, Bengaluru: NAAC, April, Retrieved on 18<sup>th</sup> April, 2020 from: [http://www.naac.gov.in/images/docs/Manuals/Revised-University-Manual\\_1.pdf](http://www.naac.gov.in/images/docs/Manuals/Revised-University-Manual_1.pdf)
12. National Council for Teacher Education (NCTE) (2020). *National Council for Teacher Education- Website*, Retrieved on 14<sup>th</sup> April 2020 from: <https://ncte.gov.in/Website/Index.aspx>
13. University Grants Commission (2019). *Annual Report 2018-19*, New Delhi: University Grants Commission. Retrieved on 2<sup>nd</sup> May, 2020 from: [https://www.ugc.ac.in/pdfnews/3060779\\_UGC-ANNUAL-REPORT--ENGLISH-2018-19.pdf](https://www.ugc.ac.in/pdfnews/3060779_UGC-ANNUAL-REPORT--ENGLISH-2018-19.pdf)
14. Srivastava, M.(2016). *Report: Status of the State Open Universities in India*, New Delhi: CEMCA. Retrieved on 11<sup>th</sup> May, 2020. from: [http://cemca.org.in/ckfinder/userfiles/files/Status\\_per\\_cent20of\\_per\\_cent20The\\_per\\_cent20State\\_per\\_cent20Open\\_per\\_cent20Universities\\_per\\_cent20in\\_per\\_cent20India\(1\).pdf](http://cemca.org.in/ckfinder/userfiles/files/Status_per_cent20of_per_cent20The_per_cent20State_per_cent20Open_per_cent20Universities_per_cent20in_per_cent20India(1).pdf)
15. Stella, A. (2002). Institutional Accreditation in India. *International Higher Education*, (27). Retrieved on 14<sup>th</sup> April, 2020 from: <https://doi.org/10.6017/ihe.2002.27.6982>
16. Venkatesh, P. (2013). Accreditation as a Benchmark of Quality Sustenance in Higher Education: A Review of Quality Assurance in Indian University System, *NITTE Management Review*, 7 (1), Retrieved on 14<sup>th</sup> April, 2020 from: <http://informaticsjournals.com/index.php/nmr/article/download/18414/15374>. □

# Online Teaching and Learning Experiences during COVID-19 Lockdowns: Ten Lessons for Higher Education Institutions

Pradeep Kumar Misra\* and Prithviraj Singh Chauhan\*\*

India has one of the largest systems of higher education in the world with 993 Universities, 39931 Colleges, 10725 standalone Institutions, 26.3 per cent gross enrolment ratio, 37.4 million students, and 1.41 million teachers. Indian higher education system is dominated by traditional institutions (often called as face to face mode educational institutions), as there are only 16 Open and 110 dual-mode Universities, and enrolment in distance education constitutes about only 10.62 per cent of the total enrolment in higher education (MHRD, 2019). Therefore, it is obvious to conclude that majority of teaching and learning in the higher education sector in India is conducted through face to face mode in classroom situations and contact between teachers and taught deemed necessary to achieve any educational objective. Learners are mainly assessed through internal and external examinations and Degrees are awarded after they get required scores in the final examination. These examinations are also conducted mostly in offline mode and in-person settings. Needless to say, the traditional or face to face mode is seen as the most dominant and prestigious mode of teaching and learning in higher education among academic institutions, faculty members, and the public in India.

## Online Teaching and Learning Initiatives by HEIs during COVID-19 Lockdown

In March 2020, the majority of the higher education institutions (HEIs) in India were busy with completing the prescribed syllabus. The institutions were also preparing to start semester-end examinations in April 2020. Suddenly, Corona virus has taken the world by surprise, and the severity of COVID-19 disease forced governments all over the world to go for complete lockdowns. Lockdown in whole India was administered on 25<sup>th</sup>

March, 2020 for 21 days in the first phase, and since then it is continuing so far. This sudden Lockdown caught HEIs unguarded and clueless as they have to abruptly end the ongoing teaching, learning, and examination related activities. This sudden closure started affecting studies and HEIs were forced to comprehend how they will manage the losses of students. And then, the HEIs realized that the only choice left for them to face this situation is to migrate to the online mode of teaching and learning.

Considering this situation, less prepared, and under sourced faculty members of the HEIs were asked to continue teaching and learning via online mode. Most importantly, the calls to start online teaching and learning came via Government(s) and regulatory bodies. The majority of faculty members in traditional HEIs were not prepared to switch to online mode for teaching and learning. For the majority of faculty members, it was their first real experience to experience online teaching. Fortunately, the majority of these faculty members were having access to smartphones, internet, and experience of using online social media platforms such as WhatsApp and Facebook. And these personalized tools and experiences helped them to put their first steps in the world of online teaching. This experience can best be described by using the words of Neil Armstrong, the first person to walk on the moon, *“That’s one small step for me, one giant leap for traditional teaching world.”* Let’s have a look at the experiences and initiatives of such faculty members of HEIs.

## Types of Tools and Technologies Used

Terms and tools like online Learning Management System (LMS), learning portal, customized online teaching, etc, still not exist in the lexicon of the majority of HEIs in India. When directives to continue teaching and learning during lockdown came, institutions, in general, were neither having any learning management systems nor any institutional mechanism to connect and deliver content to the students. Fortunately, WhatsApp,

\* Professor, Department of Education, Chaudhary Charan Singh University, Meerut-250001 (Uttar Pradesh). E-mail: pradeepmsr@yahoo.co.in

\*\*Assistant Professor, Department of English, Deva Nagari College, Chaudhary Charan Singh University, Meerut-250001 (Uttar Pradesh). E-mail: drprithviraj27@gmail.com

one of the most popular social messaging platforms among faculty members, emerged as savior. Teachers started using it for group discussions, connectivity, and supply of material in a different format. This became their first and foremost medium of communication and contact. When teachers were pushed to deliver online lectures (in a similar format as they do in traditional classrooms), they started searching free of cost tools to do this and landed on apps like Zoom, Google Duo, Skype, Google Meet, Webex, Microsoft Team, etc.

The ease of use and facility to connect to 100 users for free, made Zoom as one of the most used apps by teachers for online teaching. But news about security issues regarding the theft of data and subsequent advisory of security labs and the Ministry of Home Affairs forced educators to look for other alternatives, such as Google meet. For sharing content, giving assignments, and conducting tests, teachers mainly used Google Classroom, Edmodo, and tools of similar nature. YouTube also became a preferred mode of visual communication during the lockdown. Teachers recorded their lectures with the help of their mobile camera and placed them on YouTube for viewing of students. Smartphones became a lifeline for many teachers, and they used them in many ways. And those who have not found solace anywhere else used email and telephony.

### ***Types of Teaching and Learning Activities Performed***

Lockdown presented a herculean task before faculty members of HEIs, the task was to plan and conduct teaching activities to accommodate a new set of mechanisms and environment. As an initial step, teachers started delivering scanned versions of printed materials through emails and apps like WhatsApp, Telegram, etc. Some of them also delivered pre-recorded short and concise videos and voice lectures through these platforms so that the students having low bandwidth internet connection may also use it. Teachers formed WhatsApp groups to send study material, assignment, and to initiate discussion on students' related problems. Teachers also approached students through phone calls to solve their problems. A good number of teachers started taking online classes and organized webinars, workshops, seminars, and tutorials for students by using platforms like Zoom, Skype, and Google Meet,

etc. Some also experimented by organizing online quizzes and creative competitions.

HEIs also directed the teachers to uploaded lectures/content on the institutional website or any other site of their choice. Attempts have also been made to organize virtual practical classes. For example, Father Muller Medical College in Mangaluru, Karnataka conducted virtual surgery classes for its students (Abrar & Ishwar, 2020). During this period, the focus of HEIs remained on the delivery of content related to the curriculum. Libraries were asked to provide E-books/content to facilitate teaching and learning. Students were advised and motivated to use learning resources provided by governments and non-governmental agencies in different forms and formats. This advocacy mainly included taking benefit of the ongoing initiatives by MHRD like SWAYAM, SWAYAMPBABA, National Digital Library, e-PG Pathshala, Shodhganga, e-ShodhSindhu, e-Yantra, and Virtual Lab project (MHRD, 2020). Apart from these resources, HEIs also started building its database of resources to provide support to students. Some private players also came forward to support learning and provided free access to their products until 15<sup>th</sup> May, 2020 (AICTE, 2020).

### ***Types of Psychological Support Provided***

To provide support and motivation to students in the time of crisis, teachers relied mainly on one to one contact and connecting with students through phone calls and social media like WhatsApp and guided students to utilize their time constructively by learning new things and using available resources. Teachers also started using these tools to offer emotional support to minimize the effect of isolation and social disconnection among students. Like other initiatives, teachers have taken the help of different student communities like National Social Service (NSS) and National Cadet Corps (NCC) to spread awareness about protection from COVID-19 among the public. Following government advisories, some HEIs also opened a helpline for students to offer psychological and professional support.

### ***Types of Assessment Activities Performed***

Examinations were in progress in the number of HEIs but its sudden stoppage during lockdown left students in uncertainty. There is still uncertainty about

the resuming of the entire process because exams attract large gatherings in exam hall and worries are mounting that how the assessment will be done for outgoing students. Governments/regulatory bodies have formed committees/task force to look for the possibilities of online examination and evaluation for the award of degrees/diploma to students but the feasibility of the same still seems a distant dream. Teachers at the individual level used different online means (Google classroom, Google form, email attachment, etc.) to assess students learning outcomes via conducting quizzes and assignments. But, they were never sure whether these assessments would be counted in final results or not.

### **Ten Lessons for Higher Education Institutions**

Irrespective of many shortcomings and challenges, these online teaching and learning experiences that were carried out in such a short notice and without any proper preparation were successful to establish that (i) online teaching and learning is possible in HEIs, (ii) online mode can very well supplement/complement traditional mode of teaching and learning, and (iii) teachers teaching in traditional classroom setups can successfully adopt online tools and techniques for teaching and learning purposes. Based on these promises and experiences, HEIs can implement following ‘ten lessons’ for utilizing the potential of online mode and means of teaching and learning for significant academic gains in days to come (*post-COVID*). The lessons are:

#### ***Lesson 1: Develop Blended Teaching and Learning Policy of the Institution***

The experiences told that barring few, no HEI was having any policy to practice online teaching and learning. Traditional HEIs generally use face to face methods for teaching and learning and there is hardly any policy in place for online teaching and learning, making it difficult for teachers and students to practice blended learning (combining both online and offline mode). In absence of such policy, teachers and students have developed a flawed opinion about online teaching as they simply discard it as wastage of time. And any attempt to integrate online teaching always turns into an endless debate between advantages of face to face versus disadvantages of online teaching. These debates are misleading and out of context because the integration of technology

with the traditional mode of teaching is supposed to bring better learning experiences and outcomes. To overcome these challenges, HEIs must come up with a blended teaching and learning policy of the institution.

