



**ASSAM  
DON BOSCO UNIVERSITY**

A photograph of the Don Bosco University Academic Block-I building. The building is a modern structure with a prominent wooden facade. The text "DON BOSCO UNIVERSITY" and "ACADEMIC BLOCK-I" is visible on the wooden part of the building. The sky is blue with white clouds.

**DON BOSCO UNIVERSITY  
ACADEMIC BLOCK-I**

**Annual Report  
2020-2021**

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## Foreword by the Vice Chancellor

As a preface to this Annual Report of the University dealing with a very singular year in our history as the Corona Virus insinuated itself into our lives, stealthily invaded every nook and corner of the world, threw our lives into a macabre dance of death and destruction, I want to touch upon its impact on the world of higher education – the initial numb reaction, the subsequent groping in the dark for answers, and the eventual survival mechanisms to cope with the changed realities. In brief, I want to touch upon ‘the challenges of fragmentation and fracturisation in the field of higher education’ that had begun quite a few years before the pandemic, but got embedded into the system very forcefully in the aftermath of the pandemic, or rather, along with the march of the pandemic.

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In June last year, with the pandemic tightening its grip over the length and breadth of our country, in fact of pretty much the whole world, I proposed a theme for the academic year 2020-2021 for us at Don Bosco University: ‘Searching for meaning... in the bits and pieces of life’ ...

It was framed against this once in a lifetime scenario that was being played out in front of us as well as through us. We were, and still are, the players as much as the victims. This pandemic kept stripping away most of our illusions about what is ‘normal’. It picked relentlessly at the core of our erstwhile certainties about life and death, about self and the other, about what really mattered and what was dispensable...

But, for a time, we were confused; we could not make any sense of it... This whole experience looked so surreal. It seemed just the other day when the world as we know it came crashing down all around us. We were under lockdown (a new term we still keep gawking at...). Ever since that fateful day in mid-March a year ago, we have been living through extraordinary times, the like of which will probably not be repeated in our lifetimes... Of course, we do have some experts warning us that the next pandemic is not too far away!

This locked-down existence how does one look at it?

As a challenging time? – the established world order seems to give way...

As a disconcerting time? –disturbing reports abound of life and death decisions about who gets saved, who is dispensable and can be left to die...

As a revealing time? – laying bare the heroism of some as well as the selfishness, personal priorities, grabbing of resources by the rich and the powerful...

As a disturbing time? – with disquieting questions about the deeper realities of life which, earlier, would have been smothered under the relentless pace of our driven days and nights...

As an unsettling time? - when all is under control again and life gains a semblance of normality, what will the new normal look like?

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Deep down, I felt that the ‘Search for meaning’ and a ‘right attitude’ to face that ever evolving scenario were the tools we had in hand. Both called for courage to pick up the pieces, and to walk on with changed perceptions and changed selves, one day at a time, navigating through the challenges and the pitfalls, battling the lethargy and the listlessness, recognizing and confronting the inevitable bouts of despondency and depression...

These were all commonplace experiences of everyone by then. The scramble for meaning, the search for some philosophical, psychological and spiritual underpinnings that could sustain us through it all started right in earnest. That search was made more complex by all sorts of confusion and facile solutions put forth by quacks of all types – political, religious, scientific, fundamentalists, doomsday prophets and the like...

THAT was my reason for proposing a continuing search for meaning in the bits and pieces of life as a new way of life.

I must confess that I did not realise then that the phrase ‘the bits and pieces of life’ would have such wide-ranging ramifications for virtually all spheres of life.

Since then, I have participated in umpteen numbers of webinars and some workshops, each trying to make some sense out of the enormity of the task of finding meaning, purpose and a way forward. Making some interventions in some of those events, it struck me that, whenever I mentioned this theme in some context or another (Searching for meaning... in the bits and pieces of life), it instantly attracted attention. Many began to see it as a powerful image to represent the fragmented lives they were experiencing; and they began to touch base with a deeper realization - the search for meaning had to begin within the very experience of a world and life that seemed so disjointed.

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As the lock-downs began to bite and disrupt lives, there were a few separate but connected realities that I, as the Vice Chancellor of the University, kept facing in those early months of the national ‘lock-down’:

1. There was this huge campus of 300 acres or so – suddenly silent except for the birds and the elephants which had a field day. The students and the faculty, the soul of any university, were gone, each one shut up in their own little or big ‘boxed up existence’ scattered over the country.
2. There were some 800 construction workers, confined to their barracks on campus, with nowhere to go and no means to live by but what we could provide them.
3. There was this Covid Care Centre, set up by the government in our biggest academic block catering to some 350 patients a day – quarantine, treatment, isolation, supply of meals, daily disposal of huge quantities of bio-medical waste for five straight months.
4. There were the tea garden labourers and farm workers of the university from the nearby villages who were helpless, not allowed to come for work, but dependent on us.
5. Above all, there was this nagging, overwhelming conviction in my mind that ‘our students must come out winners right in the midst of the pandemic’.

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It was a struggle to spare funds to keep the construction, tea garden and farm workers reasonably looked after. It strained our resources, ate into most of our security deposits, delayed our construction activity and severely limited our options to face prolonged risks and emergencies. But, it is a matter of tremendous satisfaction that we were able to rise to this challenge reasonably well. We did reach out to nearly 2000 families too with provisions and medical help.

The biggest headache with the Covid Care Centre was the huge volume of bio-medical waste it kept churning out day after day. Apart from that, the resentment some felt about bringing such a centre right in the middle of the campus turned to appreciation when they began to see the number of patients who benefitted during the five months it was in operation on campus.

The task to which we dedicated all our energies was to ensure our main concern – our students should come out unscathed academically and otherwise in spite of the pandemic. Here, in India, the lock-down started in the last week of March 2020. Within a month, we had our faculty and students fully on board with our drive for taking all teaching, coaching and testing online. It was the graduating students (who had still four months to go when the pandemic struck) who took enthusiastically to this switch to online education. We plunged into it because we had a time-tested platform, DBU Global, our Centre for Online and Distance Education (CODE). Begun in 2010, with the approval of the government and under an MOU with University18 (our technology partner), it got a boost when we were supported financially by Porticus in 2011-12.

It took a while to get our faculty on board; it did take longer to achieve the enthusiastic support of the students. But I must say with a sense of pride that our faculty rose to the occasion most admirably, and our students, in spite of initial set-backs and skepticism and lethargy (because most others were not doing it), beamed with pride when we were able to complete all teaching and examinations on line and with virtual labs, and hold our virtual Convocation on 5th October 2020, just three weeks later than normal years!

The classes for the autumn semester started immediately thereafter, online too; and, now, the campus is abuzz again with the students on campus for the Spring Semester from 1st March onwards...

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Having shared with you the broad contours of this journey, let me get more specifically into the topic for our deliberation today: ‘The challenges of fracturisation/fragmentation in Higher Education’.

The theme that has been put forth for our deliberation this evening arises out of a combination of factors, arising mostly out of the pandemic that has the entire world in its inexorable grip:

- a. There is a widespread agreement that humanity confronts now a critical time of transition, one that holds promise of leading towards some form of global consciousness and consensus on what matters and what does not;
- b. The overly optimistic view of globalization of the eighties and the nineties that held promise of a peaceful and supportive global civilization does not seem so very utopian now – it has become, perhaps, a requirement for the very survival of our race.
- c. But the elephant in the room is the plight of children and young adults who have to get on with their lives. They cannot afford to be frozen in time, to be thawed back to life with a year or more lost in the mists of the pandemic.

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Coming to the first of these points (that is facing a critical time of transition), there is a growing agreement now, as pointed out by Douane Elgin in his book ‘Choosing Earth: Humanity's Great Transition to a Mature Planetary Civilization’ that we are indeed right in the midst of a critical time of transition.

He says that it might help to put things into perspective by looking at some prescient analyses that the great historian Arnold Toynbee made about times of transition in the history of human civilization. After analyzing the dynamics of development of all the major civilizations throughout history, he concluded that a civilization will begin to disintegrate when it loses its capacity to respond creatively to major challenges.

Toynbee also concluded that a failure of creativity often follows a period of great achievement. When we consider today the industrialized nations and their two centuries of unparalleled

material achievement, we might want to revisit this foresight of Toynbee and this look into the future, fifty years hence, of Douane Elgin.

Elgin says, 'After acquiring a self-image of seemingly invincible mastery, many developed nations find themselves in the demoralizing position of being unable to manage their own affairs, let alone cope creatively with mounting global problems'.

In a telling and humourous commentary on the book, Dr Vandana Shiva, an Indian Scholar and an environmental activist, says, 'At a time when billionaires are preparing to escape from the earth through SpaceX, assuming that extinction is inevitable... we as humans have the potential to sow the seeds of a planetary civilization as members of the Earth Community'... That much on this important insight that we are in the grip of a very significant time of transition as a race.

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Looking at the second point (that a globalized world does not, any more, have the choice to build and fortify secure islands of plenty and comfort for a select few, select nations, select classes within those nations), it is evident now that that choice is no more the privilege of a few. What colonization, industrialization, slavery, climate change, religious fundamentalism, political ideologies and the ravages of war have not achieved, this pandemic has managed to highlight. In the words of one of the well-known poets of Assam, Bhupen Hazarika, there is a growing realization that 'We are in the same boat, brother'.

Yes, the pandemic has highlighted disparities like never before; it has exposed the selfishness, personal priorities, grabbing of resources by the rich and the powerful... As I said earlier in this presentation, we know for a fact today that life and death decisions about who gets saved, who is dispensable and can be left to die, were commonplace at the height of the pandemic...

Acknowledging all that, we can still say that there is increasingly larger sections of society, all over the world, beginning to ask deeper questions of themselves, of the world they helped create, and, more importantly, fundamental questions about what is it that is driving them.

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It is on the third point that I want to devote the rest of my talk. In the midst of all that is going on, it is the plight of children and young adults that we, in the field of education, have to grapple with. They have to get on with their lives; they cannot afford to be frozen in time, waiting to be thawed back to life with a year or more lost in the mists of the pandemic. From right round the world we are getting reports of schools and colleges and universities being opened, then shut, then opened again.

Let me share with you some indicators of what I meant by saying that all stakeholders (the students, those who provide education and the employers) are faced with as emerging trends out of the pandemic experience.

Most students were pleased with their digital learning: In a JISC Survey of 27,069 higher education students, nearly seven in 10 students rated the quality of online and digital learning as either 'best imaginable', 'excellent' or 'good' (68% of both further and higher education students). The survey also found that areas such as well-being, mental health and staff digital skills need more attention.

Among those surveyed, 81% were studying online, 72% of them from home. Both higher education and further education students surveyed noted the huge benefits of flexible learning,

with lecture recordings proving helpful for note-taking and scheduling learning around other aspects of life.

Further, the report advocated engaging students as “co-designers of their learning experience”, advising that engaging in conversations with students will result in a deeper understanding of the issues and perhaps yield solutions not thought of before.

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Having said that, it is time to ask ourselves: ‘Are we already into an era of ‘micro-credentials’?

To attempt an answer to that, we need to understand that, over the last decade, the higher education sector worldwide has seen a much greater focus on employability and skills development. It began in what was a challenging global recession and is continuing through many years of sustained economic expansion. The development and acquisition of human capital has risen to the very top of corporate agendas.

The growing need for continuous learning is also reflected in the explosion of new educational credential offerings in recent years, a mushrooming of micro-credentials – ranging from online degrees and coding boot-camps, to technology certificates, digital badges, Nano degrees and Micro-Masters.

These professionally oriented educational offerings have a growing momentum. But even as millions of micro-credentials are being issued, it is still very early in the development of a new market. The data suggests that so far, micro-credentials are largely functioning in the labour market as supplements to traditional degrees, rather than degree substitutes, more for demonstrating advanced skill development, qualifying individuals for promotions, and facilitating career change.

At the same time, these micro-credentials still hold great promise as initial job qualifications, especially in technically oriented occupations.

Learning and real-world experience: This growing interest in professionally focused micro-credential programmes highlights a more fundamental truth – that in the job qualification process, education and experience are intertwined, and often difficult to decouple.

Notably, one of the hallmarks of many micro-credential programmes – and a trend in higher education more generally – is the integration of capstone projects and work-based or experiential learning opportunities, as well as employer endorsement of curricula.

For example, in many MOOC (massive open online course) and online education certificate programmes, computer science students may use real employer data and programme a solution to a real-world employer challenge. Hackathons to achieve this end is being used worldwide. When assessing human capital, the ideal combination for employers is education and evidence of being able to perform a given role.

Survey after survey across countries has found that employers’ top priority recommendation for colleges and universities was to “include real-world projects and engagements with employers and the world of work” in their programmes.

This was followed closely by providing academic credit for experience and on-the-job learning, as well as including more industry-based validation of curricula. Employers are issuing a clear call to action for universities to integrate their offerings more tightly into the fabric of the world of work.

This imperative is manifested in the growing interest in work-based learning worldwide – as governments, private businesses and universities are exploring new solutions for human capital development.

One particular work-based learning model that has captured special attention is apprenticeship. A number of large global technology companies such as IBM and Amazon have launched next generation digital apprenticeship programmes.

Integrating micro-credentials and micro-internships: Work-based learning models such as apprenticeships and internships can be high-value ways to give full-time students and transitioning workers education, training and experience. But in an economy that demands continuous lifelong learning, it is important to think about these models as part of a broader continuum that can and must also serve the growing numbers of working adult, online and part-time students.

A lot of start-up companies are creating platforms that connect students and universities to 'micro-internships' with employers, experiential learning software that provides faculty with the tools to integrate real-world employment into their courses.

A new ecosystem of experiential learning providers and technology companies is beginning to develop and mature to meet the growing demand from students, universities and employers. Micro-credentials – and micro-work experiences – are one offering within this much larger marketplace.

Thinking about micro-credential offerings only as shorter online educational programmes would miss the broader, more significant trends that they exemplify.

First, the growth of micro-credentials is evidence of the emergence of more continuous and less episodic post-secondary learning. Second, micro-credentials highlight an educational curriculum that is much more industry-aligned and competency-focused. Finally, they demonstrate that we are entering an era with much greater overlap and integration between education and experience.

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Again, 'Does the age of artificial intelligence (AI) force universities to rethink their purpose?' This is question that is very much aligned with these developments.

It is brought out very forcefully in a book 'Education and Technological Unemployment' (Peters, Michael Adrian, Jandrić, Petar, Means, Alexander). It considers the role of education in a digital age characterized by potential mass technological unemployment. The book examines the challenge of accelerating automation, and argues that countering and adapting to this challenge requires new methodological, philosophical, scientific, sociological, economic, ethical, and political perspectives that fundamentally rethink the categories of work and education. What is required is political will and social vision to respond to the question: What is the role of education in a digital age characterized by increasing deployment of Artificial Intelligence leading to potential mass technological unemployment?

The rapid emergence of artificial intelligence (AI) and deep learning in the past decade has taken us by surprise, both in their development and the scope of their applications.

'Convergent technologies' – nano-bio-info-cogno technologies – in the knowledge system, which enable each other and propel a vision of a science-based future, have an accelerating impact and



exercise a determining direction on economic and cultural development.

There are multiple challenges facing education in a future digital society. The digital university will see the rise of artificial intelligence, deep learning (machine learning), robotisation, 'intelligent systems' in manufacturing and 'Industry 4.0' strategies, sometimes called the 'fourth industrial revolution', which presage what some critics have called the move to the 'Bioinformational Society'.

In particular, a new techno-science synergy, 'convergent technologies', referred to as the 'nano-bio-info-cogno' paradigm, represents a big jump to a new stage of the knowledge economy.

It comprises:

- Nano – The branch of technology that deals with dimensions and tolerances of less than 100 nanometers, especially the manipulation of individual atoms and molecules;
- Bio – The exploitation of biological processes for industrial and other purposes, especially the genetic manipulation of micro-organisms for the production of antibiotics, hormones, etc.;
- Info – New information technologies with the development of quantum computing;
- Cogno – Convergence of Nano, bio and IT for remote brain sensing and mind control.

These convergent technologies are also referred to as NBIC technologies. It is still to be seen whether

- a) They will indeed lead to the disappearance of labour as a factor from production, or
- b) They will lead to augmented intelligence rather than autonomous learning systems resulting in a hybrid model with human beings firmly in control, or,
- c) They will leave us much as before with all this talk about AI and intelligent systems as just another tech-hype discourse that will erode, but also create, some jobs.

The 2018 OECD Automation Policy Brief confirms that 14% of jobs are automatable and another 32% will face substantial change in how they are carried out; young people will find it harder to enter the labour market and, while jobs in manufacturing and agriculture face greater risk of automation, others are not immune to change. The greatest risk is to low-skill routine jobs, although education and training will not offset the risks of automation.

The 'joblessness' scenario is a frightening one, especially for young people who will increasingly find growing competition for a decreasing pool of available jobs with higher entry qualifications and conditions, and lower wages. The future of work in this scenario looks bleak even if we admit that the process is not one of the simple elimination of jobs through increasingly sophisticated automation and the application of intelligent systems to the world of work.

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... and one last point I want to touch upon before I end: evolution of 'academic bank of credits' all over the world.

Here, in our country, for the last few years we have been experimenting with a 'National Academic Registry' which was like a clearing house where the Degree Certificates and Transcripts of students were uploaded by all institutions. It gave the possibility to students to download their documents for a small fee. It also enabled potential employers to get copies of these credentials from a reliable national database – National Academic Registry.

It progressed later to another Repository called 'Digilocker' that provided greater security and ease of access. All documents were then migrated to this new database.

Just a few weeks ago, the government has come out with another concept, soon to be implemented. It is called an 'Academic Bank of Credits (ABC)' - an academic service mechanism as a digital/virtual/online entity established and managed by Ministry of Education/University Grants Commission to facilitate students to become its academic account holders, paving the way for seamless student mobility, between or within degree-granting Higher Education Institutions (HEIs) through a formal system of credit recognition, credit accumulation, credit transfers and credit redemption to promote distributed and flexible teaching-learning.

The underlying assumption is 'Academic Flexibility' which is defined as the provision for innovative and interchangeable curricular structures to enable creative combinations of Courses/Programmes in Disciplines of study leading to Degree/Diploma/PG Diploma/Certificate of Study offering multiple entry and multiple exit facilities in tune with National Education Policy-2020, while removing the rigid curricular boundaries and creating new possibilities of life-long learning.

It will serve as depository or a mechanism to facilitate the students to choose their own learning path to attain a Degree/ Diploma/PG-diploma etc., working on the principle of multiple entry-multiple exit as well as anytime, anywhere, and any level learning.

Ideally, it is meant to promote student centricity with learner-friendly approaches in higher education across the country and promote more inter-disciplinary approach in higher education

- a) To enable students to select the best courses/combination of courses to suit their aptitude and knowledge thirst.
- b) To permit students to choose a pace for their studies along with the associated logistics and cost.
- c) To allow students to tailor their degrees or make specific modifications/specialisations rather than undergoing the rigid, regularly prescribed degree/courses of a single university/autonomous college.
- d) To enable multiple entry-multiple exit for students as envisaged under NEP-2020 to complete their degrees as per their time preferences, providing mobility across various disciplines and HEIs for Degree/ Diploma /PG Diploma/ Certificate programs/Course work for the Ph.D programme.
- e) To support procedurally the teaching-learning activities to happen in a distributed and blended manner through integration across campuses/universities/autonomous colleges with increased mobility.
- f) To facilitate lifelong learning amongst all, that is, formal and informal students both from fulltime and part time modes.
- g) To satisfy the students' quest for knowledge, freedom to choose and change their academic directions, connect different domains and help them acquire right foundations and building blocks of their dreams.

This is the acme of 'fracturisation' of higher education. To be honest, I did not expect it to move so very fast in our country. At DBU Global, our Centre for Online and Distance Education (CODE), we had started experimenting with this idea in a tentative way about two or three years ago. But, now, this looks the way forward - micro-credentials, accumulation of credits in a variety of fields according to one's liking, acquiring these credits at one's own pace and time, qualifying for a degree or a diploma or a Certificate in a recognized area of knowledge where one has accumulated sufficient credits in core competencies in that field, and covering the rest of the credit requirements for that degree from any and every field of study.

How this scenario plays out for Universities and their functioning is far from clear. But it seems to be the way forward, the increasing role of AI in industry, the emphasis on human capital by Corporations, the need for specialists in ever-narrower areas of expertise and skills, the

inevitability of life-long learning and re-skilling – all these point in one direction only: fracturisation and fragmentation of education as we know it.

Increasingly, the young people of today are going to pick and choose what they want to study and become proficient in - a few credits in music, some credits in German, a few more credits in African English Literature, some knowledge of Aristotelian Philosophy, some expertise in religious themes, some credits in nuclear Physics... and so on and so on... Of course, all this, after the basic High School Certificate... They could acquire these credits from various universities around the world and from the courses available on the net... Once they have collected a sufficient number of credits to qualify for a graduate degree, they apply to a university to examine it and award them a degree... It is difficult to imagine where this will take us... What impact will it have on the ideals of long-cherished 'liberal' education, and more especially on the ideal of 'integral' education?

Good or bad? Time will tell!

Will universities become casualties of this disruption, or are they in fact perfectly placed to rise to the challenge? Whatever the arguments for and against, technology used as a force for good can be transformative with far-reaching implications for the way institutions are run and for the graduates they produce, the key to 'success' is flexibility. Universities that are able to respond quickly to this fourth industrial revolution will be the most competitive and the most popular among students keen to acquire the kind of digital skills that governments and businesses demand now and in the years to come.

Here, at Don Bosco University, we are laying, slowly but surely, brick by brick, the foundations for becoming a University of substance in this brave new world that is emerging.

Fr Stephen Mavelly  
Vice Chancellor, Don Bosco University  
07 October 2021

# About Assam Don Bosco University

## Introduction

The Assam Don Bosco University is the first University in the English speaking world of the worldwide family of the renowned Don Bosco Society present across 134 countries in service of the educational and developmental needs of 15 million young people. The University was set up by the Assam Don Bosco University Act 2009 under the State Private Universities Act of the Government of Assam, and was duly notified vide Government Notification No. LGL 149/2008/30 dated 12th February 2009. The University is authorized to award and grant degrees under the University Grants Commission Act of 1956, India, accredited by National Assessment and Accreditation Council, India and is approved by the Distance Education Council and the All India Council for Technical Education. The University is also a member of the Commonwealth Association of Universities (ACU) based at London since 18th October 2011, and of the International Association of Universities (IAU) based at Paris since 29th November 2011, and of the Association of Don Bosco Institutions of Higher Education (IUS) based at Rome since 2008.

The University has been set up as a response to the felt educational needs of the people of North-East India and offers relevant study programmes with a focus on research and social commitment through the Schools of Technology, Humanities and Social Sciences, Life Sciences, Applied Sciences, Commerce and Management. The University Centre for Online and Distance Education (CODE), called DBU Global, offers a variety of study programmes in Management and Information Technology. The University has also entered into a number of collaborative agreements with universities from around the world for student and staff exchange programmes and for joint research studies. Don Bosco University has evolved for itself a clear-cut vision that defines its rationale, objectives and approach to excel in teaching, formation of individuals by offering support, making students ready for quality placements at the three vibrant campuses at Tapesia, Azara and Kharguli. A sustained alumni association is established to carry forward lifelong learning of the students by partnership of the students with their alma mater.

## Vision and Mission of the University

Our vision, mission and values statement, our graduate attributes, and our achievements encapsulate what we stand for as a University and what we offer to students, staff and the wider community. We are committed to providing an education that cultivates a spirit of creativity and initiative and equips tomorrow's leaders and innovators; engaging community; maintaining diversity and inclusion among our students and staff; and providing equitable access to education.

## Vision .....

"To mould intellectually competent, morally upright, socially committed and spiritually inspired persons at the service of India and the world of today and tomorrow, by imparting holistic and personalized education."

## **Mission .....**

This university will be a centre for culture, knowledge, research, intellectual ferment; for critical thinking and analysis of whatever shapes and impacts human life; that influences thinking, planning and policy making on vital aspects of social life: religion, culture, society, politics, governance, education, health care; and engages in dialogues across the board - THAT is our role.

This university will strive to make professional and higher education accessible to the weaker sections of society - THAT is our solemn commitment.

This university will spare no effort to ensure that our graduates become dependable and true human leaders with a strong sense of commitment to the poor, the disadvantaged and the needy - THAT is the goal embedded in our vision.

This university will strive for excellence in every process and undertaking; and, among many other things, it will specialize in research with social relevance - THAT is our approach.

Guided by this vision and leveraging its century-old expertise in education in India and abroad, Don Bosco University is envisaged to be a Centre of excellence in study and research focusing upon the following:

- Providing easier access to higher education for the under-privileged
- Harmonizing technical excellence with human and religious values
- Employment-oriented courses in emerging areas of contemporary technology and service
- 'Teacher Education' as a privileged area of interest to accelerate the pace, reach and quality of education
- Impetus to research initiatives with practical and social relevance
- Providing a forum for debate and research on key human issues like religion & culture, peace & justice
- Contributing to the socio-economic development of North-East India
- Boosting international linkages and collaboration in university education

## **Schools**

The Assam Don Bosco University started with four academic programmes of Engineering and Technology in 2008 and currently the University offers 19 graduate programmes, 22 postgraduate programmes and doctoral studies in 24 areas belonging to, the School of Technology, the School of Humanities and Social Sciences, the School of Commerce and Management, the School of Fundamental and Applied Sciences and the School of Life Sciences. To encompass the larger scope and vision of the University towards its commitment of building and operating a healthy and self-renewing, vibrant campus community with clear cut goals and priorities in the areas of education, clean energy, nature and eco systems, cutting-edge research and teaching in the latest technologies to tackle real issues of the region.

## Highlights of 2020-2021: A Diary of Events

### The University won eNabling North East Award 2019-20, 20 June 2020

The eNabling North East Award was presented to the University on the 7<sup>th</sup> edition of the eNorth East Award 2019-20 by North East Development Foundation, on 20 June 2020. As the culmination of months of nomination process, three days of virtual jury (due to Covid-19) was held for selecting the best sustainable development practices of North East India. 23 sustainable development projects (11 winners and 12 special mentions) of North East India as winners and special mentions (runners up) in as many as 10 categories including - Access to Public Schemes, citizen services and e-governance services; Agriculture & Rural Development; Biodiversity and Sustainable Development; Livelihood and Income Generation; Education and Learning; and Health and Sanitation. Mr. K. Moses Chalai, IAS, Secretary of the North Eastern Council (NEC) graced the occasion as a Chief Guest along with other dignitaries.



The winning project was the invention and installation of solar water purifiers in the neighbouring villages of the University, titled 'Bixudha Jol Asoni' - a safe drinking water project. The same project was also featured by BBC Story works Production in 2019.

### International Yoga Day 2020, 21 June 2020

The International Yoga Day 2020 was celebrated in the university through a Yoga session that was conducted on the lawns of Academic Block I on the following Monday, 22 June 2020. In spite of the ongoing pandemic, there were some faculty, staff and research scholars on the campus who could take part in the session. Care was taken to maintain social distance and each participant wore a mask.



As per the instructions from the Ministry of AYUSH, Government of India, the speech of the Honorable Prime Minister Shri Narendra Modi was also uploaded on the University's official youtube channel, Facebook page, and Twitter.

### University's UBA Team won National Level Photostory Competition, 15 August 2020

The University's Unnat Bharat Abhiyan Team was one of the five winners in the competition 'Unnati ki kahani Chitro ki Jubani' - a photostory competition that showcased the best photographs taken by UBA Volunteers in the villages adopted. The competition was organized by Unnat Bharat Abhiyan in commemoration of the India's Independence Day celebration 2020.

*List of Participating Institute who won for  
Ummati Ki Kahani Chitro Ki Jubani*

ADSE Code	Institute Name	State	District	IC Name
U-0049	Assam Don Bosco University	Assam	Kamrup Metropolitan District	IIT Guwahati
C-32837	Institute of Information Technology & Management	Delhi	Janakpuri, New Delhi	IIT Delhi
C-25045	M.A.M. College of Engineering and Technology	Tamil Nadu	Tiruchirappalli	TNAU CBE
C-41151	St. Mary's College (Autonomous), Thoothukudi	Tamil Nadu	Thoothukudi	GRI TN
C-21248	Vasanta College for Women, Raighat	Uttar Pradesh	Varanasi	IIT BHU

There were 827 participating institutions across India and each winning team received Rs 5000 cash award. These photo entries will be displayed in the Photo Album Book which will be presented to MHRD.

### **Don Bosco University – the only Private University in NE featuring in ARIIA 2020, 18 August 2020**



Atal Ranking of Institutions on Innovation Achievements (ARIIA), Ministry of Education, Govt. of India Report was released on 18th August 2020 by the Vice President of India, Shri Venkaiah Naidu. Out of 674 Universities ranked in ARIIA, Assam Don Bosco University was positioned in the ranking band of 26-50 among the private universities in India. The University was the only one from North East India featured in the ARIIA among private Universities – the other institutions featured in ARIIA were IIT- Guwahati, NIT Silchar and NIT Arunachal Pradesh which were established by Central Government.

Atal Ranking of Institutions on Innovation Achievements (ARIIA) ranks education institutions and universities primarily on innovation related indicators.

### **Webinar: Nurture the Nature for the Future, 26 September 2020**

Assam Don Bosco University organized a webinar on 26<sup>th</sup> September 2020 on Google Meet with a topic 'Nurture the Nature for the Future'. The webinar was organized to motivate the youth to be a part of the global campaign towards achieving environmental sustainability and address the need for "Conversion in caring for Creation and Ecological Spirituality". Bremley W.B. Lyngdoh, the resource person shared the vast experience that he has in nurturing the nature and explained the need for urgent action in saving the planet. He is the Founder and CEO of Worldview Impact, the Co-Founder of the Global Youth Action Network and Co-Chairs the United Nations CSD Education Caucus.



As a member of the Don Bosco Green Alliance, the University is committed towards accompanying the young towards a sustainable future and fostering the participation of the young in global campaigns on behalf of the sustainability of environmental and ecological causes for the care of creation and human life.

### **Ninth Convocation of Assam Don Bosco University, 5 October 2020**

The Ninth Convocation of the University was held on 5<sup>th</sup> October, 2020. The entire programme was live streamed on Youtube and Facebook to a global audience of the graduating students, their friends and families of the Don Bosco Society fraternity across 132 countries serving 9 million students. The first time virtual mode of the ceremony was resonant of the experiences shared, values imbibed, knowledge gained and bonds of friendship formed for a lifetime on campus creating a truly momentous event for the graduating students.



In his 'Message of Hope' to the graduates, the past pupil of Don Bosco School, the Chief Minister of Assam, Mr. Sarbananda Sonowal said, "It is a great day for all the graduates to cherish their success" and conveyed his wishes for a "bright future". In his appreciation of the quality education, teaching and administration rendered by Assam Don Bosco University, he mentioned the legacy of the University will inspire other Universities to maintain discipline, punctuality and dedication.

The Chancellor of the University, Fr. Januarius Sangma said, "Through the investment of efforts and application of knowledge, you have become someone in life and in society. Strive to be a man or a woman of high intelligence coupled with noble values and character and you will certainly contribute much to the world".

Delivering the welcome address, the Vice Chancellor Fr (Dr) Stephen Mavely congratulated the students for their success by overcoming the hardships of this pandemic situation. Encouraging the students to celebrate the insights gained from the challenges of the current situation to discover their inner depth, he added, "As you traverse that road ahead,

uniquely your own, be passionate about what you do, focus on reaching your destination, treat everyone and everything with respect and compassion, undergird your decisions with the values you have learnt here".

The degrees were conferred to 908 students of which 468 students received the bachelor's degrees in engineering and technology, basic sciences, commerce, management and humanities; 440 students received master's degrees in various branches of engineering, science, commerce

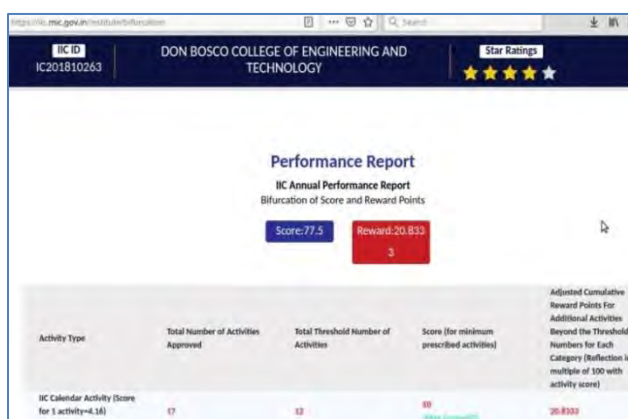


and management. Doctoral Degrees were conferred to 15 scholars. In the DBU Global Online and Distance Education courses, 173 students received bachelor's degree, master's degree and diploma under various programmes. Gold Medals under various categories were awarded to 28 outstanding graduates with the highest Cumulative Grade Point Average in each program. The Chancellor's medal for outstanding graduate in PG courses and the Vice Chancellor's medal for outstanding graduate in UG courses for notable and exceptional contribution to campus life were also awarded on the occasion.

Dr. Bikramjit Goswami, a PhD Graduate took the Graduate's Pledge on behalf of all graduating students of being intellectually competent, morally upright, socially committed, spiritually inspired and civically responsible in their quest for professionalism and service to humanity as truly dependable nation builders and global citizens. The occasion ended with the closure of Convocation 2020 announced by the Chancellor of the University followed by the National Anthem.

### **Institution's Innovation Council Rating 2020, 15 October 2020**

The Institution's Innovation Council (IIC), Ministry of Education announced the new ratings of various Institutions in India on 15th October 2020 where the University's School of Technology (also known as Don Bosco College of Engineering and Technology) was given a rating of 3.5 stars out of 5.



The rating of institutions is based on the participation and organization of events related to innovations and entrepreneurship. These events are clubbed under three categories – Institutions Innovation Council Driven Activities, MHRD's Innovation Cell (MIC)'s – AICTE Driven Activities and Self-Driven Activities. Self-Driven Activities are those activities related to innovation and entrepreneurship conducted at the Institution level.

A total of 77.5 out of 100 was scored by the Institution and also was rewarded with an additional 20.8333 points for conducting additional activities under the category of IIC Driven Activities.

### **Workshop on: Zoom and LMSs – Moodle and Panopto through International Virtual Academic Collaboration (IVAC), 5 November 2020**

The University in collaboration with the German Academic Exchange Service (DAAD) and Frankfurt University of Applied Sciences started a project titled 'International Virtual Academic Collaboration (IVAC) as a response to the need of the hour. This project aims at providing platforms for various Higher Education Institutions around the world for - virtual academic collaborations, intercultural exchanges without having to move to another country physically, applying digital skills acquired through virtual cooperation, contributing to the interoperable student data ecosystems etc.

Under the project an online Workshop on Zoom and LMSs – Moodle and Panopto was organised on 5th of November, 2020 with an aim to provide information about learning management systems and to show some useful tools/functions that can be used for online teaching. The resource person, Ms Esther Zeschky, Faculty Advisor for Digital Media in Teaching at the

Frankfurt University, Faculty of Health and Social Work. Ms Esther Zeschky effectively provided appropriate information about various tools/programmes for online teaching such as Moodle, Zoom and Panopto. The workshop ended with a Q&A session. About 20 participants registered for the programme.

### **Tribute to Shri Tarun Gogoi, former Chief Minister of Assam, 24 November 2020**

The University held a solemn gathering at 10:30 a.m. on 24<sup>th</sup> November 2020 in remembrance



and celebration of the life of Shri Tarun Gogoi, former Chief Minister of Assam, who passed away on 23<sup>rd</sup> November evening due to post-Covid complications. He was 86 years old. The Vice Chancellor, Fr (Dr) Stephen Mavely and the Directors paid tributes to Shri Tarun Gogoi in this meeting held online through Google Meet, hosted from the Vice Chancellor's Office. The short gathering began with a delicate and melodious prayer song - Ave Maria, followed by tributes from the Vice Chancellor, Pro-Vice Chancellor and the Directors. Recollecting the multiple

interactions he had with Shri Tarun Gogoi regarding the establishment of Don Bosco University in Assam, Fr. Stephen Mavely acknowledged that Shri Tarun Gogoi played a key role in the establishment of Don Bosco University. The programme ended with another prayer song 'Abide with me', to comfort all on the demise of Shri Tarun Gogoi, who contributed to the betterment of the society.

### **ICERME 2021: International Conference on SDG-7, 12-13 February 2021**

Assam Don Bosco University (ADBU) of India, being appointed as the leader of the cluster formed by the International Association of Universities for SDG-7, organized an Online **International Conference on Emerging Renewable and Modern Energy (ICERME-2021)** on the theme "*Access to Affordable, Reliable, and Modern energy services to all*" under its Department of Electrical and Electronics Engineering (EEE) of ADBU, in collaboration with Sikkim Manipal Institute of Technology, Sikkim Manipal University, India during 12-13 February 2021.



A total of 18 research papers on sustainable development and clean energy were presented on this global agenda. ICRME-2021 brought together researchers, educators, students and

policymakers from various nations including Bhutan, Algeria, Thailand, UK and India, across academia, government, industry and non-governmental organizations to discuss, share and promote current works and recent accomplishments in various aspects of green energy sector.

### **Excellence in Institutional Social Responsibility Award 2021 – FICCI, 25 February 2021**

Federation of Indian Chambers of Commerce and Industry (FICCI) awarded the University, the 'Excellence in Institutional Social Responsibility Award' at the 7<sup>th</sup> FICCI Higher Education Excellence Award ceremony held on 25<sup>th</sup> February 2021.