This policy should be binding and every faculty member and teaching department should be asked to submit the action plan of implementation of blended teaching and learning at the beginning of the session, although, Departments may be provided flexibility to make the necessary change to accommodate contextual teaching and learning requirements. Beside, HEIs may also form a digital learning committee to act as facilitators and motivators to teachers and students in practicing blended learning. This policy planning will help HEIs to regulate online teaching and learning processes and make teachers ready to adopt emerging online teaching tools and practices. Most importantly, this policy will be much helpful to recognize and reward the efforts of teachers to implement blended learning by taking the best from both the worlds (online and offline).

#### ***Lesson 2: Convince Teachers to Practice Blended Mode of Teaching***

Experiences revealed that online teaching was conceived as a forced rather welcome choice by many of the practicing faculty members. The desired result of online teaching and learning will remain a distant dream until all stakeholders are taken into confidence. Teachers stand at the primary end in this process and their role and confidence in the adoption of online teaching need to be built systematically by making them realize that they are irreplaceable and technology is mainly to help them in this task. They have to be politely reminded that traditional teaching can be more effective by using online tools and techniques. To make this happen, HEIs must regularly organize awareness programs and workshops with a focus on attitude modulation/change. During this process, every teacher needs to be treated like a student to minimize their resistance. It has been noticed that often teachers get conscious about their self-image on camera which generates feelings of anxiety among them. Fear of being making mistakes on record is one of the foremost barriers

in the integration of technology into corridors of traditional HEIs.

To overcome these fears, teachers need to be narrated that mistakes are part and parcel of any new experiment, since they are venturing on a new mission to take benefit of technologies in their classrooms, and it will not harm their self or academic image. HEIs must devise a strategy to provide positive feedback to those who attempt to inculcate blended learning in traditional classrooms. Cooperation from all the stakeholders is very important for the success of any process, and if anyone feels that he/she is being laughed for not knowing something or committing silly mistakes, he/she will never give his/her best. Being one of the most important stakeholders of educational processes, teachers of HEIs should be convinced about changing modes of teaching and learning and be assured that they are free to experiment and fail as well. Once teachers will be convinced that the intersection of technologies is helping to make teaching and learning processes more liberal and decentralized then they will not need any more advisory on online teaching.

### ***Lesson 3: Train Every Teacher for the Blended Mode of Teaching***

Stories emerging from online teaching during the lockdown period revealed that the majority of teachers lack basic skills to maximize the benefit of technology. In this context, a well-planned strategy of training every teacher regarding the integration of blended learning model can be a game-changer. HEIs must attempt to train every teacher on two aspects i.e. (i) orientation about blended learning, and (ii) handling of different technological tools and techniques. Teachers must be made acquainted with the working model of blended learning and its pro and cons. HEIs must realize that it is very pertinent to make teachers understand that transporting traditional classrooms to the internet is not blended teaching as commonly believed and practiced in academia. HEIs must train teachers to realize that blended learning is not all about supplementing to face to face classroom, but it is an extension of learning where technology-mediated learning significantly increase productivity and help them to provide additional ways and methods to engage and facilitate continuous learning. Most importantly, this training will help every teacher to learn that ‘simply

putting offline material on the online platform cannot make learning happen’.

HEIs must realize that handling of technology is a herculean task and most of the teachers are not comfortable in the use of technology in traditional teaching and learning environments. HEIs must plan a strategy to train teachers in a phased-out manner. First, willing teachers of respective institutions should be trained in the use of technologies and available platforms for teaching and learning. Their confidence and skills about the use of available platforms will create a positive atmosphere and will motivate other teachers of the institution to accommodate technology in their classrooms. Once the second line of teachers will develop a positive outlook to integrate technology, they can be trained as well. HEIs must make a policy to depute every teacher to take compulsory training on effective and efficient use of technologies for teaching and learning purposes.

### ***Lesson 4: Have Online Means and Apps to Practice Blended Mode of Teaching***

Online teaching and learning experiences during lockdown indicated that the majority of institutions are lacking basic tools and techniques to facilitate blended learning. Learning Management System (LMS) is still fighting to find a place in the basic learning requirement list of HEIs. In the absence of institutional LMS, teachers were bound to rely on third-party software for the management of online classes. Similarly, during the lockdown period educators struggled to find out a reliable, affordable, and easy to handle video conferencing platform to conduct online classes. Their search zeroed on Zoom App but security agencies have red-flagged it over data security issues, leaving them wandering in search of another secure and user-friendly platform. Internet is flooded with hundreds of software/Apps but navigating a workable solution is a daunting task for those teachers who are not techno-savvy. Tacking clue from these problems and challenges, HEIs must necessarily have an institutional LMS for use of teachers and students. Besides, HEIs must also enlist appropriate apps for various teaching and learning purposes. These measures will be helpful for both teachers and learners to practice blended teaching and learning in an organized and hassle-free manner.

### ***Lesson 5: Revisit the Curriculum to Accommodate the Blended Mode of Teaching and Learning***

Experiences during lockdown revealed that the curriculum prescribed by the majority of HEIs hardly offer any scope to accommodate online teaching and learning activities. The curriculum is a blueprint that guides teachers and students to attain predefined goals of learning. Instead of calls by governments and regulatory bodies to inculcate online learning in different parts of the curriculum, the majority of HEIs are still comfortable with and using face to face teaching and learning oriented curriculum. The age-old curriculum makes it difficult for teachers to bring online tasks, activities, and practices to support prescribed content and intended learning outcomes. Therefore, it becomes obvious that the existing curriculum will be revisited to accommodate online teaching and learning.

Therefore, HEIs may pay attention that revisited curriculum should contain detailed information about the methods to involve learners in online learning as well as the activities that teachers and learner will be able to perform in blended mode. Each unit must have clear instructions about the role and responsibility of the teacher and learner by mentioning prescribed technology along with the intended learning outcomes. The revisited curriculum must also have adequate space for interactive learning. The curriculum should be revised to accommodate activity-based learning by giving learners a choice to perform online experiments to document his/her experiences. Inclusion of online quizzes, projects, presentations, and games in the curriculum will also be helpful to motivate teachers and learners to move towards the blended mode of teaching and learning.

### ***Lesson 6: Have Provisions for Online Assessment of Learning***

The most robust challenge faced during lockdown by HEIs was 'how to assess learning by online means'. The experiences highlighted that individual institutions as well as agencies lack a credible mechanism for assessment of learning in online mode. There is no policy framework regarding the execution and regulation of online assessment in HEIs. In the absence of any viable policy, both institutions and regulatory bodies are struggling to find out the way to conduct the online

assessment. Regulatory bodies are trying to work out the solutions but the educators and learners are skeptical about the entire process and resentment are growing among them. This situation is creating a sense of distrust among end-users (students) and also making life difficult for knowledge providers (teachers).

Considering that 'learning without assessment goes directionless', HEIs must have clear-cut provisions for assessment of learning in online mode. As the first step, institutions must allow teachers to use inbuilt mechanisms like assignment and quiz with online learning platforms for assessment and subsequent grading. HEIs must devise and design online assessment processes and practices with the help of technology experts. Teachers may also be authorized to adopt different methodologies to assess learning outcomes with the help of available technologies. Online assessment of learning should not be limited to the subjects taught and semester-end examinations but also include continuous evaluation of learning of students by online mode. HEIs may also ask teachers to develop a set of 'ungoogleable' questions focusing on critical thinking abilities for use of assessment in online mode.

### ***Lesson 7: Make Budgetary Provisions to Support the Blended Mode of Teaching***

The majority of the teachers who practiced online teaching and learning during the lockdown phase mainly used their resources (laptops, computers, smartphones) and finances (data expenses, electricity costs) to carry out the process. This practice was good for a short period, but not meant for a longer run. Considering this, HEIs need to have adequate budgetary provisions for online teaching and learning regularly. Besides, funding agencies may also adopt a well-planned strategy to disburse the budget for the promotion of online teaching and learning in HEIs. Government/funding agencies should support HEIs by providing seed money to acquire the necessary tools and software for online learning cyclically. Once the set up has been readied, institutions may be asked to generate resources to wear the cost of maintenance on their own.

Both government agencies and institutions must realize that old practice of 'building big ICT labs, acquiring many computers, an army of technical

staff, and huge financial support' is no more relevant for practicing online teaching and learning. Instead, providing a smartphone with a monthly data pack to an individual teacher is a much more viable approach to promote online teaching in HEIs. Institutions must have priorities to utilize the money, and priorities must include (i) ensuring internet connectivity to every teacher and learner in campus via wired or wifi mode, (ii) having a resource room to answer online teaching and learning queries of teachers and students and to offer technical support, (iii) developing an online LMS for wider use of teachers and learners, and (iv) offering training to make teachers more proficient users of online teaching and learning.

### ***Lesson 8: Give Equal Weightage to Online Learning Activities***

The majority of students who got engaged in online learning during lockdown are often discouraged by the fact that these efforts will hardly have any bearing on their grade sheets. Lack of recognition is a major deterrent in the promotion of online learning in HEIs. Regarding recognition of online learning in HEIs, the problem persists at three levels i.e. (i) acceptance of online learning as a credible source of learning, (ii) the lack of a mechanism to recognize credit earned through online learning in academic score sheets of students, and (iii) attitude in academia to see online teaching and learning as an 'inferior rival rather able supporter'. To overcome these hurdles, policymakers should put in place a clear-cut policy regarding allotment of credit to online learning activities and equality of these to credits earned through traditional modes of learning. Official recognition of online teaching and learning activities will be helpful to better the attitude of stakeholders and they will be encouraged to participate in online teaching and learning activities confidently.

### ***Lesson 9: Publish the Best Institutional Practices of Online Teaching and Learning***

During the lockdown period, several HEIs came up with good initiatives and innovative ideas regarding the use of online teaching and learning. To continue this spirit further, HEIs must come up with a plan to regularly publish best practices of online teaching and learning on the institutional

website. Focus areas of such practices could range: pedagogies adopted, instructional designs used, processes of implementation like the class, course, and programme level, assessment methods used, problems encountered and solved, and learning outcomes achieved. This documentation may also include experiences and stories of teachers and learners during online interaction. Publication of such practices will be helpful to portray the institutional efforts in society and academia and also motivate fellow institutions to come up with better practices of online teaching and learning.

### ***Lesson 10: Recognize and Appreciate the Online Teaching and Learning Initiatives***

The faculty members who have conducted online teaching have one very important question to ask that 'whether online efforts are at par with traditional classroom teaching'. They have every right to ask this question as HEIs hardly have any policy to recognize and appreciate the online teaching efforts of faculty members. To overcome this deficit, HEIs must come with a plan and policy to recognize and appreciate the online teaching efforts of faculty members. Appreciation may be provided to faculty members in many ways, such as best practitioners of online teaching certificate, the inclusion of such members in policy-making bodies, asking them to act as a mentor for other colleagues, appointing them as advisors for other institutions, etc. HEIs may also facilitate these teachers by deputing them to get advanced training in online teaching from technologically advanced institutions. HEIs may also provide financial assistance to such faculty members for the implementation of innovative ideas along with research projects for the development of models to practice blended teaching and learning. As other useful measures, HEIs may collaborate to make and publish a directory of the 'online teaching champion teachers' of different institutions and request them to motivate and support those who have just entered the world of online teaching.