The University is committed to various community engagement programmes and has been actively conducting participative community development programmes. A detailed report of University's Community engagement programmes, is available at



[https://www.dbuniversity.ac.in/social\\_commitment.php](https://www.dbuniversity.ac.in/social_commitment.php)

FICCI Higher Education Excellence Awards were instituted in 2014 to recognize and felicitate the achievements and excellent work done by the institutions and individuals, who have set benchmarks of excellence and are doing inspirational and exemplary work in the higher education domain.

### **Assam Don Bosco University featured in IAU Publication, 8 March 2021**



The International Association of Universities (IAU) on 8<sup>th</sup> March launched a new publication in commemoration of International Women's Day 2021 in which the activities and actions of various Universities around the world under the 'United Nations SDG 5 – Gender Equality' were featured including actions taken by Don Bosco University. The publication is available at: [https://www.iau-aiu.net/IMG/pdf/iau\\_sdg5\\_universitiesforequality2021\\_hq.pdf](https://www.iau-aiu.net/IMG/pdf/iau_sdg5_universitiesforequality2021_hq.pdf)

### **Folklore 2021 – A Symphony of the World, 17 March 2021**

To commemorate the International Mother Language Day, the American International University-Bangladesh (AIUB), one of Assam Don Bosco University's collaborative partner

organized **Folklore 2021 – A Symphony of the World, a virtual international celebration of folk musical performances from around the globe!** On the Zoom video communication medium, in which the University participated. The Participation Certificate is given above.



### Seminar on National Education Policy, 24 March 2021

A Seminar cum Webinar on “Implementation of NEP-2020: Focus on Higher/Technical Education” was organized by the School of Technology on 24 March 2021 at the Conference Hall of Azara Campus. Abiding to the All India Council for Technical Education (AICTE) mandate, the programme aimed at creating awareness about the New Education Policy (NEP) amongst its students and staff members as well as facilitating a clear insight of the various features and recommendations for the entire education system in India, especially in the area of higher education. Welcoming the participants, Prof. Manoranjan Kalita, Director, School of Technology outlined the vision of India’s landmark document, NEP-2020, and highlighted that this visionary policy marks a drastic structural change in the Indian education system for the betterment of the coming generation. This was followed by an overview of the programme by Dr. Nabamita Das, Assistant Professor, Department of Humanities and Social Sciences, who was the Seminar coordinator.



The resource person, Prof. K. C. Kapoor, HoD of the Department of Education, gave a detailed explanation about the different dimensions of the milestone document, NEP-2020 emphasising the need to create and sustain quality standards in the higher education institutions. Highlighting the revolutionary changes at all levels of education, Prof. Kapoor stressed on the Outcome-based education and teaching-learning process. He further discussed about the four verticals exclusively under Higher Education Commission of India (HECI) – the single regulatory

authority for regulating the entire higher education system – for regulation (NHERC-National Higher Education Regulatory Council), accreditation (NAC-National Accreditation Council), funding (HEGC-Higher Education Grants Council) & academic standard setting (GEC-General Education Council). The seminar ended with vibrant discussions in the open forum and vote of thanks by Mr. P. Joseph, Head, Department of Humanities and Social Sciences. The event was also covered on Google Meet platform along with live streaming on YouTube for the benefit of larger audience. Total 306 participants – including students, faculty and other staff members – attended the event either in online or offline mode (62 participants – Google Meet, 192 participants – YouTube & 52 participants on campus).

### **Fr (Dr) Stephen Mavelly awarded Top Digital Enabler Award, 25 March 2021**

Fr. (Dr) Stephen Mavelly, the Vice Chancellor has been awarded 'New Code of Education Awards 2021' under 'Top Digital Enablers in Executive/Distance Education Category' by Wheebox. This award was adjudicated by Prof. Anil Sahasrabudhe, Chairman, AICTE; Dr. (Mrs) Pankaj Mittal, Secretary General, Association of Indian Universities; and, Dr. Prem Singh, Member, Higher Education, NITI Aayog.

The Award recognizes the determination and resilience of the leadership at the University which resulted in a quick and smooth transition from on-campus to a fully online mode of teaching-learning at Assam Don Bosco University since March 2020. Responding to the need of the hour, the University designed online examination platform and have successfully conducted multiple proctored online examinations which benefitted the students greatly as they graduated on time in spite of the pandemic. Wheebox is a Global Online Talent Assessment Company empowering businesses, academic institutions, sector skills councils and government with deep talent insights while enabling better hiring and development decisions.



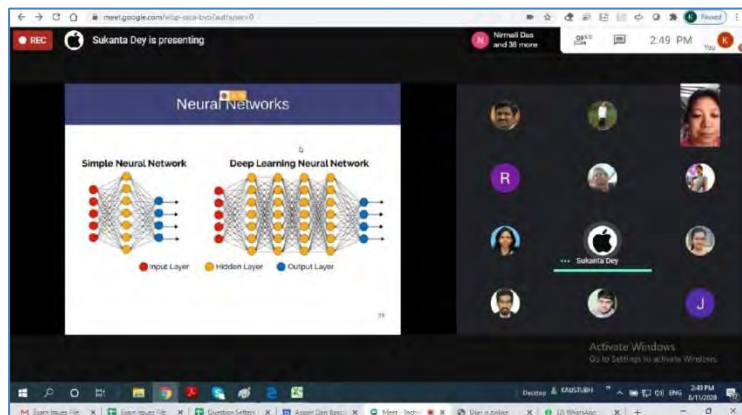
# School of Technology

## Webinar on Cyber-safety, 18-19 May 2020



The Institution Innovation Council (IIC), Assam Don Bosco University in association with Department of Computer Applications organized a Webinar series on 18 May 2020 and 19 May 2020 on the noteworthy subjects of “Cyber Security Challenge” and “Cyber Safety”. The speakers were Dr. Varun Kapoor (IPS), Additional Director General of Police, Madhya Pradesh and Mr. Arjun Chetry, Assistant Director (IT), North Eastern Police Academy, Meghalaya on the aspects and dimensions of cyber security such as (i) Use of cyber space, (ii) Components of cyber-crime. (iii) Digital footprint, (iv) Phishing, (v) Smishing, and (vi) Social media usage and cognizance. The session concluded with an engaging question and answer session. The session was attended by approximately 200 participants from across the globe which included students, professors, cyber security professionals and police officers. The following day, Mr. Arjun Chetry, Assistant Director (IT), North Eastern Police Academy, Meghalaya made a series of presentations on various facets of Cyber Space: (i) Cyber space facts of India, (ii) Smart grasping of smart devices, (iii) Equation of data with power, (iv) Cyber-attacks, (v) Vulnerabilities in android applications, (vi) Virtual Private Networks (VPN), (vii) Usage of social media in smart devices, and (viii) Trackers.

## One Week Workshop on Signal Processing and Machine Learning, 10-14 August 2020



One week workshop on Signal Processing and Machine Learning was held during 10-14 August 2020 was conducted by the Department of Electronics and Communication Engineering. The workshop was coordinated by Dr. Kaustubh Bhattacharyya along with Co-coordinator Mr. Mriganka Gogoi. The workshop had 10 technical sessions conducted by various resource

persons with hands on practices. Certificates were distributed to all the participants electronically. The workshop was attended by 106 students from various Engineering Institutions in India.

### **International Webinar on Demo JAMS Modelling System, 25 August 2020**

An international webinar titled 'Introduction and Demo JAMS Modelling System: an open source

software for developing and applying eco-hydrological simulation models' was coordinated by Mrs Pori Das, Assistant Professor from the Department of Civil Engineering, Assam Don Bosco University and hosted by Mr Miga M. Julian, Assistant Professor, Hydrography Research Group, Institut Teknologi Bandung (ITB), Indonesia in collaboration with the Department of Geographic Information Science, Friedrich-Schiller-Universität Jena, Germany on Aug 25, 2020. The



webinar was organized as part of the 70th-anniversary celebration of geodetic and geomatics higher education in Indonesia. The resource person for the webinar was Dr. Sven Kralisch, Senior Researcher of the Department of Geographic Information Science, Friedrich-Schiller-Universität Jena, Germany and German Aerospace Center (DLR), Institute of Data Science Jena, Germany. Dr. Sven Kralisch provided an elaborate introduction of the JAMS Modelling System and an interactive demonstration of its basic functionalities to the participants. The webinar witnessed an active participation from the faculty members and students of the Department of Civil Engineering, Assam Don Bosco University.

### **International Webinar on Coupled Surface and Groundwater Modeling in Arid Regions, 8 September 2020**

A One-day International webinar entitled 'Coupled Surface and Groundwater Modeling in Arid Regions' was organized by Mrs Pori Das, Assistant Professor from the Department of Civil Engineering, Assam Don Bosco University on



September 8, 2020. The resource person for the webinar was Dr. Andrew Watson, Postdoctoral fellow, Department of Earth Sciences, Stellenbosch University, South Africa. Dr Watson underscored the fact that climate change is likely to impact both the surface as well as the subsurface water resources in the already water stressed areas such as South Africa in the near as well as the far future. The talk clearly outlined the importance of proper assessment of the water availability

by application of coupled Surface and Groundwater models to understand the dynamics of river flow regime under both present and predicted climate change scenarios in water scarce, arid areas. Participants were mainly the faculty members and students of the Department of Civil Engineering, Assam Don Bosco University.

### **International Webinar on Climate Change, 23 October 2020**

A One-day International webinar entitled 'Climate Change impacts on the Hindukush Himalayan region' was organized by Mrs Pori Das, Assistant Professor from the Department of Civil Engineering, Assam Don Bosco University on 23 October 2020. The resource person for the webinar was Dr. Santosh Nepal, Water and Climate Specialist at International Centre for Integrated Mountain Development (ICIMOD) and also heads the Climate and Hydrology group within the Water and Air Theme. Dr Nepal elaborated on the vulnerability of the Hindukush Himalayan region to global climate change impacts across different sectors. The talk highlighted the



significance of elaborate assessment of the impacts of climate change on the Himalayan water resources and the need to design better adaptation strategies towards integrated water resources management.

### **International Webinar on Meteorological Perspectives and Regional Wind Energy, 4 November 2020**

A One-day International webinar entitled 'Meteorological Perspectives on Regional Wind Energy Resource Estimation' was organized by Mrs Pori Das, Assistant Professor from the Department of Civil Engineering, Assam Don Bosco University on 4 November 2020. The resource person for the webinar was Mr. Jonathan Minz, PhD researcher at the Biospheric Theory and Modelling group at the Max Planck Institute of Biogeochemistry, Jena, Germany and the Institute of Physics and Meteorology at the University of Hohenheim. Mr. Minz demonstrated the importance of understanding and modelling the feedback between the atmosphere and large wind turbine deployments. His talk illustrated the possibility of regional weather prediction models (WRF) to determine and identify variables that could be useful for characterizing the feedback between the atmosphere and wind turbines leading to better estimates of regional wind energy potentials.

### **Webinar on Future Engineering with Data Science, 10 November 2020**



Dr. Ferdous Ahmed  
Barbhuiya

Dr. Y. Jayanta Singh

Mr. Vicky Ray

Ms. Simran Gibson

The Department of Electronics and Communication Engineering in collaboration with National Institute of Electronics and Information Technology, (Under Ministry of Electronics & IT (MeitY, Govt. of India)), Guwahati - 781008, ASSAM organized a webinar on Future Engineering with Data Science, on 10th November 2020. The webinar introduced participants to the Data science, Machine Learning in Data Science, Different Application area of Data Science and Future Engineering Scope in Data Science. The goal is to present profound teaching techniques and advice for transferring the knowledge from academia to Industry. The webinar included four invited talks from academia as well as Industry. 'Role of Machine Learning in Data Science' by Dr. Ferdous Ahmed Barbhuiya, Associate Professor (CSE) and Associate Dean (R&D), IIIT, Guwahati; 'Cyber Security and Data Science' by Mr. Vicky Ray, Principal Researcher, Asia Pacific, UNIT 42, Palo Alto Networks, Singapore; 'The Power of Data Science in Fighting Cyber Threats' by Ms. Simran Gibson, Northumbria University, Newcastle, UK; 'Future Engineering with Data Science' by Dr. Y. Jayanta Singh, Director (NIELIT-Guwahati). There were a total of 180 participants who registered for this webinar. The participants included UG/PG students, research scholars and faculty members from various institute/Universities across India.

### **Webinar: Nanotechnology: Scope & Challenges, 7 December 2020**

Considering the future possibilities and associated issues in the field of Nanotechnology and Electronics, Dept. of Electronics & Communication Engineering, SoT, ADBU organized a webinar on "Nanotechnology: Scope & Challenges" on 7th December, 2020 at the Azara Campus. As many



39 participants registered for the webinar. Two talks were delivered by eminent speakers. Dr. Devasish Chowdhury, assoc. Prof., IASST gave a talk on “Nanotechnology for Sustainable Future” and Dr. Indrani Dakua, Assoc. Prof., ADBU delivered a talk on “Nanotechnology: Scope and Challenges”.

### **Webinar: Embedded Artificial Intelligence for Internet of Things, 13 March 2021**

The Dept. of Electronics and Communication Engineering, ADBU organized a webinar on “Embedded Artificial Intelligence for Internet of Things” in collaboration with DigiToad Technologies, Bengaluru and Cartesiam, France on 13th March, 2021. Mr. Rohit Prajapati, CTO at DigiToad Technologies was the resource person for the webinar.



The webinar aimed to educate the participants about the latest technologies to facilitate designing cost effective AI and Machine Learning powered applications on ARM Cortex microcontrollers targeted toward the Internet of Things. There were 77 participants from premier institutes of India like IIT Guwahati, IIT Hyderabad, IIT Madras, IIIT Guwahati Anna University, Assam Engineering College, Jorhat Engineering College, Assam University, Gauhati University, Dibrugarh University, Centre of Plasma Physics Institute for Plasma Research, NIELIT, NERIST, Tezpur University, Assam Don Bosco University etc. There is also one participant from Partido State University, Philippines.

## School of Life Sciences

### Talk on Origin, evolution and molecular characterization of SARS-CoV-2, 29 April 2020

A Talk was delivered by Dr. Biswajyoti Borkakoty (MD), Scientist-E & Principal cum Nodal officer, Regional Viral Research & Diagnostic Laboratory, ICMR-Regional Medical Research Centre for NE Region, Dibrugarh on Origin, evolution and molecular characterization of SARS-CoV-2: The world and the Indian scenario.

The participants were faculty and students of the school of life sciences. The audience got enlightened on the background of the current Corona pandemic that has shaken the entire world and our own country and is experiencing the nationwide lockdown.

### World Environment Day, 5 June 2020

On the occasion of World Environment Day 5 June 2020, the Department of Zoology initiated a Plantation Drive in the Tapesia Campus of the University in the presence of the Vice-Chancellor, Fr. Stephen Mavelly; Director, School of Life Sciences, Professor J. N. Vishwakarma; Administrative Officer, Mr. Wilson Matthews, and a few faculty and staff.



Fourteen fruit tree saplings of fruits which included Pomegranate, Guava, Plum, Star fruit were planted in the area of the Campus envisioned "Village Green". The aim of the Plantation Drive is to make available Plants that will serve as food reserves for the Campus fauna.

### Webinar organized on North-East Regional Dialogue on Green Campus, 5 June 2020

The Centre for Science and Environment (CSE), New Delhi launched its Green Campus Initiative in 2017. CSE had identified Assam Don Bosco University as one of the Institutions with good practices under its Green Campus Initiative. It was included in CSE's publication - A Green Campus Compendium: Incubation, Experimentation and Demonstration of a Green Future (Available at <https://www.cseindia.org/a-green-campus-compendium-9902>), along with other campuses having distinct characteristics. The Compendium was launched at CSE's 5th National Knowledge Conclave organised at the Anil Agarwal Environment Training Institute (AAETI) on 31 January 2020. In this regard, with Assam Don Bosco University as its flag-bearer for the Northeast region of the country, CSE and Assam Don Bosco University jointly organised a Webinar on the theme 'North-East Regional Dialogue on Green Campus' for faculty, students and those involved in education campuses. The hour-long webinar was held on 5 June 2020.

The aim of the Webinar was to highlight the potential of Campuses to promote environmentally responsible practices and behaviour, and encourage low-carbon emitting, energy efficient, water prudent, less wasteful, greener practices in the campuses. CSE introduced its green audit and rating system that recognizes Campus' efforts better than the check-box type

audit instruments of the Government which would, in a way, strengthen our understanding on green audits and will take us through the efforts of other campuses in this regard in a bid to enable mutual learning.

Fr. Joseph Nellanat, Pro Vice-Chancellor, Assam Don Bosco University, inaugurated the programme and welcomed the participants. This was followed by a presentation “SDGs and How Green is your Campus” by Mr. Rajneesh Sareen, Programme Director, Sustainable Building and Habitat Programme, CSE. A presentation on “Green Initiatives of Assam Don Bosco University” was then delivered by Dr. Bikramjit Goswami, Assistant Professor, Department of Electronics and Electrical Engineering (EEE). There were questions from the participants to the Panelists, who included members from the CSE and DBU, on several aspects related to the ways and means to become a Green Campus.

A total of 400 participants representing the students and academics of North-East India as well as the rest of the country registered for and participated in the Webinar.

### **Lecture Series “Science behind Nature”: “Scorpions: The Incredible Arachnids”, 8-9 August 2020**

The Department of Zoology in collaboration with the EcoClub, Assam Don Bosco University hosted a webinar on “Scorpions: The Incredible Arachnids”. The event was conducted in two days, 8 and 9 August 2020. The speaker was the (also) “incredible” Pratyush P. Mohapatra, Ph.D., of the Zoological Survey of India. Dr. Mohapatra introduced the participants to the *wonderful world of Scorpions* and the plethora of research gaps where students with a quest for greater knowledge on scorpions, can explore.



The sessions received a good response from participants belonging to various parts of the country as well as overseas. The total number of participants was close to 300. The Department is grateful to Dr. Mohapatra for sharing his valuable time to engage and interact with the academe community.

### **Lecture Series “Science behind Nature”: Dynamics of Chytridiomycosis - A Panzootic Disease Causing Amphibian Declines, 16 August 2020**

As *Homo sapiens sapiens* braves the Covid-19 Pandemic Era, another group of organisms - the amphibians - has also been fighting for its survival amidst a fungal panzootic disease, Chytridiomycosis (amphibian chytrid fungal disease). To shed light on this deadly disease which is responsible for a global decline of amphibians worldwide, the Department of Zoology in collaboration with the EcoClub, Assam Don Bosco University, hosted Dr. Karthikeyan Vasudevan, Scientist-F,



LaCONES, CCMB, Hyderabad <https://www.ccmb.res.in/People/Research-Group/Karthikeyan-Vasudevan> for an interaction with ~150 wildlife enthusiasts from across the country. The Webinar entitled "Dynamics of Chytridiomycosis - A Panzootic Disease Causing Amphibian Declines" was held on 16 August 2020.

Dr. Vasudevan shared his concern regarding this deadly invasive fungus among the amphibians which has led to the extinction of ~90 species worldwide (Scheele et al., 2019). He cited the ongoing research work in his Laboratory, which is challenging yet exciting. Dr. Vasudevan further pointed out that this is a fertile area, a spawning ground rather, for research! The participants showed a keen interest in the event, particularly in the Q&A session during which Dr. Vasudevan took to clarify their doubts.

The Department is grateful to Dr. Karthikeyan Vasudevan for his time and willingness to serve as Speaker for the Lecture Series *Science behind Nature #3*.

### Lecture Series "Science behind Nature": Regeneration in Anuran Tadpoles, 23 August 2020

The fourth lecture series on Regeneration in Anuran Tadpoles was conducted on 23<sup>rd</sup> August, 2020. Professor Pravati Kumari Mahapatra, HOD, Department of Zoology, Utkal University was the resource person. Dr. Mahapatra inspired the 65 participants with a lucid description of her research on anuran regeneration. The participants represented educational institutions across India including Morigaon College, B.N.College, Tihu college, Assam University, Arya Vidyapeeth College, Pandu College, Gauhati University, Tezpur University, Manipur University, Tripura Central University, College of Fisheries, Assam



Agricultural University, St. Joseph's College (Autonomous), Sri Ramachandra Institute of Higher Education & Research, North-Eastern Hill University, Dakshin Kamrup College, Thambal Marik College, Ahmednagar College and Visva-bharati University.

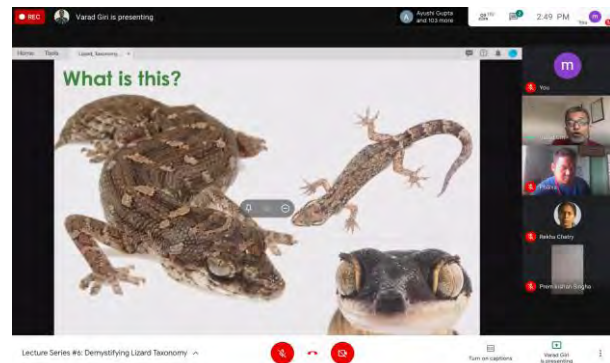
### Lecture Series "Science behind Nature": Fish Genomics, 29 August 2020

The 5<sup>th</sup> Lecture Series on Fish Genomics was conducted on 29<sup>th</sup> August, 2020. The Lecture was delivered by Dr. Ashoktaru Barat, FAEB, Principal Scientist, ICAR-CIFA, Fish Genetics & Biotechnology Division. In his lecture, Dr. Barat introduced the students to the field of Genomics and further explained its application in Fish studies. He also encouraged students to explore this field which is perceived to take huge strides in the years to follow. The webinar was attended by 122 participants from several educational institutes, Assam Downtown University, Cotton University, ICAR-CIFRI Guwahati, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, West Goalpara College, Gauhati University, University of Science and Technology, Bodoland University, Dibrugarh University, Happy Convent School, Birla Institute of Technology, Zoological Survey of India, Kolkata, Handique Girls College, and Presidency College.



## Lecture Series “Science behind Nature”: Demystifying Lizard Taxonomy, 5 September 2020

On 5 September 2020, the Department of Zoology in collaboration with EcoClub, Assam Don Bosco University, organized a Webinar on “Demystifying Lizard Taxonomy” as part of the Lecture Series #6 Science behind Nature. Varad Giri, Ph.D. was the guest speaker. He is the Founder Director of Nidus and Director of Foundation for Biodiversity Conservation. In his lecture, Dr. Giri spoke about the importance of taxonomy and the methods for studying taxonomy. He stressed the importance of having a curious mind as one delves deeper into the field. The session had a few ‘myth-busting moments’ which clarified myths related to Lizards.



Dr. Giri concluded his lecture with a word of encouragement and motivation to the participants, “Taxonomy is not difficult. It is the only branch of science which gives you immortality”. With about 30-40% of fauna remaining unknown, this indeed sparked interest in the participants to explore the unexplored and step into the fascinating *Immortal World of Taxonomy!* The session was attended by about 120 participants from India, Bhutan, Nepal, and Kuwait. The Department is grateful to Dr. Varad Giri for his time and willingness to serve as Speaker for the Lecture Series *Science behind Nature #6*.

## Lecture Series “Science behind Nature”: Can a Piece of Eri Silk Conserve Biodiversity, Empower Indigenous Communities and Bring Economic Freedom? , 12 September 2020

As fashionistas and retailers are realising the importance of shifting from fast fashion to the “sustainable” Slow Fashion, the 7<sup>th</sup> Lecture Series of the Department of Zoology was conducted on 12 September 2020 on the theme “Can a Piece of Eri Silk Conserve Biodiversity, Empower Indigenous Communities and Bring Economic Freedom?” The Speaker was Mr. Rituraj Dewan, Co-founder, 7 weaves. Mr. Dewan emphasized on the importance of realising the damage that fast and unsustainable fashion choices have on the environment and further drew our attention towards the advantages of switching to a more sustainable choice ‘Eri’. The webinar was attended by 110 participants from several educational institutes all across India including Assam University, Central Silk Board, Miranda House, Gauhati University, Cotton University, Rangia College, Morigaon College, Sorbhog College, and Bodoland University.



## Lecture Series “Science behind Nature”: Saving tigers in a Human-Dominated Landscape - Lessons Learnt from the Terai, 18 September 2020

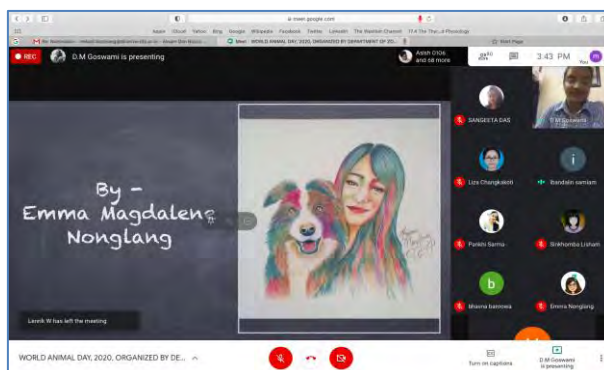
The 8<sup>th</sup> Lecture Series on “Saving tigers in a Human-Dominated Landscape - Lessons Learnt from The Terai” was conducted on 18 September 2020. Dr. Bivash Pandav, Department of



Endangered Species Management, WII, was the resource person. Dr. Pandav shared an enriching discussion on his first-hand field experiences and encouraged the participants to work together towards protection and conservation of wildlife, particularly the Majestic Tiger. The webinar was attended by 50 participants from various parts of the country.

## World Animal Day and World Wildlife Week Celebration: 10 October 2020

As we embrace the new normal, the Department of Zoology in collaboration with the EcoClub, Assam Don Bosco University, put together a Virtual Meet of animal lovers on 10 October 2020, to celebrate two events: *World Animal Day* and *World Wildlife Week*. The event witnessed the participation of around 80 animal enthusiasts who together raised concerns over animal welfare through Poetry, Painting, and Photographs. The themes for these events were *Speak Up for the Animals/Be Their Voice; Man and Dog; and Wildlife through Your Lens*.

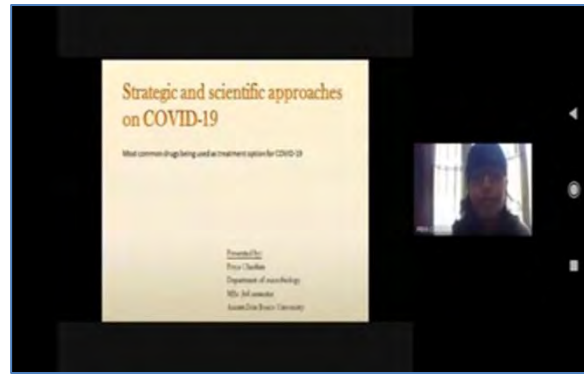


To acquaint students with their seniors and build a strong network among them, an interactive session was held where students shared their experiences as a student of the University and as budding researchers who are maneuvering their way into the scientific community. The speakers - Dibyajyoti Kalita (Batch 2019), Sagarika Das (Batch of 2020), Emidakachwa Khonglah (Batch of 2020), and Anastasia Ting (Batch of 2020) - spoke of their *Dissertation Journey*. They expressed a unanimous claim of how this journey was “quite the experience”! Dibyajyoti, who is currently working on a conservation project with 7Weaves, motivated and inspired the students through his session on his journey from Assam Don Bosco University to 7 Weaves.

The programme concluded with the announcement of the result of the Competitions: Photomania 3.0, Splash 1.0, and Poetry writing competition.

## Journal Club Session on “Strategies and scientific approaches on COVID -19”, 27 October, 2020

A Journal Club session has organised a webinar on the topic “Strategies and scientific approaches on COVID -19”. The session was held on 27th October 2020 in which M.Sc 3rd Semester students and research scholars of the Department of Biosciences has actively participated. The moderator of the session was Mr. Patrick Zolawma Lawlor and the four speaker were Miss Priya Chauhan, Miss Indrani Mazumdar, Miss Sibangi Paul and Mr. Gonsalo Sumer. The students highlighted various measures to combat COVID-19 which included drug



therapy, plasma therapy and immunization. They emphasised the advantages and disadvantages of these therapies to create awareness and sensitization. The session was organised by Dr. Jayanti Datta Roy and Dr. Nazneen Hussain, co-ordinators of the Journal Club, Department of

Biosciences. Prof. J.N. Vishwakarma , Director, School of Life Sciences and Dr. Shiny Thomas , Head of the Department appreciated the session. The session can be accessed through the link <https://youtu.be/KWsOzLzOwyQ>

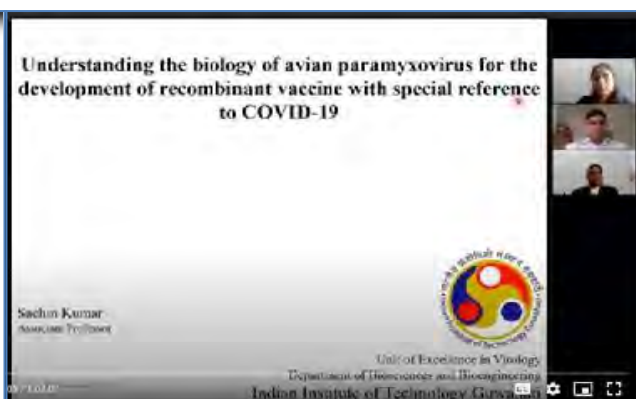
### The World Vegan Day, 1 November 2020



The World's Vegan's Day was observed on 1<sup>st</sup> November 2020 by the Department of Botany, Assam Don Bosco University. To commemorate this day a poster making competition was organized where students participated to showcase their ideas on veganism. The theme of the competition was "Go Green, Grow Green, Go Clean". Around 40 participants took part in the poster making competition. The entries were judged on the basis of three criteria namely, innovative title, content and clarity of the posters. The winner of the competition was Mr. Sasa Apollo from B.Sc. Botany 1<sup>st</sup> semester. The second position was bagged by Ms. Bimisa Khersa of M.Sc. Botany 3<sup>rd</sup> semester. The third position was occupied by two students, Ms. Liza Changkakoti of M.Sc. Zoology 3<sup>rd</sup> semester and Ms. Ibadahunlang Lytan of M.Sc. Botany 3<sup>rd</sup> semester. Consolation prizes were also given to Ms. Rajlaxmi Kashyap of B.Sc. 1<sup>st</sup> semester and Ms. Amrita Tirkey of M.Sc. 3<sup>rd</sup> semester. E-certificates were awarded to all the

winners.

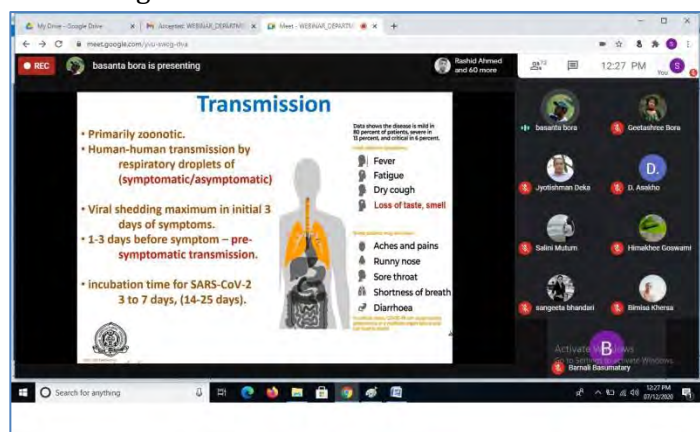
### Webinar on "Understanding the biology of avian paramyxovirus for the development of recombinant vaccine with special reference to COVID-19", 27 November 2020



A webinar was conducted by the Department of Biosciences in collaboration with IIT-Guwahati. The speaker of the event was Dr.Sachin Kumar from the Department of Biosciences and Bioengineering Indian Institute of Technology Guwahati. The webinar was on "Understanding the biology of avian paramyxovirus for the development of recombinant vaccine with special reference to COVID-19". The webinar had more than 80 participants from different parts of India. Speaker Dr. Sachin Kumar showed how Newcastle disease virus could be utilized as a vector to design vaccine for COVID-19. The Newcastle disease virus affects poultry, birds or other avians. Virus could transmit through contaminated water, food or faces and diagnosis is often confused with avian influenza. He also discussed molecular biology involved in designing vaccine against spike proteins present on the corona virus envelope. It was shown how Newcastle disease virus could be advantageous candidate vector to develop vaccine for humans and animals.

### SARS-CoV-2: its genome, 7 December 2020

The Department of Botany, Assam Don Bosco University organized a webinar entitled “SARS-CoV-2: its genome” on 7<sup>th</sup> December 2020 to address the current situation of the corona virus pandemic.



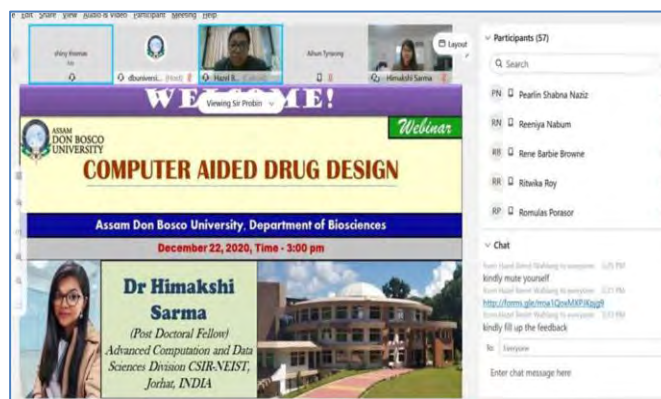
Dr Basanta Kumar Borah, Assistant Professor, Department of Agricultural Biotechnology, Assam Agricultural University was the invited speaker of the webinar. The invited speaker, Dr Borah delivered a talk entitled “A basic understanding of SARS-Coronavirus-2”. He discussed about the genomics of the novel coronavirus and also compared it with earlier versions of coronavirus like SARS and MERS. He also highlighted the progress of vaccine

production in many countries including India. There were several questions by the participants on the genomics of the virus as well as on vaccine production.

Overall, it was a brain-storming session with around 80 participants comprising of students and academicians from North-East and other parts of the country registering and participating in the webinar. The programme ended with the vote of thanks by Dr. Jyotishman Deka, Assistant professor from Department of Botany.

### Webinar on the topic “Computer Aided Drug Design (CADD)”, 22 December 2020

Webinar on the topic “Computer Aided Drug Design (CADD)” was organised by the Department of Biosciences, Assam Don Bosco University on December 22<sup>nd</sup>, 2020. The resource person was Dr Himakshi Sarma, Post-Doctoral Fellow, Advanced Computation and DATA Sciences Division, CSIR-NEIST, Jorhat, India. The number of the participant for the webinar was 57, which also included the participants from different organisations. Dr Sarma





gave insight regarding the different approaches and concept involved in computer aided drug design. She also gave information regarding the various online free software available. She further shared information regarding the various project carried out in NEIST under the guidance of Dr. G. Narahari Sastry, Director CSIR-North East Institute of Science and Technology, a premier R&D institute of the Council of Scientific and Industrial Research.

### **Lecture Series “Science behind Nature”: Webinar on Entrepreneurship and Fishery, 22 December 2020**

The Covid-19 Pandemic has wiped out millions of jobs in 2020. As fresh graduates and others continue their quest for employment opportunities, the Department of Zoology, Assam Don Bosco University in collaboration with Fishfed, Department of Fisheries, Government of Assam organised the 9th Lecture on “Entrepreneurship and Fishery” as part of the Lecture Series ‘Science Behind Nature’ on 22 December 2020. The lecture was delivered by Dr. Dhruba Jyoti Sharma, Managing Director, Fishfed, Government of Assam. Dr. Sharma shared a comprehensible and lucid presentation on the multitudinous opportunities for the youth in the field of fishery. There were a total of 25 participants representing institutions from across the State of Assam as well as the neighbouring Northeastern States of the country. As Dr. Sharma concluded his session saying, “Age should not be a barrier”, the participants were encouraged to explore the fisheries sector and be innovative “entrepreneurs” and contribute to the economy of the State and the country as a whole.



The Department is grateful to Dr. Dhruba Jyoti Sharma for his time and willingness to serve as Speaker for the event.

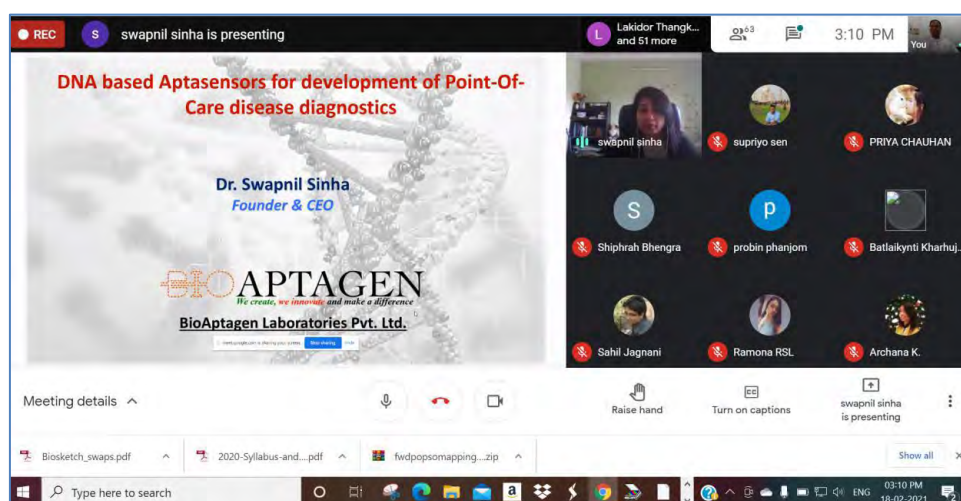
### **Lecture Series “Science behind Nature”: Entrepreneurship Development through Aquarium and Ornamental Fish, 23 January 2021**

The Department of Zoology, Assam Don Bosco University in collaboration with Fishfed, Department of Fisheries, Government of Assam organised the 10th Lecture on “Entrepreneurship Development through Aquarium and Ornamental Fishery” as part of the Lecture Series ‘Science Behind Nature’ on 23 January 2021.