### **Conclusion**

Online teaching and learning initiatives and experiences carried out during COVID-19 lockdowns in India established that 'online teaching and learning is possible in HEIs'. But there are widespread



fears that this euphoria will be over soon, and post lockdown, institutions, teachers, and students will be back to their old ways of teaching and learning. Therefore, this is the most opportune time for HEIs to come up with such plans and policies to keep both teachers and learners motivated to continue using these newly learned practices. HEIs must realize that helping teachers and learners to mix traditional and online learning practices will be a win-win situation for every stakeholder of the higher education sector. Researchers hope that the implementation of suggested ‘lessons’ will be helpful to empower both teachers and students to make the best use of online modalities to create a more engaging and joyful teaching and learning environments in HEIs.

## References

1. Abrar, P., and Ishwar, S. (2020). Classes in Cloud: Online Teaching Becomes Order of the Day Amid Lockdown. Retrieved from [https://www.business-standard.com/article/technology/classes-in-cloud-online-teaching-becomes-order-of-the-day-amid-lockdown-120041500067\\_1.html](https://www.business-standard.com/article/technology/classes-in-cloud-online-teaching-becomes-order-of-the-day-amid-lockdown-120041500067_1.html)
2. All India Council for Teacher Education (2020). ELIS free courses. Retrieved from <http://free.aicte-india.org/>
3. Government of India, Ministry of Human Resource Development(2019). All India Survey on Higher Education 2018-19. New Delhi, MHRD. Retrieved from <http://aishe.nic.in/aishe/viewDocument.action?documentId=262>
4. Government of India, Ministry of Human Resource Development. (2020). Technology Enabled Learning. Retrieved from <https://mhrd.gov.in/ict-initiatives>. □

## Weekly E- Essay Series of Scholarly Articles on Reimagining Indian Universities

A ‘Weekly E-Essay Series of Scholarly Articles on ‘Reimagining Indian Universities’ was launched on AIU Website on 15<sup>th</sup> May, 2020 as a part of the change which AIU seeks to bring about in the academics in this day and age of COVID-19. The essays scheduled for release in this series are in a broad range of fields covering a variety of topics pertinent to ‘Reimagining Indian Universities’ received from distinguished experts and authorities in the area of Indian higher education included in the Book ‘Reimagining Indian Universities’ edited by Dr. Ms.Pankaj Mittal and Dr Sistla Rama Devi Pani. In the series, every week one scholarly article written by an erudite scholar of Indian academia is being released on the AIU Website. The series was initiated with the essay of Prof Bhushan Patwardhan, Vice Chairman, University Grants Commission, India on 15<sup>th</sup> May, 2020.

The essays are unique, enlightening and inspirational. Those who are interested in reading these essays may browse AIU Website: [www.aiu.ac.in](http://www.aiu.ac.in). □

# Quest for Knowledge Leads to Greater Minds

---

**Ram Nath Kovind, Hon'ble President of India delivered the Special Address on the occasion of the conclusion of the Platinum Jubilee Celebrations of Utkal University, Bhubaneswar on December 8, 2019. He said, "Education is the best tool of social empowerment. I am not only a passionate advocate of this belief, but stand before you as a proof of it too. Universities are great hubs of ideas, but they are not ivory towers. They are part of society and thus remain engaged with social change. The academic community should be engaged in research in areas that create not only a new knowledge base but also a knowledge base that sustains human society." Excerpts**

---

The Land of Odisha is a marvel to behold. Not far from this place where we stand today exists a historic site that gave the eternal message of love and peace to the humankind after realising the futility of violence and hatred hundreds of years ago. This land is a seat of learning for entire humanity. Therefore, I feel honoured to be here among you all today. I am happy to participate in the concluding celebrations of the Platinum Jubilee of Utkal University. I congratulate all of you on this proud occasion.

Founded in 1943 by the architects of modern Odisha and great freedom fighters, this University embodies the educational aspirations of its people. I join you in paying a glowing tribute on this auspicious occasion to Barrister Madhusudan Das, Gopabandhu Das, Nilakantha Das, Godavarish Mishra and Maharaja Krushna Chandra Gajapati, among others, who are remembered as the builders of new Odisha. I note with satisfaction that the foundation stone of the campus was laid by the first President of India, Dr. Rajendra Prasad, in 1958. It was inaugurated by the second President of India, Dr. S. Radhakrishnan, in 1963. After a gap of half a century, in 2013 Shri Pranab Mukherjee delivered the Convocation Address here at this University. Continuing the special bond, I am happy to be a part of the platinum jubilee celebrations of this University.

During the 75 years of its existence, the University has dedicated itself to the advancement of learning. It has emerged as the premier destination for thousands of students. Scholars from here have brought glory to their alma mater by distinguishing themselves in different walks of life in India and proud, and I am happy to see some of them here today. The achievements of this University in the fields of teaching and research have brought it laurels and it was granted the coveted A+ by N.A.A.C. in 2016. The Ministry of Human Resource Development, Government of India, identified it as a Category I

University in 2018 and vested it with greater autonomy for its pursuit of academic excellence.

I learn that Utkal University has been recognized by the Government of India as a Regional Research Hub and entrusted with the important task of networking with the central research institutes in this part of the country. By joining hands and pooling their resources together, they will create a vibrant research ecosystem.

I am confident that the University is poised to scale even greater heights in future and contribute significantly to building a knowledge-driven society fully equipped to face the challenges of the 21st Century. The upcoming Centres of Excellence for cutting-edge research in frontier areas, will help realize this lofty goal.

I am glad to learn that the University created a park in memory of Gandhiji, called Ahimsa Sthal, on 2<sup>nd</sup> October, 2019, as part of the Platinum Jubilee celebrations. That was a fitting tribute to the Father of the Nation on his 150<sup>th</sup> Birth Anniversary. In a time of violence, intolerance and strife, it is our duty to remind everyone, especially the young, of the core values that Gandhiji lived for and died for. This park has a special resonance as it lies not far from Dhauli, where Emperor Ashoka learnt invaluable lessons in peace and compassion after the bloodbath at the Battle of Kalinga in 261 B.C.E. The University has sought to translate another key idea of Mahatma Gandhi that India lives in its villages. The Government of Odisha allotted 67 acres of land at Chandikhole, and the University started its second campus there. I am sure it will benefit a large number of students in the area.

The other initiatives taken as part of the Platinum Jubilee celebrations also give me much satisfaction as they strengthen the very foundations on which the University is built. I gather the stage was set for the celebrations with a literary festival, which

was a confluence of many languages. The University has also launched a distinguished lecture series. It will provide a great opportunity to not only students, scholars and the faculty but also the wider community to hear acclaimed scholars. Such interactions and exchanges of ideas make a university a vibrant place of learning. The recent conclave titled *Antardhvani* provided a platform for young scholars to showcase the progress in their learning as well as the richness of their heritage. In the Platinum Jubilee Year, the University has taken the initiative to involve its alumni in the development of their alma mater. This worthy move will fetch dividends in future.

An occasion like this is a milestone. During a long journey, when we come across it, we pause; then we look back and gaze ahead. It is time to take stock of achievements as well as of areas where further improvements are possible. For the whole Utkal community, it is time to rededicate themselves to the vision of the founders. I am confident that the University will remain committed to playing a significant role in higher education and research, nationally and globally.

Education is the best tool of social empowerment. I am not only a passionate advocate of this belief, but stand before you as a proof of it too. Universities are great hubs of ideas, but they are not ivory towers. They are part of society and thus remain engaged with social change. The academic community should be engaged in research in areas that create not only a new knowledge base but also a knowledge base that sustains human society. Students and teachers should be sensitive towards the themes of empowerment of the marginalised. Environment, health and education

should be taken up vigorously. Universities like Utkal that are endowed with multi-disciplinary faculty are better equipped to undertake this task. Moreover, the world has started taking note of the richness of India's ancient knowledge systems. Our universities need to harness this and Utkal can take the lead in this regard. In the next 5 to 7 years I would like to see Utkal University emerge as an Institute of Eminence in our country. This status will carry with it not only recognition but also greater autonomy and higher funding. I am happy to note that the University has entered into MoUs with two reputed foreign universities. I am sure that Utkal University will emerge as an Institute of Eminence with a strong international outlook.

If I have to leave you with one advice, it will be one from

Hitopadesha:

शास्त्राणि अधीत्य अपि भवन्ति मूर्खाः  
यस्तु क्रियावान् पुरुषः स विद्वान्।

It means: One can study a lot of scriptures and still remain fool. The real scholar is one who puts his or her learning into practice. So, in your quest for knowledge, never forget to put it into practice in the world around you, and improve it with your intellect.

I once again congratulate you on having reached this historic milestone in the long journey of your University. I express the sincere hope that its quest for excellence leads to glory.

Jai Hind!

□

### **National Seminar on Indian Education System**

One -day National Seminar on ‘Indian Education System: Capacity Building and Employability’ is being organised by S.D. College of Education, Barnala, Punjab in association with Council for Teacher Education, recently. Around 120 delegates, research scholars, faculty from different parts of Punjab and neighbouring states participated in the event. The seminar started with the formal welcome of the guests and introduction of the seminar by Dr. Tapan Kumar Sahu, Principal, S.D. College of Education. General Secretary of S.D. College Institutions, Mr. J N Sharma also interacted with the delegates and shared his views on the main theme of the event.

Technical Session started with the Keynote Address of Director, Indian Council for Social Science Research (ICSSR), New Delhi. Dr. Sanjay Kaushik who is also active as Dean, College Development Council, Punjab University, Chandigarh. According to him, there is huge gap between ‘what is thought’ and ‘what is practical’ in schools and colleges and due to this problem our youth lacks in employability.

Guest Speaker, Dr. Pushpinder Singh Gill, Professor, School Management Studies and Dean, External Campuses, Punjabi University, Patiala expressed his views on ‘Indian Education and Capacity Building’, about problem of un-employability and presented power point presentation on related theme.

The next Technical Session, Ms. Aisha Chandel, English Language Trainer and Assessor for International Students, Migrants, Refugees and Asylum Seekers in Australia, used question answer technique in a very interesting way and discussed about various problems faced by Indian students abroad. She also elaborated the importance of learning English in a heartily manner to get better placed abroad.

Resource Person, Dr. Pargat Singh Garcha, Secretary, CTEF (Pb. & Chd. Chapter) and Assistant Professor, GHG Khalsa College of Education, Gurusar Sadhar, Ludhiana concluded the Session. He highlighted the different changing patterns in Education and emphasized that today biggest competitor of teacher is not teacher but technology instead. He explained 5c mantras to be a good teacher which are communication,

Creativity, Computer literacy, Critical thinking and Collaboration through Power Point presentation. In Valedictory Session, Ms. Navneet Kaur presented seminar report and Vote of Thanks was proposed by Ms. Barinder Kaur.