The lecture was delivered by Dr. Sanjay Sarma, State Fishery Coordinator, World Bank Funded APART Project, Fishfed, Government of Assam. Dr. Sarma shared his views on Entrepreneurship Development through Aquarium and Ornamental Fishery. The participants interacted with Dr. Sarma through the Question and Answer session wherein Dr. Sarma answered their questions and also shared a few tips with them on the management of this type of Fishery. The participants were motivated to take up Fishery as an alternative source of income as well as for aesthetics purposes.

## Webinar on “Define Your Research with BioAptagen: A walk through of Nurture Youth Training Program in cutting edge Molecular Biology and Industrial Engineering”, 18 February 2021



The Department of Biosciences, Assam Don Bosco University in collaboration with BioAptagen Laboratories, IIT- Guwahati Research Park organized a webinar entitled “Define Your Research with BioAptagen: A walk through of Nurture Youth Training Program in cutting edge Molecular Biology and Industrial Engineering “on 18 February, 2021. The event was organized over Google Meet platform. A total of 62 participants joined online from different parts of the country. The speaker Dr Swapnil Sinha, Founder Director & CEO, BioAptagen Laboratories Private Limited, IIT Guwahati Research Park is a science entrepreneur with 10 years of research in cancer biology, epidemiology and biopharmaceutical drug development in India and abroad, who cofounded the start-up BioAptagen Laboratories to pursue her entrepreneurial dreams. The webinar began at 3 PM with opening remarks by Dr Supriyo Sen, Assistant Professor, ADBU and Convenor and proceeded with welcome address and introduction of the speaker by Dr Shiny C. Thomas, Head, Department of Biosciences, ADBU.

Dr Sinha then took over and spoke elaborately about her research on Bioaptamers and its utility in diagnostics and therapy. She spoke about the technology innovations on the health and pharmaceutical sector including COVID that she is presently working on. She then proceeded to talk about the recently launched Nurture Youth Training Program under which she is targeting the skill enhancement of students pursuing Bioscience courses through practical orientation. Her module-based training formats attracted the interest of the student participants.

The webinar was also attended by Team BioAptagen that included Mr. Sahil Jagnani, Founder & CEO Primary Healthtech Private Limited, IIT Guwahati Research Park, Ms. Reena Bansal and Ms. Mousumi Gogoi. Mr Jagnani also spoke about the technology innovations they are working on towards developing health solutions. The webinar concluded with a vote of thanks offered by Dr Supriyo Sen on behalf of the organizers and with the assurance of active collaboration in future research and student events.

## National Science Day: 1 March 2021

The Department of Zoology, in collaboration with EcoClub celebrated the National Science Day on 1st March, 2021. The Theme for this year’s Science Day is “Future of STI: Impacts on Education, Skills, and Work”. The day-long programme commenced with a welcome address by Ms. Dhritimoni Goswami, followed by the inaugural speech by Professor JN Vishwakarma, Director, School of Life Sciences. Professor Vishwakarma fascinated the audience with his

profound knowledge and advocated on the need for taking science to the masses. An Annual Calendar 2021, designed by Miss Sangeeta Das, was released by Dr. Monmoyuri Baruah, Director, School of Fundamental and Applied Sciences.

The events conducted in the first session included *Lockdown Treasury*, where students' creative forms of art during the lockdown were showcased; and *Campus Bird Count 4.0: A Presentation on Avian Diversity in Assam Don Bosco University* by Miss Sangeeta Das. The campus bird count is an annual event at Assam Don Bosco University which unveils some amazing species of birds spotted on our campus. A pre-event video presentation competition, *Biology for the Young 'un*, was also organised with the aim of using one's skills in explaining everyday scientific phenomena to young minds, particularly school kids. A Documentary 'Three Identical Strangers' was featured to the participants. The celebration concluded with a note of appreciation by Miss Emma Magdalene Nonglang, Student Coordinator of the Event.



## School of Humanities and Social Sciences

### Mandarin Classes at the University

The University in collaboration with the Ministry of Education, Taiwan and Taipei Economic and Cultural Center in India started offering Mandarin Classes to interested students of the University since February 2020. The first batch of students have finished 180 hours of Mandarin Classes, the second batch of students completed 90 hours and the third batches comprising two shifts started classes in the month of November. On completion of the course, students have the choice of appearing for Test of Chinese as a Foreign Language (TOCFL) and receive a Proficiency Certificate from the Ministry of Education, Taiwan. Ms Kuei-mi Li, who is teaching Mandarin to DBU students, has a vast experience in teaching Mandarin and French as a Second Language. She has worked as a translator and language teacher in Solomon's Island, Burkina Faso and Taiwan for over 20 years.

### A webinar on 'A Foundation for Life: The Importance of Volunteering', 1 August 2020



To cater the potential of the youths in the right way, a webinar on “A Foundation for Life: The Importance of Volunteering” was organized by the National Service Scheme (NSS) Unit, Assam Don Bosco University in collaboration with the Rotaract Club of Pine City, RID 3240 on 1st August 2020, and 96 participants registered for the webinar from different field of studies and work settings. The resource person for the webinar was Mr. Robbie Townsend, Coordinator, Community and Volunteer Services, Ireland, who had worked and lived in Ireland, Uganda, South Africa, and Australia. He highlighted on his volunteering experiences and how it develop his career and employability skills. He also stated that, sometimes we don't need a reason to volunteer; we just have to do it because it is the right thing to do. The webinar created a sense of responsibility, and humanity among the youth by lending their services to a noble cause. It also provided the scopes that volunteering opens in the volunteer's professional and personal growth. Participants learned that volunteering provides a sense of purpose, and a base in their future career and that one can learn better through involvement and volunteering is one platform where they can bring about positive transformation.

### Distinguished Lecture by Prof. Bill Ashcroft, 11 October 2020

The Department of English, organized the first Distinguished Lecture Series – 2020, with Professor Bill on 11th October 2020. Prof. Ashcroft the resource person is a founding figure of postcolonial theory and an Emeritus Professor in the School of English, Media and Performing Arts, University of New South Wales, Sydney, Australia.



Prof. Bill Ashcroft

In an insightful and gripping presentation on 'Postcolonialism Today', Prof. Ashcroft shared his in-depth knowledge and ideas on postcolonial theory, postcolonialism and globalization, postcolonial futures, postcolonial utopianism, literature's anticipatory function, borders and bordering, nation, trans nation and so on. The insightful lecture was followed by critical and interesting questions on ideas like postcolonialism being physical or mental, the role of creative discourse in postcolonialism, borders and so on. There were 1900 registrations with participants from countries such as Bangladesh, Morocco, Pakistan, Sri Lanka, Australia, Algeria, Italy, Saudi Arabia, Philippines, Nepal, Egypt, Iraq, Tunisia, Malaysia, Ukraine, United Kingdom, Scotland, Spain, Nigeria, Afghanistan, Bolivia, United States of America, Myanmar, Germany, Mauritania, Palestine, Yemen, China and Pan India.

### **Panel Discussion on Child Rights, 14 November 2020**



Dr Ursula Fasselt



Ms Tan Chi Yang

A Panel Discussion was organised by ADBU and Frankfurt UAS on the occasion of the 30<sup>th</sup> anniversary of the United Nations Convention on the Rights of the Child (UNCRC) and World's Children Day. The discussion aims to learn how the rights of the children are implemented in the different cultural context. It also intends to identify opportunities and points of entry for greater collaboration with the key stakeholders in fulfilling the rights of the child in the cultural decisions and actions. The Moderator of the discussion was Mr. Victor Narzary, an Asst. Professor in the Department of Social Work, ADBU and the Panellists were Prof. Dr Ursula Fasselt, Frankfurt University of Applied Sciences and Ms Tan Chi Yang, Child Welfare League Foundation (Taiwan). There were 114 participants from Germany, Taiwan, Solomon Islands and India.

### **Webinar on International Cultural Exchange, 9 December 2020**

International Cultural Exchange on the theme: "Cultural Diversity and Imaginations for Cultural Pluralism" was organized on 9th December 2020 with an aim to provide an opportunity for the students to share their culture and get to learn about foreign cultures from other international students. This venture aims to promote empathy and unity, cross-cultural friendship, critical outlook towards one's own culture and that of the others, and to imbibe the spirit of cultural pluralism. 60 students from Germany, India, Taiwan, and Brazil participated in this event. Dr. Samhita Barooah Consultant & Trainer in Social Development and Transformation, Guwahati, India was the resource person and observer of this programme.

## Online Lecture Series, 2 December 2020 and 16 December 2020



Under this project, Online Lecture Series was also started where two lectures have been conducted on the theme 'Emerging Trends and Perspectives in Social Work'. The first lecture titled "Critical Revisit of Social Work Education and Practices in India" was delivered by Dr. Bodhi S.R., TISS, Mumbai on 2nd December 2020, and it was attended by 127 participants. The Second Lecture in this series titled, 'Tele-health and Social Work Practice' was delivered by Prof. Nandita

Bezbaruah, Minnesota State University Moorhead, USA on 16th December 2020. The lecture was attended by 158 participants. The participants of both the lectures were students, faculty and professionals in Social Work.

## Activity Report of Literary Club, 29-30 October 2020 and 12 November 2020

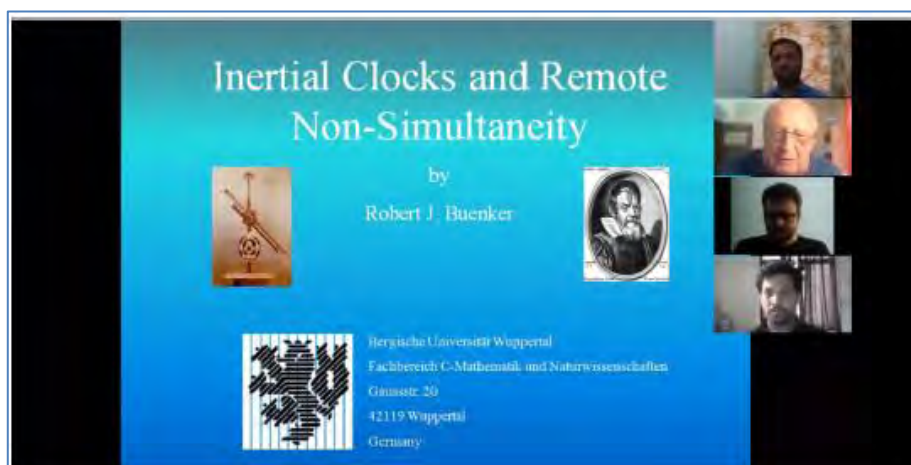
Various activities were organized by the literary club of the Department of English. On the occasion of Vigilance Awareness Week, the club organized two events, viz, Essay Competition and Poster Making Competition on 29th and 30th of October 2020. There were 20 participants for the Essay Competition and 27 participants for the Poster Making Competition across all departments of Tapesia Campus. The first prize for the Essay competition was bagged by Mr. Kapil Kumar Kemprai of Msc 3rd Sem, Botany Department, and the first position for Poster Making Competition was claimed by Ms. Syeda Farhin Sultana of BA 3rd Sem, English Department. The club had organized a Poetry Writing Competition on 12<sup>th</sup> November 2020. The themes assigned for the Poetry Writing Competition were "Rusted Elegance", "Solitude", and "Your Mother's Perfume". The winners of the event were George Kresilius Hanse (1st prize), BA 1st Sem, English Department, Romero D'Souza (2nd prize), MA 1st Sem, Department of Education, and Puotounguno Basumatary (third), BA 1st Sem, Psychology Department.

## International Women's Day 2021, 8 March 2021

The International Women's Day 2021 was celebrated by a Poster Campaign in the University campus. These posters depicted issues, struggles and resilience of women around the world. Further, a special lecture was also organised by the NSS Cell in collaboration with the Department of Social Work. The theme of the international women's day 2021 was "CHOOSE TO CHALLENGE" and the theme of the interactive session was "Women in leadership: Achieving an equal future in a COVID-19 world" delivered by Smita Jacob and was attended by 53 participants. Sharing her views on the status of women in today's world Smita Jacob raised a question, 'how really empowered women empower women?' challenging women to stand up for their own folks. She also shared the importance of having psycho-social support by drawing an example from her own life experience where she grew up with parents who supported her dreams and how they became the enablers of her successful venture while reiterating that "it takes a village to raise a child." During this talk, Smita Jacob also shared her views on gender based violence and encouraged the participants to question about how safe are our homes for women in a world where domestic violence plagued the society. The session ended with questions and answers sessions chaired by Asst. Prof. Victor Narzary from the Department of Social Work.

# School of Fundamental and Applied Sciences

**Live Webinar: Symposium on Special Theory of Relativity 2020, 4 June 2020**




The Department of Physics at Assam Don Bosco University organised a live webinar titled Symposium on Special Theory of Relativity 2020 on 4th June 2020. Prof. Robert J. Buenker from Wuppertal University, Germany, delivered a highly engaging talk and interacted with the participants. Ninety six participants from forty three different institutions from all over India attended the programme.

Many participants voluntarily sent their feedback to the organisers informing about their satisfaction and gratitude. Personalized e-invitation letters were emailed to all the registered participants prior to the webinar, which was subsequently conducted on the Zoom platform. After the webinar, personalized e-certificates were emailed to all the participants.

## **Webinar on Sustainable chemistry for the synthesis of novel biologically significant natural heterocycles and product quality assessment in the pharma industry, 18 July 2020**

The department of Chemistry organized a webinar on Sustainable Chemistry for the synthesis of novel biologically significant natural heterocycles and product quality assessment in the Pharma Industry. The aim of the topic chosen for the webinar was introduce to the participants the role of heterocycle compounds in the field of sciences. The Resource person, Dr. Meenakshi Sharma, Analytical Chemist, Toronto Research Chemicals, Canada gave insights of how there is always a strong need for new and efficient processes in synthesizing of new heterocyclics.

Webinar  
on  
**Sustainable Chemistry for the Synthesis of Novel Biologically Significant Natural Heterocycles and Product Quality Assessment in the Pharma Industry**  
*Organized by*

  
Department of Chemistry, Assam Don Bosco University,  
Tapesia Gardens, Kamarkuchi, Sonapur, Assam  
Resource Person: Dr. Meenakshi Sharma,  
Analytical Scientist, Toronto Research Chemicals, Canada  
Date: 18<sup>th</sup> July, 2020  
Time: 10:00 AM

Registration Link: <https://forms.gle/6TFzztQyNpJX84tA8>  
Last date of registration is 16<sup>th</sup> July, 2020  
Registration is free for the Webinar (Hosted on google meet)

Coordinators: Dr Pallabi Borah, Assistant Professor, Email: [pallabi.borah@dbuniversity.ac.in](mailto:pallabi.borah@dbuniversity.ac.in)  
Dr Sagar Sharma, Assistant Professor (Senior), Email: [sagar.sharma@dbuniversity.ac.in](mailto:sagar.sharma@dbuniversity.ac.in)

## National Webinar on “Decision Making In Pandemic Situation”, 22 July 2020

The Department of Mathematics organized its first webinar with title “Decision Making in Pandemic Situation” and the coordinators of the webinar were Dr. Sanjay Dutta and Dr. Hemen Bharali. The webinar was held on 22<sup>nd</sup> July, 2020 at 11:00 AM. Dr. Tarini Kumar Dutta from the department of mathematics, Assam Don Bosco University welcomed the speaker Dr. Stephen Titus, former professor of Department of Mathematics St. Joseph’s College Bangalore. The talk was very informative, wonderfully explained with the current situations of Covid-19 in different parts of the country. How the policy makers are taking their decision in such situation where the whole country is under the grip of Covid-19. The talk was very interactive and 229 participants registered for the webinar from different parts of country. The session of 1 hour 20 minutes ended with a healthy note and most of the participants were quite happy with the speaker. Dr. Sanjay Dutta personally thanked the speaker for such an impressive session.



**ASSAM DON BOSCO UNIVERSITY**  
SONAPUR, GUWAHATI-782402, ASSAM, INDIA  
09476690950, 91-9435545754  
[www.dbuniversity.ac.in](http://www.dbuniversity.ac.in)  
[contact@dbuniversity.ac.in](mailto:contact@dbuniversity.ac.in)

Department of Mathematics  
Organizes  
**A Webinar on**  
Topic: Decision Analysis in Pandemic Situation

Date: 22 July, 2020  
Time: 11:00 AM-12:00AM

Registration: <https://forms.gi/okL7JEex545RUPiG9>  
(Registration free)

Contact us on : [sanjay.dutta@dbuniversity.ac.in](mailto:sanjay.dutta@dbuniversity.ac.in)  
Coordinators: Dr. Sanjay Dutta & Dr. Hemen Bharali

**SPEAKER**  
Dr. Stephen Titus  
Retired Professor  
Department of Mathematics  
St. Joseph's College  
Bangalore, India

## Workshop on Particle Physics 2020, 17 – 31 August 2020


The Department of Physics, ADBU organized a ten-day online workshop titled *Workshop on Particle Physics 2020* (WPP 2020) from 17 – 31 August 2020.

The aim of this workshop was to introduce the students to the fascinating field of particle physics. The resource persons involved were from India as well as abroad. Out of over 200 applicants, finally 100 were selected and given the opportunity to participate in the workshop. Due to the restrictions imposed by the Covid-19 pandemic, the workshop was conducted fully online using Google Meet. The workshop was smoothly coordinated by the convener, Dr. Debajyoti Dutta from the Department of Physics, ADBU.

The workshop commenced with a short inaugural session, where Dr. Samrat Dey, Head of the Department of Physics, ADBU, welcomed all and the distinguished speakers of the event.

The technical sessions began with Dr. Subhaditya Bhattacharya from the







Department of Physics at IIT Guwahati presenting his talk titled *Physics of the Standard Model*. The second day of the workshop was a continuation of the same topic. On 19 August Prof. Biswarup Mukhopadhyaya from IISER Kolkata introduced the participants to the facts and phenomenology of collider physics with his highly illuminating talk.