### **International Conference on Equality, Diversity and Inclusivity**

One-day International Conference on ‘Equality, Diversity and Inclusivity: Issues and Concerns’ is being organised by the Department of Education, Lovely Professional University, Phagwara, Punjab on August 28, 2020.

The prevailing intransigent global system and the left-over scars of the history has necessitated to address a person from being the just same or different to being an insider, an outsider or deviant in the prevailing multicultural society. This led to certain individuals and social groups becoming deprived or prevented from participating fully and meaningfully by virtue of their poverty, the lack of competencies, and lack of lifelong learning opportunities because of discrimination. To create opportunities and remove the barriers to reach humans to enjoy their life in its fullest is the ultimate goal of any society. Given this context of social diversity and social inequality, the most important challenge the world face today is how to assure the equality in diversity through inclusiveness and make this world a better place to live in. The equality, diversity, and inclusivity have various dimensions and this conference is intended to address the same through its various themes. The Broad Themes of the Conference are:

#### ***Social and Psychological Dimensions of Equality, Diversity and Inclusivity***

- Social inclusion: The Way Forward.
- Journey from Marginalization to Social Equality and Inclusivity.
- Caste Discrimination and Social Change in India.
- Bridging the Rural and Urban Divide.
- Social Struggle for Equality, Diversity and Inclusivity.
- Role of Mass Media in Promoting Equality, Diversity and Inclusivity.

- Minority Perceptions and Contributions.
- Issues in Regionalism and Development in India.
- Issues in Multiculturalism, Diversity and Nationalism.
- Social and Psychological Dimensions of Gender Equality.
- Emerging Dimensions of Population and Human Geography.

***Political Dimensions of Equality, Diversity and Inclusivity***

- Promoting Equality, Diversity and Inclusivity: Political and Legal Perspectives.
- Tribal Empowerment in India: Issues and Challenges.
- Inclusive Approach for Good Governance.
- Refugees, Asylum Seekers, Displaced and People of nowhere.
- Human Rights in Contemporary World.
- Policy Evaluation and Decision-Making Framework for Equality, Diversity and Inclusivity.
- Role of Legislature, Executive and Judiciary for Equality, Diversity and Inclusivity in Democracy.
- Politics of Migration, Multiculturalism and Nationalism.
- Second Wave of Arab Spring and Issues of Inclusiveness.

***Economic Dimensions of Equality, Diversity and Inclusivity***

- Globalization: Economic Exclusion to Economic Inclusion
- Equality, Diversity and Inclusivity and Its Growth Implications
- International Migration, Ethnic Rights and Economic Development
- Socio-economic Inclusion in 21<sup>st</sup> Century
- Human Resource Development and Human Capital Formation
- Cross National Economic Inequality and Groupings
- Role of Globalization and International Trade in Bridging Inequalities

***Educational Dimensions of Equality, Diversity and Inclusivity***

- School Education: Equality, Diversity and Inclusivity.

- Higher Education: Awareness and Debates on Equality, Diversity and Inclusivity Issues.
- Inclusive Education for Educational Equality as Capability Equality.
- Role of Educational Technology in Equality, Diversity and Inclusivity.
- Promoting Ethics and Morality in Education for Equality, Diversity and Inclusivity.
- Role of Physical Education, Yoga and Sports in Promotion of Equality, Diversity, Inclusivity and Peace.

***Arts, Cultural and Linguistic Dimensions of Equality, Diversity and Inclusivity***

- Ethnic Assertions in Globalized World.
- Linguistic Diversity and Language Rights.
- Role of Literature and Art in Promoting Equality, Diversity, Inclusivity.
- Recent trends in Language and Literature.
- Plurilingualism and Multicultural Society.
- Journey of Literature from Diversity to Inclusiveness.
- Language Notions of Equality and Diversity.
- Equality, Diversity and Representation of Women in Arts.
- Representation of Women in Media and Arts : Equality, Diversity, Inclusivity Perspectives.
- Evolving Artistic Representation of Equality, Diversity and Inclusivity.

For further details, contact Dr. Vijay Kumar Chechi, Professor and Head, Department of Education, Lovely Professional University, Jalandhar, Punjab-144 411, Mobile No +91-9888300138, Email: [vijay.chechi@lpu.co.in](mailto:vijay.chechi@lpu.co.in) / [ediic@lpu.co.in](mailto:ediic@lpu.co.in). For updates, log on to: [www.lpu.ac.in](http://www.lpu.ac.in).

**International Webinar on The Role of Applied Mathematics in Present Global Crises**

A-three-day International Webinar on ‘The Role of Applied Mathematics in Present Global Crises’ is being organised to commemorate the bicentenary Birth Anniversary of Pandit Iswar Chandra Vidyasagar by the Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, Midnapore, Wengal during August 5-7, 2020.

The whole world is in crises. The foremost is the SARS. In the present global health threat from the novel corona virus, one may have questions, like,

how the world's people and their governments arrive at estimates of the number of people who might get infected. Or, how do experts visualise the progress of the infection and its capacity to cross borders? Based on what conclusions, are lockdown directives issued? And finally, how can experts predict how long an epidemic will last? Almost all answers lie in the use of Mathematics.

The other forms of crises are rapidly rising ocean temperatures, rising sea levels, extreme weather events and drought. These phenomena are not just signs of climate change. They are the signs of a crisis. Because climate change has led us to a global crisis, that goes well beyond climate change, into every aspect of human life on Earth. The kinematics and dynamics of Tropical Cyclone (TC) tracks are studied by using a mathematical model of track curvature. The key to the accurate forecast involved mathematical mastery of the storm's chaotic behaviour.

Another global crisis falls in the economy since manufacturing, transportations, inventory and other related parts have already been largely affected because of the lockdown. Different mathematical tools such as mathematical modelling on epidemiology, random theory, optimization theory, graph theory, uncertainty theory, theory of computation and other tools may help us to challenge the above crises smoothly.

For further details, contact Joint Conveners, Dr. Raghu Nandan Giri, and /or Dr. Krishnendu Barman, Assistant Professor, Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, Midnapore-721102, West Bengal, Mobile No: (+91) 7679299030, /(+91) 8777809557, E-mail: [raghunandan.giri86@gmail.com](mailto:raghunandan.giri86@gmail.com)/ [krishnendu.math2010@gmail.com](mailto:krishnendu.math2010@gmail.com). For updates, log on to: [www.vidyasagar.ac.in/](http://www.vidyasagar.ac.in/) □

# **Association of Indian Universities**

**WELCOMES**

The Vice Chancellors

for

National Webinar of Vice Chancellors

On

**Reimagining Indian Universities**

On

17-18 August, 2020



## Association of Indian Universities

AIU House, 16, Comrade Indrajit Gupta Marg (Kotla Marg),  
New Delhi 110 002

### AIU Invites Proposals for Collaboration for Organizing National Anveshan Online: 2020-21

Association of Indian Universities organizes *Anveshan-Student Research Convention* every year to identify and nurture the young talents and budding researchers in the Indian Universities. In these Conventions, Innovative Research Projects are invited from the Students (Undergraduate to Ph. D level), and assessed by a group of experts of the field on some well laid criteria. The best Research Projects are conferred with certificates and awards. The Projects are invited from the disciplines of Basic Sciences & Applied Sciences, Engineering and Technology, Agriculture and allied fields, Health Sciences and allied fields, Social Sciences; Humanities; Commerce; Business Management; and Law. Normally, *Anveshan* is organized in conventional manner with live demonstration of projects and innovations alongwith the physical presence of the Researchers. Due to the COVID-19 pandemic and the resultant difficulties it has been proposed to be organized online for the year 2020-21. Instead of Six Conventions (five zonal and one National), only one *National Convention* with three days duration shall be organized in online mode. The event is to be conducted in the current Financial Year ending on **March 31, 2021**.

AIU invites proposals from member universities/institutions for hosting the *National Convention* in online mode for three days. Interested Member universities/institutions may send their Expression of Interest (EoI) along with proposal duly endorsed by the Vice Chancellor/Head of the Institution to AIU at the address given below:

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

**The proposals are required to be submitted latest by August 20, 2020.** The Event will be finalized on mutually convenient dates and terms and conditions laid down by AIU. For any further query please contact on : 011-23230059, Extn-202/209, **E-mail: researchaiu@gmail.com**. The details can also be downloaded from AIU Website: **www.aiuweb.ac.in**

**N.B.:** The event is a regular annual activity of Research Division and shall be organized in collaboration with selected member university/institution. The Guideline for organizing the event online are attached. The details of terms and conditions will be communicated on selection of the Proposal

**Proposal must be sent to AIU with the Approval/ Endorsement of Vice Chancellor/Head of the Institution.**

[Joint Director]  
Research Division  
(Contd. on next page)

(Contd. from pre page)

## Guidelines for Anveshan

- 1) Due to the COVID-19 pandemic and the resultant difficulties and in adherence of the GOI guidelines, it has been decided to organize *Anveshan*: National Research Convention Online for the year 2020-21. The duration of Online *Anveshan* will be of Three days.
- 1) The events will be conducted under the banner of AIU and in partnership with selected University.
- 2) The innovative research projects will be invited in five areas viz. (i) Basic Sciences & Applied Sciences (ii) Engineering and Technology (iii) Agriculture and allied fields (iv) Health Sciences and allied fields (v) Social Sciences; Humanities; Commerce; Business Management; and Law.
- 3) The received projects will be scrutinized by a panel of experts drawn from various disciplines. The students whose projects will be scrutinized, will be asked to present the project in online mode during the convention in an allocated time slot of 20 minutes (15 Minutes for presentation and 5 Minutes for question from experts).
- 4) The assessment will be done by panel of three experts drawn from each field and the decision of the experts will be final.
- 5) **Selection of experts:** The panel of experts (preferably retired or serving academicians from the adjoining institutions, personnel from local industries). A token honorarium of **Rs 2000 will be paid** to each expert.
- 6) **The expenditure will be reimburse by AIU the host Universities on submission of statement of expenditure on actual basis.**
- 7) All the projects will be assessed on the basis of following criteria. Each criterion is assigned some weightage. The final selection of projects will be based on the cumulative weightage given on all criteria.

### Criteria and Weightage

• Scientific Thoughts and Principles	20
• Creativity	20
• Thoroughness	10
• Skill	10
• Relevance	20
• Cost Effectiveness	10
• Teamwork	10

Apart from the above criteria, **Scope of Commercialization** of the projects will be considered as an **additional merit**. However, there will be no weightage point for this criterion. In case of the projects having scored equal cumulative weightage point, this criterion will be considered for making the final decision.