DEPARTMENT OF PHYSICS  
*Assam Don Bosco University*

WORKSHOP ON  
**PARTICLE PHYSICS**  
2020  
3 - 14 AUGUST 2020

**SPEAKERS**

 <b>PROF. BISWARUP MUKHOPADHYAY</b> IISER Kolkata India	 <b>DR. SUBHADITYA BHATTACHARYA</b> IIT Guwahati India
 <b>DR. DEBASISH BORAH</b> IIT Guwahati India	 <b>DR. DEBAJYOTI DUTTA</b> Assam Don Bosco University, India
 <b>DR. ARNAB DASGUPTA</b> ICFS South Korea	 <b>DR. ABHASS KUMAR</b> Physical Research Laboratory, India



The topic for 20 and 21 August was *The Early Universe Cosmology, Inflation* by Dr. Abhass Kumar from the Physical Research Laboratory, India. The fourth session of the workshop, spanning 24 – 27 August consisted of two speakers, namely Dr. Debasish Borah from the Department of Physics at IIT Guwahati and Dr. Arnab Dasgupta from ICFS, South Korea. Both speakers gave a detailed summary of *Neutrino Mass Model, Lepto genesis*. On the last day of the workshop, Dr .Debajyoti Dutta delivered his talk titled *Neutrino Oscillations, Physics at Long-Baseline Experiments*.

The participants were given the opportunity to discuss their queries with the speakers. The workshop ended with a valedictory function on 31August 2020. Upon their successful completion, all the participants were awarded e-certificates.

## International Webinar on “Mathematical Applications in Human Cognition and Neuroscience”, 16 September 2020



International Webinar on Mathematical Applications in Human Cognition and Neuroscience		Media Partner Gauhati University
Organised by - Department of Mathematics, Assam Don Bosco University, Guwahati, Assam, India		
<b>1<sup>st</sup> Speaker</b>	<b>Date and Time</b> 16 <sup>th</sup> September, 2020 03:00 PM IST	<b>2<sup>nd</sup> Speaker</b>
	  LIVE	
<b>Prof. Robin I. M. Dunbar</b> Ph.D, D.Sc. (Hon), FRAI, FBA Emeritus Fellow, Magdalen College Professor of Evolutionary Psychology Department of Experimental Psychology University of Oxford, United Kingdom	<b>REGISTER NOW</b> Registration Fee : Nil Last date of Registration 10 <sup>th</sup> September, 2020	<b>Dr. Santanu Acharjee</b> Assistant Professor Department of Mathematics Gauhati University, Assam, India
 For updates, join us on Telegram	<b>Convener</b> Prof. Tarini Kumar Dutta <a href="mailto:tarini.kumar.dutta@dbuiversity.ac.in">tarini.kumar.dutta@dbuiversity.ac.in</a> +91 99540 64908	For any query, contact us on Whatsapp 
e-Certificates will be provided to all participants on successful submission of feedback form. The feedback link shall be shared in the YouTube/Google Meet chat box, during the webinar.		

The Department of Mathematics, Assam Don Bosco University organized an international webinar on 16th September, 2020 from 3.00 pm onwards. The speakers of the event were Professor Robin I. M. Dunbar, Department of Experimental Psychology of University of Oxford, United Kingdom and Dr. Santanu Acharjee, Assistant Professor of Department of Mathematics, Gauhati University. Professor Tarini Kumar Dutta coordinated the entire webinar and delivered an inaugural speech, Father (Dr) Stephen Mavley, Hon'ble Vice Chancellor delivered the Welcome Address, Dr Mommoyuri Barua, Director of School of Fundamental Science, spoke on the academic biodata of Prof Dunbar. Professor Dunbar and Dr Acharjee spoke at length on their respective topics on Fractal structure of Human and primate social groups and also the relationship between the Dunbar graphs of social networks and the small-world phenomenon in a very interesting and application-oriented manner. At the end, Dr. H. Bharali, HOD of Mathematics delivered Vote of Thanks. To the outstanding credit, 3200+ participants from 27 different countries registered for the Webinar and more than 4000+ people either attended or/and viewed the performance of webinar with very enthusiasm manner. The departments of mathematics as well as the whole ADBU have been much benefitted academically and globally by this Webinar.

## Workshop on NET, 3-6 November 2020.

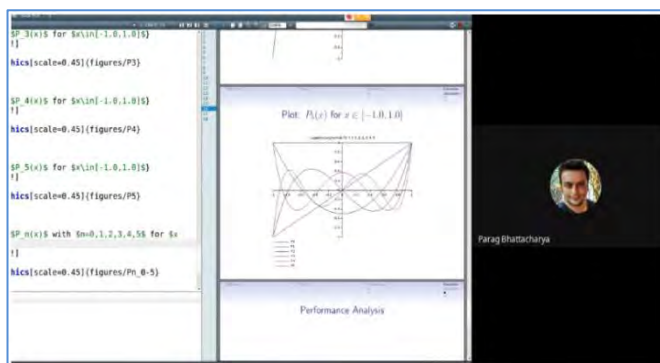
The Department of Chemistry organized a workshop on National Eligibility Test from 3-6 November 2020. The workshop included 6 lectures by reputed professors and their talk touched upon important as well as relevant topics in chemistry. Dr. Kusum Kumar Bania (Tezpur University) and Dr. Sagar Sharma delivered their talk on Inorganic Chemistry. Dr. Basanta Kumar Rajbongshi (Cotton State University) and Dr. Pallabi Borah delivered their talk

on Organic Chemistry. Dr. Debajyoti Mahanta (Gauhati University) and Dr. Lopamudra Homchaudhuri delivered their talk on Physical Chemistry. After the workshop, personalized e-certificates were emailed to all the participants.

### **Workshop on Latex Documents 2020, 24 – 26 September 2020**

A three-day online workshop titled Workshop on LaTeX Documents 2020 (WLD 2020) was organized by the Department of Physics, Assam Don Bosco University, during 24 – 26 September 2020.

The purpose of this workshop was to enable students, research scholars and faculty members from various institutions of the country to learn the fundamentals of scientific and technical documentation using LaTeX, a free and opensource software. The importance of the workshop can be gauged from the fact that today LaTeX has become the de facto global standard for scientific publication.



After a brief inaugural session, the technical sessions were kicked off with an invited talk by Dr. Sukanta Deb from the Department of Physics at Cotton University, Guwahati. Dr. Deb put out before the participants different aspects of LaTeX, thereby setting the stage and context for the workshop.

The next three technical sessions were handled by Mr. Parag Bhattacharya from the Department of Physics, ADBU, who was the main resource person for the workshop. He demonstrated the compilation of LaTeX documents both offline (using Tex maker) and online (using overleaf) and introduced to the participants many diverse topics, ranging from the basic structure of a LaTeX document, math mode and incorporation of graphics and tables.

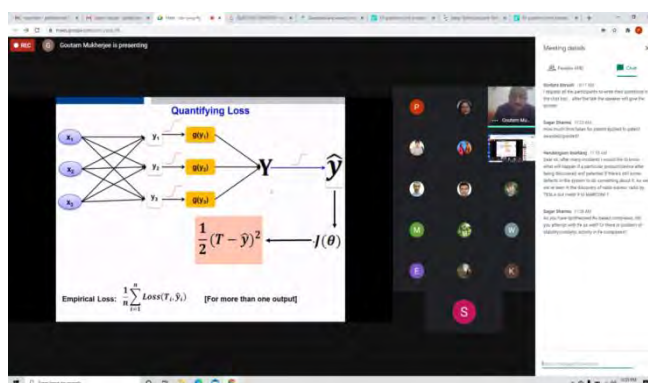
Two of the technical sessions were covered by Dr. Debajyoti Dutta from the Department of Physics, ADBU and Dr. Kaustubh Bhattacharyya from the Department of ECE, ADBU. They provided the participants with illustrations on how to draft academic documents, such as research papers and academic theses – topics which were of special interest to research scholars and postgraduate students. This was followed by the final technical session handled by Mr. Parag again, where he gave a live demonstration on developing a slide presentation from scratch using LaTeX.

The workshop concluded with a valedictory function on 26 September 2020 and all the participants were awarded e-certificates.

### **International Webinar on Modern Trends in Chemistry, 31 October 2020**

The Department of Chemistry organized a one day international webinar titled “Modern Trends in Chemistry” on 31st October, 2020. The webinar, held on a Google Meet platform, started with the welcoming address by Dr. Monmoyuri Boruah, Director of School of Fundamental and Applied Sciences, Assam Don Bosco University. The webinar comprised three lectures by renowned scientists and their talk touched upon important and relevant topics in chemistry. The first talk on “Intellectual Property Rights and its importance and functioning” was delivered by Dr. Rajib Lochan

Goswamee, Senior Principal Scientist, CSIR-NEIST, Jorhat Assam; the second talk on “Applicability of Acceptorless Dehydrogenation and Borrowing Hydrogen Catalysis in Chemical Synthesis” was delivered by Dr. Dipankar Srimani, Asst. Professor, IIT Guwahati and the last and third talk was delivered by Dr. Goutam Mukherjee, Senior Scientist at PharmaCADD, South Korea and also a Post Doctoral Fellow at Heidelberg University, Germany on “RASPD+: Machine Learning for Fast Protein Ligand Binding Free Energy Prediction and its Applications to SARS-CoV-2 Targets”. The webinar was attended by 60 participants from various parts of the world and their feedback showed that they were highly satisfied and appreciated the webinar. Participants were given E-certificates at the end.



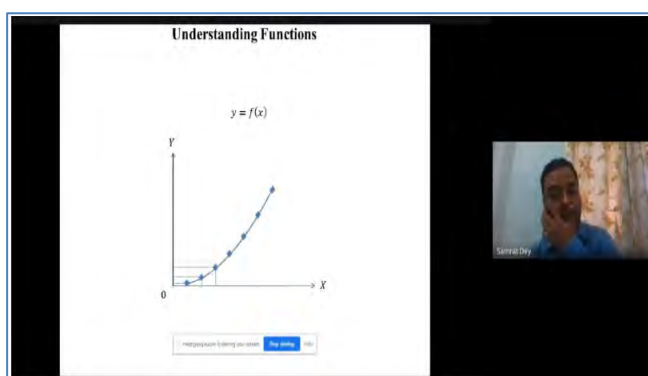
### Workshop on NET, 3-6 November 2020

The Department of Chemistry organized a workshop on National Eligibility Test from 3-6 November 2020. The workshop included 6 lectures by reputed professors and their talk touched upon important as well as relevant topics in chemistry. Dr. Kusum Kumar Bania (Tezpur University) and Dr. Sagar Sharma delivered their talk on Inorganic Chemistry. Dr. Basanta Kumar Rajbongshi (Cotton State University) and Dr. Pallabi Borah delivered their talk on Organic Chemistry. Dr. Debajyoti Mahanta (Gauhati University) and Dr. Lopamudra Homchaudhuri delivered their talk on Physical Chemistry. After the workshop, personalized e-certificates were emailed to all the participants. Many participants voluntarily sent their feedback to the organizers informing about their satisfaction and gratitude.

### Workshop on Computational Physics 2020 Using Python, 3 – 5 December 2020

The Department of Physics, Assam Don Bosco University organised a three-day online workshop titled Workshop on Computational Physics2020, using Python (WCP 2020), during 3 – 5 December 2020.

The purpose of this workshop was to enable the participants to implement numerical analysis to solve problems in physics for which a quantitative theory already exists. The software tool used for the same was Python (an open source software). Participants from ADBU as well as from other institutions were provided with demonstrations of developing Python codes using Jupyter Notebook for various physical problems; in addition to talks on various topics in the field by eminent resource persons.



A brief inaugural session was followed by the first technical session of the workshop, which began with the plenary talk by Dr. Sandeep Ghugre from UGC DAE CSR, Kolkata. Dr. Ghugre illuminated the audience with numerous illustrations and demonstrations on using Python for solving physical problems from diverse areas of physics, such as quantum mechanics and signal processing. This was followed by a demonstrative talk by Mr. Parag, wherein he introduced the

participants to Jupyter Notebook– a powerful tool for interactively developing and presenting data science.

During the second technical session on the first day (afternoon), Mr. Parag introduced the participants to the basic elements of Python using Jupyter Notebook. They were provided examples of the Python syntax and were familiarised with the basic flow control elements of the programming language. They were also familiarised with various data structures available in Python, which tremendously aid physical computations.

The third technical session began on the second day with a presentation, titled Fundamentals of Numerical Analysis, delivered by Dr. Samrat Dey from the Department of Physics, ADBU, where he elaborated on formulations of common numerical techniques for root finding, integration and solving differential equations. This was followed by continuation of demonstrations by Mr. Parag on Jupyter Notebook, extending knowledge to the use of numpy arrays, which are optimizations for performing fast computations.

The rest of the technical sessions of the workshop were covered by Mr. Parag. Different methods for data visualization were illustrated using the matplotlib package. Different types of plots, starting from simple 2D plots to surface plots, scatter plots and density plots, were introduced, apart from ways to beautify the plots, making them publication-ready. Mr. Parag also illustrated some common numerical methods, such as that of root finding, numerical integration and solving ordinary differential equations.

## Workshop on Python Programming and Mathematics, 7 December 2020

The workshop “Python Programming and Mathematics” was organized by the Department of Mathematics on 7th December 2020. The workshop began at 9:30 with an introduction from the head of the department Dr. Hemen Bharali and a welcome addresses by Fr. (Dr.) Stephen Maveley and Director of SFAS Dr. Monmayuri Baruah.



The poster for the workshop features a green and orange background with a circular logo on the left. The text is organized into sections: university name and contact info, objective, organizer, workshop title, date and time, and contact details for the organizers.

**ASSAM DON BOSCO UNIVERSITY**  
SONAPUR, GUWAHATI-782402, ASSAM, INDIA  
09476690950, 91-9435545754  
www.dbouniversity.ac.in  
contact@dbouniversity.ac.in

Department of Mathematics  
Organizes  
**A Workshop on**  
Python Programming  
And  
Mathematics  
Date: 07 December, 2020  
Time: 9:30 AM-1:00 PM

**OBJECTIVE**  
The primary objective of this workshop is to educate the participants about the computational problems and its applications in other field. The workshop will be oriented with suitable approaches to convey the information more effectively and enable the visualization and applications of computational intelligence in various applied branches of mathematics.

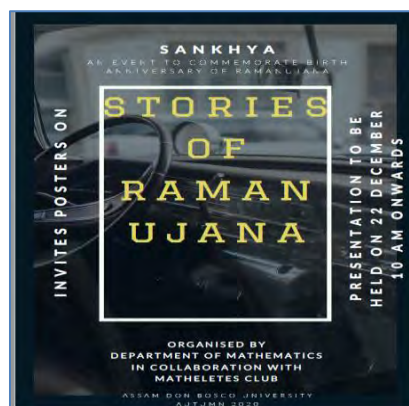
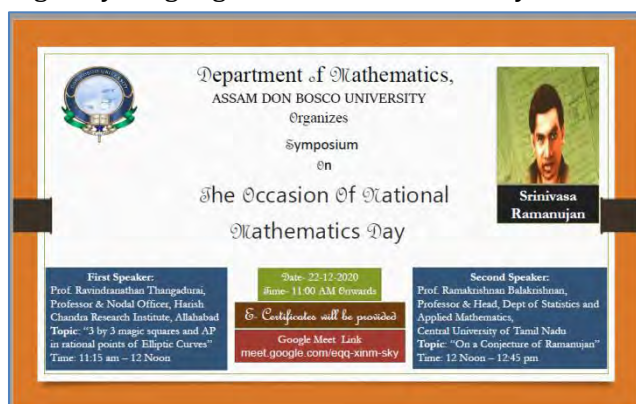
**CONTACT DETAILS**  
Dr. Fokrul Alam Mazarbhuiya, Dr. Sanjay Dutta  
Assistant Professor, Department of Mathematics, School of Fundamental & Applied Sciences, Assam Don Bosco University, Tepezia Garden, Assam  
E-mail: fokrul.mazarbhuiya@dbouniversity.ac.in, sanjay.dutta@dbouniversity.ac.in  
Phone: +919101063607, +91600397251

These were followed by a talk on ‘Python Magic in Mathematics’ by Sujata Ghatak from the Department of Computer Science and Engineering, Institute of Engineering and Management, Kolkata. She introduced the python programming to the students with basic installation, discussing the mathematics packages and modules in python programming. She further discussed the mathematical constant and how to compute them with other mathematical functions. After that there were three talks of one hour each were given by Dr. Saugata Purkayastha, Dr. Fokrul Mazarbhuiya and Dr. Sanjay Dutta of the Department of Mathematics. Dr. Saugata Purkayastha explained the basic concept of Linear Algebra and Statistics and how it is applied in data science. Dr. Fokrul Mazarbhuiya shed more light on the topic of data science, data mining and the mathematical background needed to explore more on these area and the students can see the alternate option as a career after their graduation and post-graduation. Finally, Dr. Sanjay Dutta concluded by expressing approval how the concepts can be put into practice with the help of Python programming.

## Symposium on National Mathematics Day, 22 December 2020

The Department of Mathematics, ADBU organized a Symposium on the Occasion of the National Mathematics Day in order to mark the 133<sup>rd</sup> birth anniversary of Legendary Indian

mathematician, Srinivas Ramanujan on 22<sup>nd</sup> December, 2020. The main objective of the National Mathematics Day is to raise awareness among people about the importance of mathematics for the development of humanity, science and technology. On this event, several initiatives are taken to motivate, enthuse and inculcate a positive attitude towards learning mathematics among the younger generation of the country.



Two eminent Mathematicians, Professor Ravindranathan Thangadurai, Professor and Nodal Officer, Harish Chandra Research Institute, Allahabad, and Professor Ramakrishnan Balakrishnan, Professor and Head, Dept of Statistics and Applied Mathematics, Central University of Tamil Nadu, delivered lectures on the outstanding contributions of “Srinivas Ramanujan” in Mathematics and Science. Dr. Hemen Bharali, HOD of Mathematics opened the Symposium with inaugural speech at 11.00 am, Hon’ble Pro-Vice Chancellor, Fr Joseph Nellanatt gave very attractive welcome address, and then Professor Tarini Kumar Dutta, as the convenor of the Symposium, was anchoring the rest of the event along with an impressive ‘Vote of Thanks’. Also, a special event on Stories of Ramanujan, inviting posters in a special edition of SANKHYA, was presented. More than 100 participants, some were faculty members, research workers, and PG students of ADBU, and some others from different institutions/ universities of NE region attended the symposium. The towers and pinnacles of these kinds of events have laid down strong foundation of mathematics culture and exalt the mind of students towards science and technology.

### **Launching of Tethered Balloon, 8 and 11 January 2021**

Tethered balloon/ kytoon with atmospheric science payload & an attached GPS sonde and meteorological balloons were launched for by North Eastern Space Applications Centre (NESAC) in collaboration with Physics Department, Assam Don Bosco University; tethered balloon was launched 4 times per day at 6 hourly intervals starting from 8th January, 2021, and meteorological balloons were also launched 8 times a day for one day.



On the last day, i.e., 11th of January, 2021, the scientists demonstrated the experiment to the audience following a scientific presentation at the auditorium of the main campus of Assam Don Bosco University, at 10 am; the presentation was attended by both online and offline participants and the experiment was also broadcasted live for the online participants. Two of the students of Physics Department, Assam Don Bosco University, also got selected for internships in NESAC after the event. Similar experiments were

once again conducted from 11th to 13th March, 2021. The collaboration was agreed to be strengthened even further by both the parties in the near future.

### **Science Academies' Refresher Course on Frontiers of Theoretical Physics, 1-16 February 2021**

Among all the similar offline national academic events in India after the COVID-19 pandemic, Science Academies' Refresher Course on Frontiers of Theoretical Physics, sponsored by Indian Academy of Sciences, Bengaluru, Indian National Science Academy, New Delhi, & The National Academy of Sciences, India, Prayagraj, and organised by Physics Department, Assam Don Bosco University, is probably the first one. The event was held at the Physics Department from 1st to 16th February, 2021, following all the protocols in place due to the pandemic including physical distancing, use of face masks, thermal screening, isolated eating place, etc. Prof. Sudhakar Panda (FNA, FNASc, FASc, J. C. Bose Fellow), Director of NISER, was the course director and Dr. Samrat Dey, Head of Physics Department, Assam Don Bosco University, was the course coordinator. 16 teachers and 14 students were selected based on their final confirmation. A refresher course on theoretical physics is a very rare event, particularly in Northeast India. As a result of that refresher course had a wide publicity accomplished by various online and offline means.



This refresher course paved the way for the teachers to be up to date with modern developments in Physics. The topics for the RC included computational techniques, group theory & its application and quantum field theory & its applications. There were as many as 58 lectures of each of 90 minutes duration. There were as many as 58 lectures of each of 90 minutes duration.

The following is the detailed list of topics with and the corresponding speakers.

- Quantum Field Theory (Resource person - Prof. Soumitra Sengupta, FNASc, Senior Professor and School Chair, SMCS, IACS, Kolkata)
- Quantum Monte Carlo (Resource person - Dr. Arnab Sen, IACS Kolkata)
- Density Functional Theory (Resource person - Prof. Ram Kumar Thapa, Mizoram University, Aizawl)
- Molecular Dynamics (Resource person - Prof. Swapan Kumar Ghosh, FNA, FNASc, FASc, J. C. Bose Fellow, Distinguished Professor, CEBS, Mumbai)
- Neutrino Physics (Resource person - Dr. Sanjib Kumar Agarwalla, IoP, Bhubaneswar)
- Group Theory (Resource person - Prof. Debashis Ghoshal, SPS, JNU, New Delhi)
- QFT in 2D Systems (Resource person - Prof. Sudhakar Panda, FNA, FNASc, FASc, J. C. Bose Fellow, Director, NISER)
- Cosmology (Resource person - Prof. Atri Deshamukhya, Assam University, Silchar)

## Springer International Conference on Trends in Modern Physics (TiMP) 2021, 26 – 27 February 2021

The Department of Physics at Assam Don Bosco University organised its 3<sup>rd</sup> annual conference titled *Springer International Conference on Trends in Modern Physics 2021 (TiMP 2021)* on 26 – 27 February 2021, in collaboration with the *Indian Association of Physics Teachers (IAPT)*.



The conference was inaugurated by Prof. Vijay A. Singh, President of IAPT. Prof. Singh who then set into motion the proceedings of the conference with his illuminating plenary talk titled *Semiconductor Nanostructures: Simple Scaling Approach*. This was followed by five separate technical sessions for oral presentations and a single session for poster presentations over the course of the next two days.

The first technical session, themed nuclear physics, Prof. Ashok K. Jain, Amity University, Noida, delivered an invited talk titled *Extremely Low Energy Isomers and their applications*. The second technical session was with theme astrophysics & cosmology began after lunch with two invited talks. Prof. Atri Deshamukhya from Department of Physics, Assam University, gave a talk on *Tropical Cyclones: A look through double eye walls*. This was followed by a presentation by Dr. Jan-Uwe Ness from European Space Agency, Spain, spoke on *Observing Nuclear Burning on the Surface of White Dwarf Stars*.

Second day consisted of two parallel technical sessions of material & nanophysics chaired by Prof. Vijay Singh with an invited talk by Dr. Ramakrishna Podila from Clemson University, USA, on titled *Stories from the Nano-bio lab at Clemson*. This was followed by another invited talk by Dr. Anthony Childress from Northeastern University, USA, made an informative presentation on *Directed Assembly of Nanomaterials: Methods and Applications*. The parallel technical session on plasma physics was chaired by Dr. Ngangom Aomoa from the Department of Physics, ADBU. Dr. Srikumar Ghorui from Bhabha Atomic Research Centre (BARC) delivered an invited talk titled *Addressing Some of the Key Challenges in Thermal Plasma Technology*, followed by presentations by delegates.

The second sub-session on material & nanophysics, particle physics was chaired by Dr. Samrat Dey. Dr. Saurya Das, from the University of Lethbridge, Canada, delivered his invited talk titled *Our Universe: the known, unknown and some speculations*. He was followed by Prof. Buddhadeb Bhattacharjee, from the Department of Physics, Gauhati University, who made a presentation on the topic *Primordial Matter*. This was followed by presentation by delegates.

The afternoon session on the second day was dedicated to poster presentations by the delegates both online and offline. Fifty-five participants from twenty-seven different institutions had

presented their research on diverse topics from astrophysics & cosmology, material & nanophysics, nuclear physics, particle physics and plasma physics.

## National Science Day- 2021, 28 February 2021

In India, every year February 28 is celebrated as National Science Day. This day marks the discovery of Raman Effect phenomenon of the scattering of light by the Indian Physicist Sir C.V. Raman. This year the theme of the National Science Day 2021 is “Future of STI: Impacts of STI on Education, Skills and Work”.

The Department of Mathematics, Assam Don Bosco University, Tapesia, Assam, had a virtual celebration on 28<sup>th</sup> of February, 2021. The National Science Day Celebration is a forum to bring together science students, researchers, scientists and professionals to discuss innovative ideas and diverse topics on next generation of research and technologies in the field of scientific excellence. The entire event was coordinated by Dr. Ridip Sarma, Assistant Professor, Department of Mathematics. Professor Tarini Kumar Dutta inaugurated the event and the

**NATIONAL SCIENCE DAY 2021**  
**WEBINAR ON**  
**ION EXTRACTION AND ACCELERATION THROUGH PLASMA AND ITS APPLICATIONS**

GOOGLE MEET  
  
**10:30AM-11:30AM**

**SUNDAY**  
**28**  
**FEBRUARY**

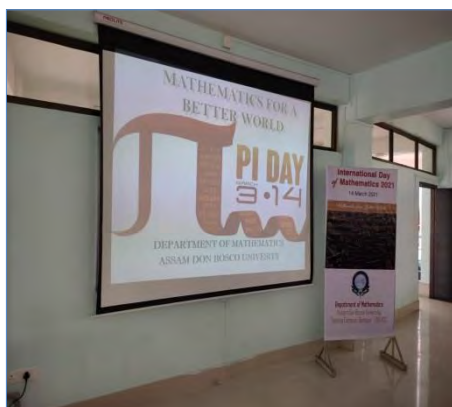
**ORGANIZED BY**  
**DEPARTMENT OF MATHEMATICS**  
**ASSAM DON BOSCO UNIVERSITY**  
**TEPESIA, ASSAM**

**RESOURCE PERSON:**  
**Dr. MUKTI RANJAN JANA**  
**SCIENTIFIC OFFICER G**  
**NEUTRAL BEAM INJECTION GROUP**  
**INSTITUTE FOR PLASMA RESEARCH**  
**GUJARAT, INDIA**

Google Meet Link: <https://meet.google.com/bds-ppwn-ien>  
 For any Queries Contact:  
**Dr. RIDIP SARMA**  
 Assistant Professor  
 Dept. of Mathematics, Assam Don Bosco University  
 Email: [ridip.sarma@dbuniversity.ac.in](mailto:ridip.sarma@dbuniversity.ac.in), Phone No. +91 6000303239

One Day Webinar proceeding, followed by an introductory speech on the importance of Raman Effect and this year’s theme of National Science Day. The speech was followed by the Keynote address by Honourable Guest Speaker Dr. Mukti Ranjan Jana, Scientific Officer G of Neutral Beam Injection Group, Institute of Plasma Research, Gujarat, India. In his Keynote speech, Dr. Jana gave deep insights on the topic “Ion extraction and acceleration from Plasma and its applications”. A total of 85 participants consisting of students, research scholars and faculty members from various institutions participated. The Webinar was followed by Open Essay competition and Open Quiz Competition based on the theme “Future of STI: Impacts of STI on Education, Skills and Work”. 40 participants in the competition and the top three winners were awarded a certificate each. At the end, vote of thanks was made by Dr. Ridip Sarma.

## Pi Day and International Day of Mathematics, 14 March 2021





The department of Mathematics observed Pi Day and International Day of Mathematics with activities involving the teachers and students of the department. The programme began at 11 am, with a short welcome note from the HoD Dr. Hemen Bharali and presentation from Dr. Sanjoy Kalita. Dr. Tarini K. Dutta, senior professor of the department, delivered a talk on the topic "Fractal Geometry and its Applications". In his talk, he explained how mathematics is present in nature around us even in the irregular shapes and gives them a beautiful appearance. After Dr. Dutta's talk, two competitions - speech competition and reciting digits of pi were held. The programme ended with a vote of thanks from Dr. Ridip Sarma.

# School of Commerce and Management

## **Webinar: Financial Literacy/Investor Awareness, 10 August 2020**

A webinar on “Financial Literacy/ Investor Awareness” was organized by the Department of Commerce and Management, Assam Don Bosco University, Azara in collaboration with Gurukul Edutech on 10th August, 2020. The focus of the webinar was on creating awareness about right investment practices so that one is enabled to make prudent choices and thereby, aids in nation building process.

## **Independence Day, 15 August 2020**

Independence Day 2020 was a very subdued celebration this year at DBIM. The occasion was solemnized by the Provincial, Guwahati Province, in the presence of Fr (Dr) P D John, Director School of Commerce and Management (DBIM), Fr Pojit Marak, Associate Director, DBI, Sr. Magdalene, and other resident staff of DBI. The celebrations began with the ceremonial hosting of the Indian Tricolor followed by the remembrance of the sacrifices made by our freedom fighters so that we can live free.

## **New student orientation, 15 September 2020**

A formal and solemn formal inauguration was held online via Zoom meeting on September 15, 2020 at 3:30 p.m. In spite of the uncertainties surrounding the Covid19 situation, the MBA department decided to start engaging students, as they took admission, in the academic process.

The short program began with Mr. Chandan Dutta, MBA In-charge, introducing Fr (Dr) P D John, Director, of the school of Commerce and Management, to the new admits and passing on the session control to Fr P D John. Fr Director began by providing the viewers with a background of the Salesians of Don Bosco and their contributions to the educational landscape of NE India. He then introduced the members of faculty and staff. This was followed by the new students introducing themselves and culminated with a short Q&A session. The program concluded at 5:00 p.m.

## **Vigilance Awareness Week, 24-31 October 2020**

Don Bosco Institute of Management observed the Vigilance Awareness Week 2020 with the theme “Integrity- A permanent commitment” from October 24 – 31, 2020. The event was conducted to affirm our student’s commitment to promotion of integrity and probity in public life through citizen participation.

All staff and students renewed the Integrity pledge whereby they reaffirmed their conviction that they would uphold their highest standards of honesty and integrity and to abide by the rule of law in all walks of life. Students also submitted essays on the life and work of Sardar Patel.

## **National Education Day, 11 November 2020**

11th November, the birth anniversary of Maulana Abul Kalam Azad, great freedom fighter, eminent educationist and the first Union Minister of Education was observed as the National Education day.

Students were asked to make presentations on the life and work of Maulana Azad during their online classes.

## **MoU Signing between Institute of Company Secretaries of India (ICSI) and Assam Don Bosco University, 20 November 2020**

A signing ceremony of the Memorandum of Understanding (MoU) between Institute of Company Secretaries of India (ICSI) and Assam Don Bosco University took place on 20th November, 2020 at the Azara Campus. CS Bishal Harlalka, Chairman, North Eastern Chapter of EIRC of ICSI and Fr. Joseph Nellanatt, Pro VC, ADBU signed the MOU for and on behalf of ICSI and ADBU in the presence of the president, ICSI. The MOU highlights the mutual cooperation between both the organization to facilitate specialized training and education especially in the field of Commerce and Management.



## **Constitution Day 2020, 26 November 2020**

The Government of India observes 26th November as 'Constitution Day' or 'Samvidhan Divas' as India's Constitution was adopted on November 26, 1949, and came into force on January 26, 1950, marking the beginning of a new era in the history of India.

Online debate and quiz competitions were organized to enhance the knowledge of the students about the Constitution of India and how it was promulgated.

## **3-Day NSS Activities by the students of Management, 1 - 2 and 5 March 2020**

These activities marked the beginning of on campus activities for our students after a year-long break owing to the Covid19 pandemic. These activities were carried out on the following three themes.



- Day 1** – Covid Sensitization Drive
- Day 2** – Plantation and cleanliness drives
- Day 3** – Personal Hygiene drive

**Day 1 – Covid Sensitization Drive:** Around 10 MBA 2nd year students visited the Lal Singh Academy High School in the vicinity to carry out a Covid Sensitization Drive for the students of 9th and 10th standards of that school. They were accompanied by the Admin Officer, Ms. Priyanka Singh and Librarian Mrs. Gayatri Hazarika. At the end of the program, masks, sanitizers, and refreshment were distributed among the students.

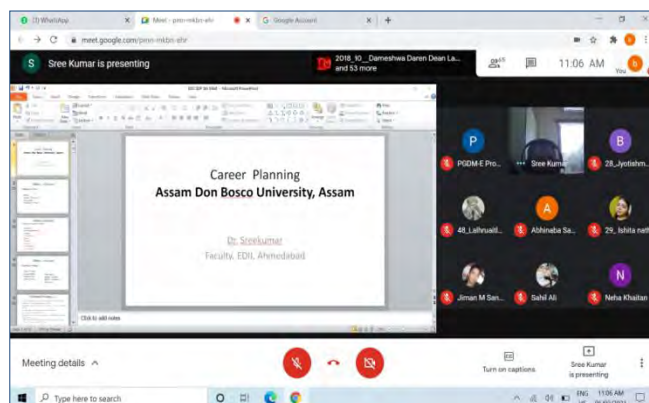
**Day 2 – Plantation and cleanliness drives:** All the 2nd year MBA students participated in the plantation drive at a farm located at about 1.5 kilometers from the institute. The next activity was the cleanliness drive. This drive was limited to the campus and its immediate surroundings.

**Day 3 – Personal Hygiene drive:** For the final NSS activity, 14 female students from the MBA 2nd year batch, along with the Admin Officer and the Librarian of DBIM had visited the Snehalaya Orphanage at Beltola.

27 girls of the orphanage took part in the activity, one of whom had the Down Syndrome. They were aged between 12 and 18 years. A short introductory session took place between the girls of the orphanage and the students of DBIM in order to make the session more comfortable and homely.

The students of DBIM also stepped forward to dance along with the girls of the orphanage to bring smiles to their faces. Towards the end, stationery items, sanitary pads, hygiene materials, clothes and shoes were distributed among the girls at the orphanage.

### **Workshop: Entrepreneurship as a Career, 5 March 2021**



On 5th March, 2021, Dept. of Commerce & Management, ADBU organized a workshop on “Entrepreneurship as a Career” at the Azara Campus of the University.

### **Orientation Workshop: Techniques of Constructing Questionnaire and Its Analysis for the Purpose of Project, 9 March 2021**

The Dept. of Commerce & Management, ADBU organized an orientation workshop on “Techniques of constructing questionnaire and its analysis for the purpose of project” on 9th March, 2021. The programme consisted of presentation and explanation of various guidelines to design an effective questionnaire and hands on practice of designing questionnaire in tools like Google forms, survey monkey etc.

### **International Women’s Day, 8 March 2021**



DBIM observed the “International Women’s Day” in a delayed but short, sweet, and grand celebration during the afternoon on March 9. The chief guests of the event were all the women staff of DBI, and DBIM.

Ms. Preetisha Rynjah anchored the program. There were two powerful speeches by two lady students followed by two video presentations by Fr. (Dr.) P. D. John, Director School of Commerce and Mangement, to showcase the power of women. The first video showed how women can do everything

that men can and more. The second video was a tribute to the women achievers of the world and DBIM. The program concluded with beautiful song and dance performances by the students. Mr. Dunipaya Sutnga proposed the vote of thanks.

### **Workshop: Essentials of Soft Skills for Business, 16 March 2021**

A workshop on “Essentials of Soft Skills for Business” was organized for the students of BBA 4th semester by the Dept. of Commerce & Management on 16th March, 2021. The session emphasized on the importance of the set of soft skills like Communication Skills, Leadership, Creativity, Interpersonal Skills etc.

### **Webinar: Financial Education, 26 March 2021**

A webinar on “Financial Education” was organized by the Dept. of Commerce and Management, ADBU, Azara in collaboration with SEBI on 26th March, 2021. The focus of the webinar was on creating awareness about right investment practices so that one is enabled to make prudent choices and thereby aids in nation building process.

## NSS Activities of ADBU

### Online Session on “Being Financially Prudent as a Youth”, 19 June 2020

On 19 June 2020, a webinar on “Being Financially Prudent as a Youth” was organised by Assam Don Bosco University in collaboration with Unnat Bharat Abhiyan (UBA) Unit and National Service Scheme (NSS) Unit of Assam Don Bosco University. According to studies, the young generation rarely practices basic financial skills, such as budgeting, frugal spending, developing a regular savings plan, or planning for long term requirements.



The webinar was envisioned to help the youth force - students and working professionals - become financially literate in terms of expenditure and saving trends. Mr. Bijoy A. Sangma, Executive Director, Haggai India who is also a Research Scholar of Assam Don Bosco University shared his thoughts and ideas on acquiring the basic financial skills and becoming financially stable individuals. Mr. Sangma engaged the participants, over a hundred of them from different parts of the country and overseas, in self-reflection and encouraged them to realign their thoughts on being financially prudent by having a certain attitude or money mindset.

### Careers in Indian Army and Para Military Forces after Graduation, 26 June 2020

On 26 June 2020, a webinar on “Careers in Indian Army and Para Military Forces after Graduation” was organized by Assam Don Bosco University in collaboration with Unnat Bharat Abhiyan (UJBA) Unit and National Service Scheme (NSS) Unit of Assam Don Bosco University with the following objectives:

1. To provide career guidance to the youth who are interested in Military Force
2. To list available opportunities and eligibility criteria in the Military Force
3. To know the procedure to apply for various posts in the Military Force



The resource person for the programme was Lt. Col Johnson Thomas, Corps of Engineers, Indian Army. He gave brief details about the opportunities provided in the Indian Army Force, and also the procedure, and eligibility to be recruited to the service. Around 189 people registered under this programme. The session sparked an interest of solidarity and patriotism among the youth and even a few others who joined to be able to guide the youths who are under them.