- 8) Entries of the research projects will be purely **INSTITUTIONAL** and only **BONAFIDE** Students/Research Scholars from Undergraduate to Doctoral Degree level are eligible to take part in the convention. **Those who are below 30 years of age are only eligible to take part in the Convention.**
- 9) Each project must be sent to AIU/Organizing University with the Approval /Endorsement of Vice Chancellor/ Head of the Institution.
- 10) The duly filled in **Registration form** should be sent to the Joint Director, Research Division, Association of Indian Universities, New Delhi on the **email: researchaiu@gmail.com** with a copy to the coordinator of the Organizing University. **No registration fee shall be charged for participating in the National convention.**
- 11) The Organizing or Host University will send circulars to constituent colleges for inviting projects from the students. **No additional financial support** will be given to organizing university for hosting the event other than the actual amount spent as mentioned in point no. 6.
- 12) It will be the responsibility of Organizing or Host University to Compile the abstracts and full-length projects, Photographs of students and submit to AIU for Bringing out the Compendium of Presented Research Projects. □

(Contd. on next page)



(Contd. from pre page)

**Registration Form for National Anveshan:  
Student Research Convention (2020-21) Online-2020**

Name: .....

Father/Guardian's name: .....

Date of Birth.....

Name of the College/ Institute where studying:.....

[Please mention clearly if the candidate is pursuing his/her study from University Department/Faculty]

Name of the University to which the college is affiliated:.....

Name of the Zone:.....

Nomenclature of the Degree (For which enrolled):.....

Discipline:..... Year:.....

Permanent Address:.....

.....

Address for Communication: .....

.....

Phone: (Off).....(Res)..... (Mob).....

Fax..... E-mail: .....

Title of the Project: .....

Faculty & Subject Area.....

Date of Commencement & completion of the Project: .....

Application of the Outcome of the Project (if any). Yes/ No.....

If Yes, mention briefly about the nature of Application

.....

Whether the project has been sent for some other competition earlier? Yes/No

If Yes, mention place and date .....

Whether the project has been submitted to any funding agency or received any funding?

If Yes, mention the details .....

**Date.....**

**Signature of Candidate**

(Signature with Seal of the Competent Authority)



## Association of Indian Universities

AIU House, 16, Comrade Indrajit Gupta Marg (Kotla Marg), New Delhi 110 002

### AIU Invites Proposals for collaboration for Organizing Workshops/Seminar in Online Mode during the Session 2020-21

Proposals are invited from the **Member Universities/ Institutions** for **jointly** organizing the following events/ programmes through **online mode** during the financial year 2020-21:

1. National Workshop on Examination Reforms (**one day**)
2. National Workshop on Management of University Administration (**Two days**)
3. National Workshop on Research Methodology (Social Sciences) (Five Days)
4. National Workshop on Emerging Trends in Information Technology in University Management (**Two days**)
5. National Seminar on Gender Studies and Women Empowerment (specific theme will be finalized after receiving proposal) (**Two days**)

#### Necessary Information:

- i. The events will be conducted under the banner of AIU and in collaboration with the selected partner universities. The details of terms and conditions will be communicated on selection of the Proposal.
- ii. The Workshops/Seminars are to be organized in the current Financial Year ending on **31 March, 2021**. The duration of the Programmes is already mentioned against each event.
- iii. The allocation of the events to the university by AIU will be based on mutually convenient dates, and terms and conditions laid by AIU.
- iv. The proposals are subjected to scrutiny by a committee. Mere submission of a proposal does not necessarily qualify for selection.
- v. AIU collaboration will be restricted to Academic/Knowledge partner only without any financial liability.
- vi. Interested AIU Members universities/institutions are invited to send their proposal for hosting any of the above mentioned events along with specific theme and subthemes to:

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

**The proposals are required to be submitted latest by August 20, 2020.** The Event will be finalized on mutually convenient dates and terms and conditions laid down by AIU. For any further query please **contact on:** 011-23230059, Extn-202/209/217, **E-mail: researchaiu@gmail.com** The details can also be downloaded from AIU Website: **www.aiuweb.ac.in**. **Proposal must be sent to AIU with the Approval /Endorsement of Vice Chancellor.**

**[Joint Director]**  
**Research Division**



## Association of Indian Universities

AIU House, 16, Comrade Indrajit Gupta Marg (Kotla Marg), New Delhi 110 002

### AIU Invites Proposals for Collaborative Research Studies in the Session 2020-21

Association of Indian Universities (AIU), an apex inter-university organization and representative body of universities and other higher education institutions in India, established under Society Registration Act, 1860, with a view to promote universities activities by way of sharing information and increasing cooperation in the field of higher education, research, culture, sports and allied areas. AIU has been engaged in conducting policy research in frontier areas of various domains of higher education for supporting the Government of India in designing the policies of higher education through providing research-based policy inputs. AIU invites proposals for research collaboration from member universities in the below mentioned topics/areas/fields to be undertaken in the current Financial Year i.e. 2020-21

1. Promoting Internationalization of Higher Education: Strategic Interventions.
2. Revisiting the Quality Assurance Parameters for Institutions of Higher Education as a new normal in post COVID -19.
3. Creating future ready students: Industry 4.0 compliance.
4. Higher Education in Post COVID Era: Developing New Model of Blending learning.
5. Developing online modules for training of educational administrators.
6. Contribution of universities to community development.

#### Terms and Conditions

- i. The research studies will be conducted jointly by AIU and the selected partner universities. The details of terms and conditions will be communicated on selection of the proposal.
- ii. The research studies are to be conducted in the current financial year i.e., ending on **31 March, 2021**. The duration of the research study will be **six months** from the date of commencement of the project.
- iii. The ceiling of funding for the collaborative projects shall be maximum of **Rs. 5.00** lakhs. However, the selection of proposals and allocation of funding amount will be decided by a Committee duly constituted for the purpose, after assessing the financial requirements based upon the nature and scope of the project.
- iv. On selection and acceptance of the proposal, the Committee shall decide the financial allocation based upon the terms and conditions laid down by AIU.
- v. Before commencement of the Project a MoU is to be signed by AIU with the Collaborating institutions.
- vi. Mere submission of a proposal does not necessarily qualify for selection and financial allocation.
- vii. The Research studied will be conducted under the direct coordination and monitoring of the Joint Director & Head, Research Division, AIU.
- viii. Interested AIU Members universities/institutions are invited to send their proposal in the enclosed proforma for conducting collaborative research studies by surface mail or email to:

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

**The proposals are required to be submitted latest by August 20, 2020.** The selection committee will assess against some well-defined criteria. For any further query please **contact on:** 011-23230059, Extn-202/209/217, **E-mail: researchaiu@gmail.com.** The details can also be downloaded from AIU Website: **www.aiuweb.ac.in**

**Proposal must be sent to AIU with the Approval /Endorsement of Vice Chancellor, duly forwarded by the Registrar.**

**[Joint Director]**  
**Research Division**  
*(Contd. on next page)*

*(Contd. from pre page)*

## **Proforma for Proposal**

1. Topic of the Research Study (One out of the six projects mentioned)  
.....
2. Name of the University.....
3. Name of the Researchers/Faculty members associated with their Contact details (E-mail & Mobile) and Experience
  1. ....
  2. ....
  3. ....
4. Rationale of the study. Give Abstract in 300 words.  
.....  
.....  
.....  
.....  
.....  
.....
5. The Scope of study in terms of region to be covered, No of Institutes, National/International.  
.....
6. Data Sources .....
7. Methodology to be adopted.....
8. Time Lines (Please give month wise Pert Chart/ Gantt Chart)  
.....
9. Financial Requirements (Please give item wise details)  
.....
10. Proposed Impact of Study.....  
.....

---

---

# THESES OF THE MONTH

---

---

## SCIENCE & TECHNOLOGY

### A List of doctoral theses accepted by Indian Universities (Notifications received in AIU during the month of Feb-march, 2020)

#### Entomology

1. Shriram, Ghongade Dilip. **Population abundance and management of whitefly and red spider mite on partheocarpic cucumber grown under protected conditions.** Department of Entomology, Punjab Agricultural University, Ludhiana.

#### Food Science & Technology

1. Manju Rani. **Assessment of flour constituents of diverse wheat cultivars for flat bread (Chapatti quality).** (Prof. Bhupender Singh Khatkar), Department of Food Technology, Guru Jambheshwar University of Science & Technology, Hisar.

#### Forestry

1. Pankaj Singh. **Assessment of nutritional value and chemical composition of edible wild mushroom *Astraeus hygrometricus* (Pers.) morgan.** (Dr. V K Varshney, Dr. Sanjay Singh and Dr. K Jayaram Kumar), Department of Chemistry of Forest Products, Forest Research Institute, Dehradun.

2. Anjum, Nishat. **Assessment of polyphenolics in *Ficus auriculata* and *F palmata* fruits and their antioxidant activity.** (Dr. Y C Tripathi), Department of Chemistry of Forest Products, Forest Research Institute, Dehradun.

3. Dubey, Pallavi. **Phytochemical examination of *pinus roxburghii* needles.** (Dr. Vineet Kumar), Department of Chemistry of Forest Products, Forest Research Institute, Dehradun.

4. Gupta, Prachi. **Microstructure studies of secondary xylem of Indian Oaks (*Quercus* sp).** (Dr. Sangeeta Gupta and Dr. Kishore S Rajput), Department of Forest Botany, Forest Research Institute, Dehradun.

5. Hom, Sanjeet Kumar. **Energy simulation studies of chemically modified wood enveloped building.** (Dr Ajmal Samani, Dr. Sadhna Tripathi and Dr. M B Suman), Department of Wood Science and Technology, Forest Research Institute, Dehradun.

6. Mishra, Shambhu Nath. **Assessing the impact of varying climatic condition in the distribution of *Buchanania cochinchinensis* (Lour.) M.R. Almeida in Jharkhand using geo-statistical modeling technique.** (Dr. Sharad Tiwari), Department of Forest Geoinformatics, Forest Research Institute, Dehradun.

7. Nayak, Hiranamayee. **Studies on genetic variability and relative productivity of selected Teak (*Tectona grandis***

**Linn. f.) clones in Orissa.** (Dr. Animesh Sinha), Department of Forest Genetics, Forest Research Institute, Dehradun.

8. Nayak, Saswat. **Effects of seed source, storage conditions and duration on germination, seedling traits and oil content in *Madhuca latifolia* macbride in Odisha.** (Prof. U K Sahoo and Dr. L M Garnayak), Department of Forestry, Mizoram University, Aizawl.

9. Ngangbam, Somen Singh. **Leaf litter decomposition in tropical moist deciduous and sub-tropical evergreen forests of Mizoram.** (Prof.S K Tripathi), Department of Forestry, Mizoram University, Aizawl.

10. Pooja. **Assessing species loss in montane temperate forest and alpine vegetation of the Western Himalaya.** (Dr. Arijit Roy and Dr. Harish Karnatak), Department of Forest Ecology and Environment, Forest Research Institute, Dehradun.

11. Rawat, Kanchan. **Developing eco-friendly preservatives and treatment techniques for *Melocanna baccifera* (Roxb) Kurz.** (Prof. U K Sahoo and Prof. Kalidas Upadhyaya), Department of Forestry, Mizoram University, Aizawl.

12. Sanjay Babu. **Human Elephant conflict assessment in Rajaji Corbett Forest Landscape of Shivalik Hills and environs.** (Dr. Sarnam Singh and Dr. S P Goyal), Department of Wildlife Science, Forest Research Institute, Dehradun.

13. Sharma, Manisha. **Biology and management of sal seed and seedlings borer *Pammene theristis* meyrick (Lepidoptera:Tortricidae).** (Dr. K P Singh and Dr. R S Bhandari), Department of Forest Entomology, Forest Research Institute, Dehradun.

14. Suting, Ekhuparlang Gary. **Assessment of Arbuscular Mycorrhizal fungi association in native plants colonizing limestone mine spoils of Mawsmai, Meghalaya.** (Dr. Laxmi Rawat and Prof. H Kayang), Department of Forest Ecology and Environment, Forest Research Institute, Dehradun.

15. Vijayan, Keerthy. **Tracking the invasion: Molecular phylogeography and phylclimatic modelling of the Giant African Snail *Achatina Fulica* (Bowdich,1822) in South India.** (Dr. T V Sajeev), Department of Forest Biotechnology, Forest Research Institute, Dehradun.

#### Horticulture

1. Talwar, Dilpreet. **Identification and characterization of salt tolerant genotypes and salt tolerant gene in brinjal**

*(Solanum melongena L)*. Department of Horticulture, Punjab Agricultural University, Ludhiana.

## BIOLOGICAL SCIENCES

### Bio Sciences

1. Tanvi. **Molecular characterization of the plastid and mitochondrial genomes in cytoplasmic male sterile pigeonpea.** (Prof. Ashok Chaudhury), Department of Bio and Nano Technology, Guru Jambheshwar University of Science & Technology, Hisar.

### Bioinformatics

1. Bhatt, Drushti Hirenbbhai. **Evaluating plant miRNA as a modulator of human gene expression.** (Dr. H A Pandya), Department of Bioinformatics, Gujarat University, Ahmedabad.

2. Bhatt, Mital Himanshubhai. **Antimetastatic potential of Solanum Xanthocarpum on human cancer cell line.** (Dr. M N Reddy), Department of Bioinformatics, Veer Narmad South Gujarat University, Surat.

3. Pandya, Pujan Nainesh. **Phytochemicals and their role in cancer research.** (Dr. A U Mankad), Department of Bioinformatics, Gujarat University, Ahmedabad.

### Biotechnology

1. Dwibedi, Vagish. **Isolation, characterization and process optimization of resveratrol production from endophytic fungi.** (Dr. Sanjal Saxena), Department of Biotechnology, Thapar Institute of Engineering and Technology, Patiala.

2. Jain, Sahil. **Identification of peptides containing epitopes of Ebola Virus Eliciting immune response.** (Dr. Manoj Baranwal), Department of Biotechnology, Thapar Institute of Engineering and Technology, Patiala.

### Zoology

1. Malsawmhriatzuala, Jeremy. **Effect of vitamin D on testicular activity in D galactose induced aged rat.** (Dr. Vikas Kumar Roy), Department of Zoology, Mizoram University, Aizawl.

## EARTH SYSTEM SCIENCES

### Environmental Science

1. Gupta, Saloni. **Heavy metal sequestration from paint industry effluent using sulfate reducing bacteria.** (Prof. Narsi Ram Bishnoi and Prof. Asha Gupta), Department of Environmental Science and Engineering, Guru Jambheshwar University of Science & Technology, Hisar.

2. Saurabh Kumar. **Impact of surrounding land use practices on wetland plant diversity, soil and water quality in Doon Valley.** (Dr. Pramod Kumar), Department of Environment Management, Forest Research Institute, Dehradun.

## ENGINEERING SCIENCES

### Computer Science & Engineering

1. Ajay Kumar. **Dynamic and scalable data access and integration services in cloud computing environment.** (Dr.

Seema Bawa), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

2. Baljit Kaur. **Augmented map based intelligent navigation system.** (Dr. Jhilik Bhattacharya), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

3. Gupta, Vishan Kumar. **Toxicity prediction pre-clinical trial drugs using physicochemical properties and computational intelligence approaches.** (Dr. Prashant Singh Rana), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

4. Jameela Bano. **Fishbone method using goal oriented requirements engineering.** (Dr. L S S Reddy), Department of Computer Science & Engineering, Acharya Nagarjuna University, Nagarjuna Nagar.

5. Kansal, Isha. **Development of efficient techniques for fog removal from digital images.** (Dr. Singara Singh Kasana), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

6. Manmeet Singh. **Anomaly based botnet detection using DNS traffic analysis.** (Dr. Maninder Singh and Dr. Sanmeet Kaur), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

7. Nandal, Deepak. **Design and evaluation of software effort estimation technique using metaheuristic approach.** (Dr. Om Prakash Sangwan), Department of Computer Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar.

8. Pasupuleti, L Prasanna. **Development of topic modeling framework using probabilistic recurrent neural network.** (Dr. D Rajeswara Rao), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

9. Sahu, Aditya Kumar. **Development of higher embedding capacity and lower distortion image steganography techniques using the principles of LSB, LSB matching PVD and modulus function.** (Dr. Gandharba Swain), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

### Electrical & Electronics Engineering

1. Achari, K Narasimhaiah. **Performance improvement of sensorless controlled IPMSM drive with adaptive controllers.** (Dr. D V Ashok Kumar and Dr. M Vijaya Kumar), Department of Electrical Engineering, Jawaharlal Nehru Technological University, Hyderabad.

### Electronics & Communication Engineering

1. Monika. **Design of an improved optical OFDM system and its performance analysis.** (Dr. Deepak Kedia), Department of Electronics & Communication Engineering, Guru Jambheshwar University of Science & Technology, Hisar.

2. Sharma, Pavika. **Design study and performance analysis of OFDMA for broadband wireless systems.** (Dr.

Deepak Kedia), Department of Electronics & Communication Engineering, Guru Jambheshwar University of Science & Technology, Hisar.

3. Singal, Anuj. **Performance analysis of MIMO OFDM system.** (Dr. Deepak Kedia), Department of Electronics & Communication Engineering, Guru Jambheshwar University of Science & Technology, Hisar.

4. Singh, Vikram. **Design and analysis of low power and low noise CMOS amplifiers.** (Dr. Sandeep Kumar Arya and Dr. Manoj Kumar), Department of Electronics & Communication Engineering, Guru Jambheshwar University of Science & Technology, Hisar.

#### **Mechanical Engineering**

1. Vinay Singh. **Experimental study of heat transfer analysis using nanofluids in a heat exchanger.** (Dr. Munish Gupta), Department of Mechanical Engineering, Guru Jambheshwar University of Science & Technology, Hisar.

#### **MATHEMATICAL SCIENCES**

##### **Mathematics**

1. Kamal Kumar. **Some strategical methods for solving decision-making problems under fuzzy/ intuitionistic fuzzy set environment.** (Dr. Harish Garg), School of Mathematics, Thapar Institute of Engineering and Technology, Patiala.

2. Manjeet. **A study of flow and heat convection problems in particle suspended fluid: Specific reference to manofluid.** (Dr. M K Sharma), Department of Mathematics, Guru Jambheshwar University of Science & Technology, Hisar.

3. Sunita Rani. **Deformation of a stratified poroelastic media due to surface loads and buried sources.** (Prof. Sunita Rani), Department of Mathematics, Guru Jambheshwar University of Science & Technology, Hisar.

4. Suresh Kumar. **Dynamic coupled thermoelastic problems of wave propagation with finite speed.** (Prof. Sunita Pannu), Department of Mathematics, Guru Jambheshwar University of Science & Technology, Hisar.

#### **MEDICAL SCIENCES**

##### **Anatomy**

1. Pradhan, Sujita. **Effect of aqueous extract of pterocarpus marsupium heartwood on diabetic rabbit model.** (Prof. Prafulla Kumar Chinara), Department of Anatomy, Siksha O Anusandhan University, Bhubaneswar.

##### **Forensic Science**

1. Sharma, Parvesh. **A study of discrete characteristics of signatures, inks and photography for forensic investigation.** (Dr. H A Pandya), Department of Forensic Science, Gujarat University, Ahmedabad.

2. Vora, Hitesh Parashotambhai. **Novel approaches in digital and conventional forensic document examination.** (Dr. H A Pandya), Department of Forensic Science, Gujarat University, Ahmedabad.

##### **Medicine**

1. Figer, Brinal Hygiene. **Evaluation of the safety and ethical issues in the conduct of clinical trial processes at an academic centre.** (Dr. Urmila Thatte), Faculty of Medicine, Maharashtra University of Health Sciences, Nashik.

2. Fouzia Begum. **Prevalence of Extended Spectrum Beta Lactamases (ESBL) in hospital isolates.** (Dr. Ajit S Damle), Faculty of Medicine, Maharashtra University of Health Sciences, Nashik.

3. Merchant, Saumil Premchandbhai. **Age of Epiphyseal Union at the elbow and wrist joint amongst the adolescent boys and girls (Age-group of 10-18 years) in Ahmedabad of Gujarat.** (Dr. Kalpesh A Shah), Department of Forensic Medicine, Gujarat University, Ahmedabad.

4. Nath, Dhar Heenu Tej. **Evaluation of anti-inflammatory and anti-nociceptive activity of crocus in animal models.** (Dr. B B Ghongane), Faculty of Medicine, Maharashtra University of Health Sciences, Nashik.

5. Potdar, Gayatri Arun. **Characterization of 16s rRNA gene of leptospire and its role in the diagnosis of leptospirosis.** (Dr. Renu Bharadwaj), Faculty of Medicine, Maharashtra University of Health Sciences, Nashik.

##### **Neurology**

1. Ashok Kumar. **Medical application based post stroke care strategy for survivors and their caregivers (MAPSS): A randomized controlled trial.** Department of Neurology, Postgraduate Institute of Medical Education and Research, Chandigarh.

##### **Pediatrics**

1. Sharma, Madhulika. **Identification of novel miRNA targets by next-generation sequencing in retinoblastoma.** Department of Pediatrics, Postgraduate Institute of Medical Education and Research, Chandigarh.

##### **Pharmaceutical Science**

1. Chauhan, Shilpi. **Studies on some modulators of molecular target(s) of obesity.** (Dr. Ashwani Kumar), Department of Pharmaceutical Sciences, Guru Jambheshwar University of Science & Technology, Hisar.

2. Deepika Rani. **Investigations of pharmaceutical applications of natural polyuronides and their derivatives.** (Dr. Munish Ahuja), Department of Pharmaceutical Sciences, Guru Jambheshwar University of Science & Technology, Hisar.

3. Dharmendra, Saroj Seema. **Surface functionalised mesoporous silica nanoparticles as a delivery system for anticancer drugs.** Department of Pharmacy, M S University of Baroda, Vadodara.

4. Katamreddy, Jyothshna Devi. **Design and development of nanoemulsion based brain targeting drug delivery of selected drugs.** (Dr. Y Prasanna Raju and Prof. D Subba Rao), Department of Pharmaceutical Science, Jawaharlal Nehru Technological University, Hyderabad.

5. Manju Rani. **Design and development of superporous hydrogels for gastric retention.** (Prof. D N Mishra), Department of Pharmaceutical Sciences, Guru Jambheshwar University of Science & Technology, Hisar.

6. Neeraj. **Formulation and evaluation of SEDDS of some antihyperglycemic plant extracts.** (Prof. Neeru Vasudeva and Prof.Sunil Sharma), Department of Pharmaceutical Sciences, Guru Jambheshwar University of Science & Technology, Hisar.

7. Ravi. **Medicinal plants in management of diabetes mellitus type II in experimental animals.** (Prof. Sunil Sharma and Prof.Neeru Vasudeva), Department of Pharmaceutical Sciences, Guru Jambheshwar University of Science & Technology, Hisar.

8. Samridhi. **Synthesis and biological evaluation of some newer sulphonamide derivatives.** (Dr. Vikram Jeet Singh), Department of Pharmaceutical Sciences, Guru Jambheshwar University of Science & Technology, Hisar.

9. Soni, Kapil. **Pharmacological screening of some plants/bioactive compounds for nootropic activity.** (Dr. Dinesh Dhingra), Department of Pharmaceutical Sciences, Guru Jambheshwar University of Science & Technology, Hisar.

#### Physiotherapy

1. Joshi, Shabnam. **Efficacy of retrowalking and topical Nanogel formulation: Randomized trials in management of knee osteoarthritis.** (Prof. Neeru Vasudeva and Dr. Jaspreet Singh Vij), Department of Physiotherapy, Guru Jambheshwar University of Science & Technology, Hisar.

2. Pawalia, Alka. **Effectiveness of behavioural intervention on pregnancy outcomes and post partum weight retention in women to prevent central obesity after pregnancy.** (Dr. Kulandaivelan S), Department of Physiotherapy, Guru Jambheshwar University of Science & Technology, Hisar. □



**NATIONAL ASSESSMENT AND  
ACCREDITATION COUNCIL (NAAC)  
(An Autonomous Institution of the  
University Grants Commission)**

PB. no.1075, Nagarbhavi, Bangalore-560072

NAAC/Admin/Adv./Hindi Consultant/2020

Dt: 24/07/2020

### APPLICATIONS INVITED

#### Empanelment of Hindi Consultant

The National Assessment and Accreditation Council (NAAC) has invited applications for the post of Hindi Consultant (Contract basis). Eligible candidates should submit their Applications by email to [recruitnaacbengaluru@gmail.com](mailto:recruitnaacbengaluru@gmail.com) on or before 8<sup>th</sup> August 2020. The details can be obtained from the NAAC website: [www.naac.gov.in](http://www.naac.gov.in) under "Recruitment". For enquiry please contact NAAC, Bengaluru, Administrative Officer, Phone 080-23005122 during working hours of 09:15 am to 05:45 pm (Monday - Friday).

### Saraswat Vidyalaya's Sridora Caculo College of Commerce & Management Studies

Telang Nagar, Khorlim, Mapusa, Bardez, Goa  
(Affiliated to Goa University)  
(Accredited by NAAC with B Grade)

Applications are invited from eligible and duly qualified candidates for filling up following posts on **contract basis** from Indian Nationals to teach at **undergraduate level** for the academic year 2020-2021

#### Assistant Professor in Economics (Contract basis) : 02 posts (01 reserved for Physically disabled)

Kindly visit the College website: [www.caculocollege.ac.in](http://www.caculocollege.ac.in) for detailed information about post, qualifications and other terms and conditions. The posts will be filled subject to NOC by Goa Government/Goa University

Apply giving full particulars **within 20 days** from the date of publication of this advertisement to the undersigned.

**Principal**



 **VEER NARMAD SOUTH GUJARAT UNIVERSITY**  
UDHNA - MAGDALLA ROAD, SURAT.  
(Re-Accredited by NAAC with 'A' Grade)

**EMPLOYMENT NOTICE**

Veer Narmad South Gujarat University invites online applications for the Post Registrar as per following :

Sr. No	Name of Post	Pay Scale	No. of Post	Category
1	Registrar (For tenure of five years) (2 <sup>nd</sup> Attempt.)	1,44,200 - 2,18,200 (Level-14) (Subject to approval of Gujarat Government)	1	General

Eligible candidate shall be required to apply online on or before 19/08/2020 till 6:00 pm at: <http://rms.vnsgu.net>  
The other details about application form fee and minimum qualifications are available on the University website: [www.vnsgu.ac.in](http://www.vnsgu.ac.in) & <http://rms.vnsgu.net>.  
Applicant needs to send two hard copies of the application on or before 29/08/2020 along with all self attested testimonials, certificates and all supporting documents.

Those who have applied in response to earlier employment notice No.: GAD/EmpNotice/12597/2019 dtd : 10/07/2019 need to apply again.

No.: GAD/EmpNotice/6188/2020  
Date : 30/07/2020

Sd/-  
I/c. REGISTRAR

**THE COCHIN COLLEGE**  
KOCHI – 682 002  
(Affiliated to Mahatma Gandhi University and NAAC Accredited)  
Phone : 0484- 2226449, 2224954, 7012938218


**WANTED**

Applications are invited for the post of **ASSISTANT PROFESSOR** in substantive vacancies for the following subject in Open Quota.

**Commerce-2 Vacancies**

Qualifications, Age, Approval, Salary etc as per Government/University/UGC norms. Application forms will be available online on payment of Rs.500/-. For details contact through **Email: [cochineducationsocietykochi2@gmail.com](mailto:cochineducationsocietykochi2@gmail.com)**. Applications along with copies of certificates should reach the Manager **within 30 days** from the date of publication of this notification,

Date : 24/07/2020 MANAGER

 **CENTRAL UNIVERSITY OF RAJASTHAN**  
(A Central University established by an Act of Parliament)  
NH-8, Bandarsindri, Tehsil Kishangarh,  
Ajmer (Raj.)-305817

CURAJ/R/F.121/2020/990 Date: 24.07.2020

**ADVERTISEMENT**

Online Applications in the prescribed format are invited from eligible Indian Citizens for the post of **Registrar** and **Controller of Examinations** (both likely to be vacated) in the University to be filled under direct recruitment/ deputation/ contract basis. For online application, details of minimum eligibility, emoluments, age of Superannuation and other service conditions, please visit University website i.e. [www.curaj.ac.in](http://www.curaj.ac.in). The notification for any future amendment will be published on University website only.

**Name & No. of post, category and Pay Level:**

1. Registrar – (01-UR) -Pay Level-14, [Rs. 144200-218200]
2. Controller of Examinations (01-UR)-Pay Level-14, [Rs. 144200-218200]

**Age Limit:** Preferably below 57 years of age, on closing date of the advertisement.

**Application Fee:** Rs. 1500/- (for Gen./ OBC/EWS category),  
Rs. 750/- (for PWD/SC/ST category)

**Last date for submission of online application:**  
26/08/2020 upto 5:00 PM.

**Last date for submission of Hardcopy of Application:** 02/09/2020 upto 6:00 PM.

Registrar

 **KHAJA BANDANAWAZ UNIVERSITY**  
EDUCATING HUMANITY

**ADMISSIONS OPEN FOR 2020**  
**B.E., B.A., B.Sc., B.Com.**

**Last date for receipt of application:**  
**29-08-2020 (Saturday)**

**Date of Entrance Test :**  
**06-09-2020 (Sunday)**  
**(Entrance Test for Engineering Programmes only)**

**For admission procedure visit :**  
**[www.kbn.university](http://www.kbn.university)**

**KHAJA BANDANAWAZ UNIVERSITY**  
**KBNU Campus, Rauza-i Buzurg,**  
**KALABURAGI - 585 104. (KS)**  
**Tel : 08472 228540/236041/267657 Extn. 136**  
**Timings : 11:00 am to 4 pm (on all working day)**



# CENTRAL UNIVERSITY OF RAJASTHAN

Bandarsindri, NH-8, Tehsil Kishangarh, Ajmer (Raj.)-305817

Advt.: R/F.121/2020/943 Date: 20.07.2020

## ROLLING ADVERTISEMENT FOR TEACHING POSITIONS

Online applications are invited from the eligible Indian Citizens and Overseas Citizens of India (OCIs) in the prescribed format through [www.curaj.ac.in](http://www.curaj.ac.in) for the positions of **Professor and Associate Professor** in the various Academic Departments of University.

(1) Rolling Advertisement through Direct Recruitment.

### PROFESSOR (13 POSTS)

Name of Department	No. of posts & Reservation	Name of Department	No. of posts & Reservation
Atmospheric Sciences	01-EWS-Backlog	Mathematic	01-UR
Biotechnology	01-OBC -Backlog	Public Policy, Law and Governance	01-UR
Chemistry	01-OBC-Backlog	Society-Technology Interface	01-SC
Commerce	01-SC-Backlog	Sports Biomechanics	01-SC
Culture & Media Studies	01-UR	Sports Bioscience	01-UR
Data Science and Analytics	01-UR	Sports Psychology	01-OBC
Yoga	01-UR		

### ASSOCIATE PROFESSOR (06 POSTS)

Name of Department	No. of posts & Reservation	Name of Department	No. of posts & Reservation
Culture & Media Studies	01-UR(VH)(B.LV)-Backlog	Sports Biomechanics	01-EWS
Society-Technology Interface	01-OBC	Sports Bioscience	01-UR
Sports Biomechanics	01-UR	Sports Psychology	01-UR

#### Academic Pay Level:

- Professor - Pay Level-14, [Rs. 144200-218200]  
Associate Professor - Pay Level-13A, [Rs. 131400-217100]

Minimum qualification, Experience, Reservation, Relaxation in Age, Service Conditions, Emoluments, Age of Superannuation, etc. are as prescribed by the University / UGC/ Government of India and or available at [www.curaj.ac.in](http://www.curaj.ac.in)

**Application Fee – Rs. 1500 (for General/EWS/OBC category)**

**Rs. 750 (for SC/ST/PWD category)**

**Note: After successfully applying online, the self-attested copies of all the required documents alongwith application form should reach the university within 10 days.**

Registrar

**ZANTYE BROTHERS EDUCATIONAL FOUNDATION'S  
NARAYAN ZANTYE COLLEGE OF COMMERCE**

POST: BICHOLIM INDUSTRIAL ESTATE, VATHADEV, SARVAN, BICHOLIM-GOIA PIN : 403 529

Phone Nos.: 2361377/2363769 E-mail : [zantyeedu@rediffmail.com](mailto:zantyeedu@rediffmail.com)

(Recognized by Govt. of Goa, Affiliated to Goa University)

(Recognized by U.G.C. under Section 2(f) and 12(B) of the UGC Act 1956)

Accredited by NAAC with 'B' Grade (CGPA Score 2.76 on a four Point Scale ( 1<sup>st</sup> Cycle)

**APPOINTMENT OF PRINCIPAL**

Applications with full Bio-Data are invited from Indian Citizens for the **POST OF PRINCIPAL** (Unreserved Category) to be filled in Government Aided College from the Academic Year 2020-2021 onwards :

The required minimum qualifications for the post of Principal are as follows :

**A) Eligibility :**

- i) Ph.D. degree
- ii) Professor/Associate Professor with a total service/experience of at least fifteen years of teaching/research in Universities, Colleges and other institutions of higher education.
- iii) A minimum of 10 research publications in peer reviewed journal as approved by Goa University from time to time OR UGC-listed journals out of which at least two should be in Scopus/Web of Science Journal.
- iv) A minimum of 110 Research Score as per Appendix II, Table 2.

**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 Statutes.

**Essential Requirements:**

- a) Knowledge of Konkani Language
- b) 15 years of Residence Certificate in Goa issued by competent authorities.

**Desirable Requirement:** Knowledge of Marathi Language

**Scale of Pay:-** As prescribed by the UGC, Goa University and Directorate of Higher Education, Govt. of Goa from time to time.

**Service Conditions:** As prescribed by the UGC, Goa University, Directorate of Higher Education, Govt. of Goa and other competent authorities.

Applicants who are already employed shall send in their applications through proper channel.

Application completed in all respects along with self-certified photocopies of statements of marks of all public examinations from S.S.C. onwards, API Score sheet and other certificates should reach the **Secretary, Governing Council, Narayan Zantye College of Commerce**, Post : Bicholim Industrial Estate, Vathadev, Sarvan, Bicholim - Goa. Pin-403 529 **within 20 days** from the date of publication of this advertisement by superscribing on the envelop "**Application for the post of Principal**". No TA/DA will be paid for attending the interview.

Place : Bicholim - Goa

Date : 13/07/2020

Sd/-  
Shri Rohit Umesh Zantye  
Secretary  
Governing Council

**N.B.:** Persons who have applied earlier should apply again.



# SRI RAMACHANDRA

## INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Category – I – Deemed to be University)  
Porur, Chennai – 600 116, Tamil Nadu

**Applications called for the post of:**

**DIRECTOR (Sri Ramachandra Centre for ODL/On-line Education): One**

**Essential Qualifications:**

- (i) Ph.D. in Health Sciences/Computer Sciences/Information Technology/Educational Technologies.
- (ii) 10 years of Teaching/Research/ODL & online education experience of which 5 years in Institute/ Department of Distance Education/SWAYAM/NPTEL/CEC/IGNOU or Industry based ODL-Online centres with track record of developing e-resources for higher education and skill development.
- (iii) Additional qualifications/Diploma in Online education technologies from national/international institutions – desirable.
- (iv) Upper age – limit : 50 years.

### **PROFESSOR – RESEARCH**

In Specialities of General Medicine/Paediatrics/Obstetrics & Gynaecology/Cardiology/Endocrinology/ Nephrology /Neurology/Oncology/Radiology or any other Interdisciplinary Branches Like Clinical Research.

**Essential Qualifications:**

- (i) MBBS/MD in the respective discipline, with a minimum of 8 years of Teaching and Research in a Medical/ Medical Research Institution at the level Associate Professor or equivalent.
- (ii) Superspeciality qualification like D.M etc/Ph.D. in that discipline will be preferable.
- (iii) Post-doctoral research experience in an International University/Research Organisation is desirable.
- (iv) Should have conducted sponsored research projects/clinical trials funded by national and international agencies/industries.
- (v) Should have published at least 10 original research articles excluding Case reports/Letter to the editor in journals indexed in SCOPUS/WEB OF SCIENCE/PUBMED.
- (vi) Should have the publication “h” index of minimum 10.
- (vii) Willingness to work as fulltime clinical researcher without any private practice.

**Desirable Qualifications:**

- i) Registered or awarded patents.
- ii) Track-record of industry-academia projects and technology transfer.
- iii) Diploma in Clinical Research.

**Scale of Pay:** As per UGC scale of pay with SRIHER special pay and allowances commensurate with qualifications and credentials.

Duration: Permanent after initial probation; Extendable after every five years assessment.

**Application guidelines:** Candidates fulfilling the above are requested to submit their updated Curriculum Vitae with Education, Employment, Experience, Expertise and Achievements copies with Date of Birth, Communication details through email to [gmhr@sriramachandra.edu.in](mailto:gmhr@sriramachandra.edu.in) on or before **15/08/2020**. Short-listed candidates will be interviewed through Google / Skype/ Zoom Meet after prior time arrangements.



**INVITATION FOR  
NOMINATIONS**

**SUN PHARMA RESEARCH  
AWARDS-2020**

**&**

**SUN PHARMA SCIENCE  
SCHOLAR AWARDS-2020**

We invite Heads of Research Institutions, Universities, Medical and Pharmaceutical Colleges of India to nominate eligible candidates for :

- (a) Sun Pharma Research Awards-2020 and**  
**(b) Sun Pharma Science Scholar Awards-2020**

**The Sun Pharma Research Awards** are for excellence in original research in Medical and Pharmaceutical Sciences. There are three Awards of Rs.2,50,000/- (Rupees two lakh fifty thousand) each; two in Medical Sciences—(Basic Research and Clinical Research), and one award in Pharmaceutical Science.

The sponsored work of Indian Scientists, both in India and abroad, together with their bio-data, research achievements, awards received in the past and papers published, along with justification for nomination and citation on the research work, may be submitted online on Sun Pharma Science Foundation's website [www.sunpharmasciencefoundation.net](http://www.sunpharmasciencefoundation.net)

**Sun Pharma Science Scholar Awards:** There are four awards - two each in Bio-Medical Sciences and Pharmaceutical Sciences for Rs.50,000/- each, and an additional amount of Rs.50,000/- to attend international conference.

Indian nationals under the age of thirty (as on August 01, 2020), who have completed at least 1<sup>st</sup> year of MD or PhD in Biomedical or Pharmaceutical Sciences are eligible to apply. Those who have

completed their MD, or PhD and above the age of thirty, as on date August 01, 2020 are not eligible to apply. **The applicant should have completed a Research Project** and should be willing to present his/her research work in front of knowledgeable assessors.

The applicants should submit:- (1) detailed CV with photograph (2) copy of their detailed research work (3) letter from the supervisor certifying that the research work under reference has actually been done by the applicant (4) a citation (brief summary) on his/her research work. (5) forwarding letter from the Head of the Department or Institution, giving justification for nominating the applicant (6) A voluntary declaration from the applicant that they would work in the public or private funded academic/research based organizations for a minimum period of two years after completion of his/her studies. The applicant should also submit the following testimonials.

- Aggregate marks obtained in PCB/PCM in Class XII, and Bachelor's/ Master's Degree
- Proof of age
- Copies of the publications, if any
- Merits/Awards/Scholarships received, if any
- A letter stating that the project submitted for the award has received ethical clearance,
- A statement duly signed by the nominee and the supervisor/co-author that the thesis has no-conflict of interest academically or financially.

The applicants should submit their nominations online at Sun Pharma Science Foundation's website [www.sunpharmasciencefoundation.net](http://www.sunpharmasciencefoundation.net) from **August 01, 2020 to September 30, 2020**. Also required to send a print copy of the nomination, to the office of the Foundation **by October 15, 2020**.

Detailed nomination procedures of the awards are available on Sun Pharma Science Foundation's website.

For further information, please contact :

The Office of Sun Pharma Science Foundation

8C, 8<sup>th</sup> Floor, Hansalaya Building, 15-Barakhamba Road, Connaught Place, New Delhi : 110 001 (India)

Tel.(91-11) 23721414; 23721415 : E-mail : [sunpharma.sciencefoundation@sunpharma.com](mailto:sunpharma.sciencefoundation@sunpharma.com)

**Website :<http://www.sunpharmasciencefoundation.net>**



## Association of Indian Universities

AIU House, 16, Comrade Indrajit Gupta Marg (Kotla Marg),  
New Delhi 110 002

### AIU Invites Proposals for Organizing Round Table Conferences of Vice Chancellors in the Session 2020-21

Association of Indian Universities has initiated a series of Webinars of Vice Chancellors on various discipline domains of higher education. The objective the webinars to bring the domain specific universities on a common platform and to provide an avenue for facilitating the interface, identify the common problems and grey areas and to work collectively towards their redressal, share the unique/best practices adopted by the universities which can be applicable to other universities for improvement. Proposals for collaboration in organizing the Roundtables in the current Financial Year i.e. 2020-21 are invited from Member universities for the following:

- Webinar of **Vice Chancellors of Law Universities.**
- Webinar of **Vice Chancellors of Agriculture Universities**
- Webinar of **Vice Chancellors of Engineering and Technology.**
- Webinar of **Vice Chancellors on Health Science.**

The focus of discussion would be on areas like Digitization, Online Education in Covid-19, New Financing prospective during Covid-19, Research and Innovations, Quality and Excellence through Online Education, Employability, Policies and Practices of Online Education, Role of Indigenous knowledge to combat corona, Faculty and Student Related Issues, etc. The Roundtables each of **one day** are to be scheduled in between **August, 2020 to March, 2021.**

Member Universities/Institutions of AIU are invited to send their willingness to collaborate with AIU in organizing any of the above Roundtables along with a Proposal containing (i) Expression of Interest through letters; (ii) Specific theme and subthemes; iv. Two sets of dates for convening the Round Table latest by **August 20, 2020 to the following:**

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

For any further query please contact on: 011-23230059, Extn-202/209, Fax No: 011-23239325,  
E-mail: **researchaiu@gmail.com.**

**N.B.:** The events will be conducted under the banner of AIU and in collaboration with selected in collaboration with selected partner universities. Since the Events will be conducted through online, **No financial support will be given. Proposal must be sent to AIU with the Approval /Endorsement of Vice Chancellor.**

**[Joint Director]**  
**Research Division**



## Association of Indian Universities

AIU House, 16, Comrade Indrajit Gupta Marg (Kotla Marg),  
New Delhi 110 002

### Advertisement for Research Internship/Trainee Researcher

Applications are invited for Research Internship/Trainee to be engaged in Research Division of AIU to assist in implementation of action plan of the regular academic activities of Research Division like Research Projects, Capacity Building Programmes such as Workshop /Seminar, ANVESHAN: Student Research Convention, Vice Chancellor Roundtable Conferences, Data-base activities as analyzing data or writing proposals, developing draft questionnaires and reports and bringing out publications in various areas of higher education. The internship will be awarded for a period of **three months** (extendable to another three months based upon the requirements). After successful completion of internship, an **experience certificate** will be issued to the candidate. The internship will help the students to gain experience of working in real life situations and enhance their employability.

#### Essential Qualification:

- I. Enrolled in Master Degree programme in any recognized university with minimum Second Class in Bachelor's Degree.
- II. Proficiency in working on computer applications and good flair of writing.

**Age Limit:** Candidates should be below 30years of age at the time of application.

Candidates meeting the above criteria may send their detailed bio data (personal details, educational qualifications and research experience if any) by **20 August, 2020** (last date), to the Joint Director & Head (Res) via **email: [researchaiu@gmail.com](mailto:researchaiu@gmail.com)**

#### Note:

Short listed candidates will be called for online/personal interview. Selected candidates must join within seven days of the date of declaration of results. No remuneration /honorarium shall be paid for the internship.

[Joint Director]  
Research Division