### **Participation in the Republic Day Parade Camp at New Delhi, 1-31 January 2021**



A month-long camp was held at the national capital, Delhi for the Republic Day Parade 2021. Ms. Deepa Leima, Volunteer, ADBU NSS Cell participated along with the Northeast team was led by Dr. Satyabrata Baruah, Asst. Professor, B. Boroah College, Guwahati. The team comprised 18 volunteers i.e. 8 from Assam, 1 from Meghalaya, 5 from Arunachal Pradesh, and 4 from Tripura.

### **Special Camps at Nartap Village and Hatimura Village, Sonapur and Kamrup Metro in Assam, 20-27 Feb 2021**

Two one-week Special Camps were organised in the Nartap and Hatimura villages respectively. Both these villages are located in the Dimoria Development Block and the ADBU NSS Cell has been conducting regular activities there. The Special camp participants were accompanied by Victor Narzary, Programme Coordinator and Hazel Wahlang and Sebastian Daisinlung Kamsuam, Programme Officers and field supervisor Phungka Basumatary, Programme Officer, SRF Foundation. Following activities were carried out by the NSS Volunteers.



Following activities were carried out by the NSS Volunteers

SL No	Activity	Dates	Participants
1	Ice- Breaking Session	23rd Feb	156
2.	Fitness training for school children	24-26 Feb	67
3.	Cleanliness Drive	23-26 Feb	210
4.	Life skills training for school children	24th Feb	230
5.	Tree plantation and maintenance of trees	25th Feb	160
6.	Road Safety Awareness Workshop	26th Feb	47
7.	Games and Sports	26th Feb	300
8.	Socio-economic survey of widows	10th Jan-30th Mar	40
9.	Cultural Rally for Children's Right to education	27th Feb	600
	Concluding Ceremony	27th Feb	1000

### ADBU NSS Cell Response to Covid 19



Youtube Video on Voice of Youth amidst COVID-19 Outbreak: With the increasing rate of COVID 19 positive cases, fear, stress, burnout, abuse towards frontline workers also increases. It was only fair that as NSS volunteers, who always work the betterment of the community to do something. In this note they realized that the only way to spread awareness, hopes and support to others is only by compiling messages from many in a short video. The video represents the “Voice of Youth” and was made the Center for Development Studies and Initiatives in collaboration with the NSS Unit of Assam Don Bosco University. The video was uploaded in the University’s You Tube Channel so that it can be accessible by anyone from everywhere to give a message of hope amidst the CoVID-19 outbreak.

<https://www.youtube.com/watch?v=2oAnhPWEb4E>

### Awareness programmes, 1 March 2021

On the 1st of March (Monday), 2021, ten students of Don Bosco Institute of Management visited the Lal Singh Academy High School to carry out a Covid Sensitization Drive for the students of 9th and 10th standards of that school. They were accompanied by the Admin Officer, Ms. Priyanka Singh and Librarian Mrs. Gayatri Hazarika. They had arrived at the school at around 11 am and 30 students had attended the session. Mrs. Gayatri started the session by giving an introduction to the program and the same was carried forward by Preetisha Rynjah, Brinita Das and Kaushiki Thakuria respectively. The session was carried out in Assamese, where they spoke



about the importance of wearing masks, keeping sanitizers handy, washing hands, taking bath and personal hygiene overall. A brief detail was provided how to keep oneself safe during this pandemic situation. At the end of the program, masks, sanitizers and refreshment were distributed among the students. Further, during the lockdown period, there were hundreds of students and faculty who were at the forefront for relief mobilization, distribution and also for awareness programmes.

### **International Women's Day 2021, 8 March 2021**

The international women's day 2021 was celebrated by a Poster Campaign all throughout the campus. The Posters depicted issues, struggles and resilience of women all throughout the world. Further, a special lecture was organised by the NSS Cell and Dept. of Social Work. The theme of the international women's day 2021 was "CHOOSE TO CHALLENGE" and the theme of the interactive session was "Women in leadership: Achieving an equal future in a COVID-19 world."

In the interactive session on the occasion of the international women's day 2021 there were 53 participants including teachers, students, the alumni of Assam Don Bosco University and the speaker Smita Jacob. The session started with a brief introduction by Reshma Shreya Kancharla where she shared about the importance of women's day and welcomed everyone to the session. Dr. Riju Sharma (Director of Humanities and social sciences, Assam Don Bosco University) took over the session and gave welcome speech and wished everyone happy women's day. Dr. Riju Sharma introduced the speaker Smita Jacob.

Smita Jacob shared her experiences relating to the theme. The speaker shared that she focused on gender, livelihood and promoting of women and students. At the end of the session few questions were addressed and answered by Ms. Smita Jacob while sharing her experiences. At the end, Mr. Victor Narzary thanked the speaker and everyone for joining the session and making it an interactive session.

### **Workshop on Covid-19 Swachhta Programming, 20 March 2021**

One- day Workshop on Covid-19 Swachhata Programming organized National Service Scheme (NSS) Cell of Assam Don Bosco University (ADBU). The one-day programme was hosted at the Tapesia Campus of ADBU, Guwahati, India. There were 3 Technical sessions that were fundamental to understanding of NSS and its role in Swachh Bharat Abhiyan, Covid 19 Swachhata Programming-its concept, Design and implementation. The experts were from UNICEF Guwahati, Regional Director of NSS and ADBU NSS CELL Coordinators. The sessions included activities such as Yoga, Zumba session, March-past, cleaning drive, group activity on Post- Covid 19 Swachhata Programming, presentations and feedback.

Over a hundred NSS Volunteers and Programme Officers participated in the daylong Workshop on Post Covid 19 Swachhata Programming at the Tapesia Campus of Assam Don Bosco University (ADBU). Attending the inaugural session as the Chief Guest, Shri Dipak Kumar, Regional Director, Guwahati NSS Regional Directorate, said, "Change should happen within ourselves first when we want to see change in our society. We should involve ourselves wholeheartedly in community service- swachhata programme, blood donation, children's education, environmental protection, fitness, etc." He appreciated and thanked the NSS Volunteers for their selfless service and contributions during the Covid 19 lockdown period and its aftermath. He stressed the importance of swachhata in Indian society by saying, "Everyone should do their level best in taking our country closer towards achieving the Sustainable Development Goals.

## Unnat Bharat Abhiyan Activities of ADBU

### University's UBA Team won National Level Photostory Competition, 15 August 2020

The University's Unnat Bharat Abhiyan Team was one of the five winners in the competition 'Unnati ki kahani Chitro ki Jubani' - a photostory competition that showcased the best photographs taken by UBA Volunteers in the villages adopted. The competition was organized by Unnat Bharat Abhiyan in commemoration of the India's Independence Day celebration 2020.



The image shows a table titled "List of Participating Institute who won for Unnati Ki Kahani Chitro Ki Jubani". The table lists five winning institutions across different states of India, including Assam, Delhi, Tamil Nadu, and Uttar Pradesh. Each row provides the ADBU Code, Institute Name, State, District, and IC Name.

ADBU Code	Institute Name	State	District	IC Name
U-0049	Assam Don Bosco University	Assam	Kamrup Metropolitan District	IIT Guwahati
C-32837	Institute of Information Technology & Management	Delhi	Janakpuri, New Delhi	IIT Delhi
C-29045	M.A.M. College of Engineering and Technology	Tamil Nadu	Tiruchirappalli	TNAU CBE
C-41151	St. Mary's College (Autonomous), Thoothukudi	Tamil Nadu	Thoothukudi	GRI TN
C-21248	Vasanta College for Women, Raighat	Uttar Pradesh	Varanasi	IIT BHU

There were 827 participating institutions across India and each winning team received Rs 5000 cash award. These photo entries will be displayed in the Photo Album Book which will be presented to MHRD.

### School Management Committee Meeting, 20 September 2020

On 20th September 2020, the Unnat Bharat Abhiyan Unit of Assam Don Bosco University in collaboration with a local NGO Avighna had a meeting with the School Management Committee of the Arabari Lower Primary School to make them aware about the new National Education Policy, 2020. Points that were highlighted were the introduction of vocational training like carpentry, gardening, pottery etc. which will be incorporated in the syllabus to give student a first-hand experience, adult education and also about bagless day where student will be given exposure to the different programs. An Assamese version of the salient features of the NEP, 2020 was also distributed to the members of the SMC.

The concept of BALA (Building as Learning Aid) was also introduced to the SMC members. The adoption of BALA in the school was appreciated and encourage by the members as it will promote the quality of education and the academic performance of the children. The colourful and educative painting will make the children motivated to go to school and learn. The concept can be adopted as TLM (Teachers Learning Material) which allows teachers to adapt it according to the educational needs of their students. BALA can be done in floor, wall,



window, door, ceiling, platform, furniture etc. The architecture of school can be a resource for the teaching processes. The SMC members have also assured the team to encourage participation of the youth to help in implementing BALA in the school.

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### Menstrual Hygiene Management, 30 September 2020



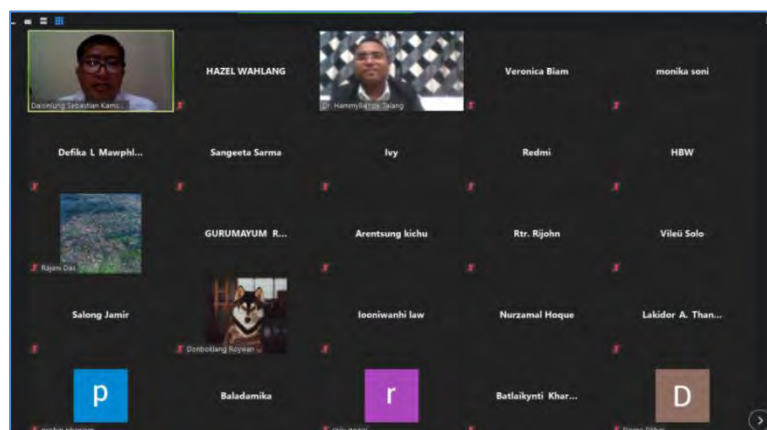
Women and girls who are in the age of menarche faced many challenges in managing hygiene during menstruation when there is not an enabling environment to do so. Notably, when they have difficulty in accessing water, sanitation, and/or healthcare, they will likely have difficulty managing their menstruation. When women and girls cannot manage their menstrual hygiene, it can negatively impact the extent to which they enjoy certain rights including those to education, work, and health (Human Rights Watch, 2017).

With an aim to promote menstrual hygiene management, the Unnat Bharat Abhiyan Unit, Assam Don Bosco University in collaboration with a local NGO Avighna distributed 80 sanitary napkins to the daily labourers and tea garden workers in Kamarkuchi, Assam on the 30th September 2020.

### Webinar on "Entrepreneurship Opportunity through Agriculture", 31 October 2020

The Unnat Bharat Abhiyan Unit, Assam Don Bosco University in collaboration with the Rotaract Club of Pine City organized Webinar on "Entrepreneurship Opportunity through Agriculture" on the 31st October 2020 with the following aim:

1. To bring awareness to the youth about the entrepreneurship opportunities in the agricultural sector
2. To give the participants an opportunity to interact with experts from this field.



Dr. Monika Soni, Asst. Professor, Department of Biosciences, Assam Don Bosco University gave a welcome address and also introduced the resource person, Dr. Hammylliende Talang, ARS, Scientist, Division of Horticulture-ICAR Research Complex for NEH Region. Dr. Talang effectively provides appropriate information about various agricultural activities that one can take up to promote their economic status. He showed a wide range of categories in agriculture which could be opted ranging from 1.Nursery development which again have two choices a) Fruits b) Vegetables, 2. Floriculture 3. Home Science which also teaches various methods of food storage for excessive and leftovers during the seasons 4. Mushroom cultivation 4. Vermicompost and 5. Fish production.

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He also touched on farming and integrated farming and how the participants can take it up as an income generating activity. The webinar also addressed various schemes, funding opportunities and training available under these categories to the public. After the session there was a Q&A session where participants had an interactive session with the resource person. About 115 participants registered for the programme.

### **Orientation Programme on Unnat Bharat Abhiyan, 19 November 2020**

The Unnat Bharat Abhiyan Unit of Assam Don Bosco University conducted an Virtual Orientation Programme on UBA as part of the Student Induction Programme on 19th November 2020 and Mr. Bibhuti Ranjan Bhattacharjya, Senior Technical Professional, UBA Cell, IIT Guwahati (Regional Coordinating Institute) was the resource person.

He highlighted the objectives of UBA and motivated the students to contribute to rural development even when they are still studying. He even gave few case studies of how the students develop different technology to help the rural people.

### **International Women's Day 2021 Celebration, 8 March 2021**

On the occasion of International Women's Day, the Unnat Bharat Abhiyan Unit of Assam Don Bosco University conducted a program in 523 No. Kamarkuchi Junior Basic School on 8th March 2021 with an aim to make the budding youths understands the importance of a women and her significant role in the society. The need for the short program was felt by the student volunteers because of the presence of domestic violence in the community and also because of women being the majority bread earners of the family.

The program started with an introduction from the student's volunteers and a short speech on the objectives of the program and the importance of women empowerment and why Women are celebrated on this day. After that the volunteers had short interaction with the students on their perception of women and few students shared that women are actually strong and they work hard in taking care of family at home, if only they were given the freedom like men, they would achieve so much more.



A short movie on women empowerment named "BETI" directed by Raja Ram Mukerji was also showed to raise awareness about the burning issue of female feticide that is still a reality in rural India. It weaves around a woman who is married to an orthodox Gujarati family who was suffered and fights back to gain respect and her right to live.

A short review of the movie was conducted to give an opportunity to the participants to share their views about the movie. The programme was concluded by showing the students picture of a woman on a chart and asked them to write why they appreciate the women in their life.

### **Meeting with University Volunteers on launching the Purple Craft Programme, 8 March 2020**

On 8th March 2021, the Unnat Bharat Abhiyan Unit launched the Purple Craft Programme with an aim to contribute to the promotion of the Sustainable Development Goal 5 "Gender Equality". The programme focused on creating a creative space for the rural women in collaboration with the university students to express themselves that will give an opportunity for the women to generate income from the activity.

Ms. Hazel Wahlang, Coordinator, UBA Unit, ADBU give a brief orientation to the volunteers about the programme, its importance and how their contribution would not help the women learn how to make ornaments, dream catcher, etc but it would also go a long way where they feel empowered because they can actually earn something from the programme.



Purple Craft Logo

The team discussed about the different skills that they have with regard to arts and crafts and they also listed out the requirements that they need to buy. The volunteers were exacted to start the programme and they were asked to keep practicing and learning different types of arts and crafts that is saleable so that the women can earn. They also discussed about the marketing strategies and decided that they will make an instagram page for the programme and the page name is `_purple_craft_` and the Hashtag is `#purplecraft` ♥.

## Purple Craft Meeting with Mahilapara Women, 12 March 2021

On 12th March 2021, the University volunteers through the Unnat Bharat Abhiyan Unit of Assam Don Bosco University organized the first meeting with a group of women in the Anganwadi Center of Mahilapara Village. The team mobilised the women present there and explained the aims and objectives of the project and how it would benefit them in the long run.



The team also explained how the project would be undertaken on days that the women want and also asked them to bring the materials which they have at home that are necessary for the craft. The team also had a short interaction with the women where they discussed how they

can learn to make the ornaments with the team and later on start their own business individually or a group and use it as a means of earning side income to provide for the family.

The student social workers had the second mobilisation on 15th March in the Anganwadi centre in Mahilapara with seven women present for the session including the anganwadi worker. During the session, they orient the women on how to make the ornaments by using audio-visual aids from YouTube video platform. After which, they discussed about the possible handmade craft they could create for the Purple Craft Programme and they also list out the logistic requirements for making ornaments.

## BaLA (Building as learning aids) Programme at Local School, 14 – 23 March 2021

Building as Learning Aid (BaLA) is an innovative approach under the aegis of the Right to Free and Compulsory Education (RTE) Act, 2009 that can help schools to become more children friendly. BaLA is about developing school spaces like the walls, floors, windows, corridors and the surrounding spaces as learning resources.

With the objective of promoting fun learning, the the Unnat Bharat Abhiyan Unit of Assam Don Bosco University in collaboration with a local NGO Avighna consulted with the Panchayat and school teachers for the selection of the school. After inspection of the primary schools the team decided to renovate the interior walls of Ural Lower Primary School by adopting the BALA concept from 14th – 23rd March 2021. The paintings were based on the challenge expressed by the students and teachers of the particular school.

## Basic Computer Literacy Course, 15 March – 3 April 2021



The Basic Computer Literacy Course is a free computer course initiated by the Unnat Bharat Abhiyan Unit of Assam Don Bosco University in collaboration with SRF Foundation to provide free basic computer knowledge to the school students, the drop outs and the community members. This programme enhanced the ability to understand and use digital technologies for meaningful actions with life situation.

The computer course was from 15th March 2021 – 3rd April 2021 and the instructor was from SRF and the classes were focussed on the following Course structure and the class was taken in the World on Wheels, the digital bus of SRF Foundation.

SN	Module Title	Learning Outcomes
1	Introduction to Digital Devices	Identifying and understanding various components, functions and applications of Computer
2	Operating Digital Devices	Understanding the basic features of a Computer Operating System
3	Introduction to the Internet	Learn about Internet, its applications and types of Internet connections
4	Communications and using internet	Create and access various features of an Email Account
		Introduction to social media tool and messaging services like Facebook, WhatsApp
		Use information tools like YouTube and Wikipedia
5	Application of internet	Search for various information over internet related to agriculture, education, etc
		Book tickets online



# In focus: ADBU Response to COVID-19 and Education during COVID-19

## 1. A Call to Prayer amidst Covid-19 Outbreak

Just Pray!

It's painful to see that parents cannot go near their children;

Children cannot listen to their parent's last words;

Humans are social beings but we're forced to isolate ourselves.

But amidst the COVID-19 outbreak we can show our care, our love, and our support through prayers from our own homes.

Assam Don Bosco University would like to spread hope by calling everyone to come together in Prayer:

Let's pray for protection, for all the health workers who are risking their lives every time they walk out of their homes to serve the victims.

Let's pray for healing to those who are tested positive for CoVID-19.

Let's pray for protection so that each of us will stay safe and will have the strength to fight against it.



**Link to the Programme:**

<https://www.facebook.com/AssamDonBoscoUniversity/photos/a.556467127747343/2932991056761593/?type=3&theater>

Also remember, WE HAVE TO TAKE CARE OF OURSELVES. IT'S THE ONLY WAY WE CAN PROTECT OTHERS.

## 2. Innovative Response to COVID-19

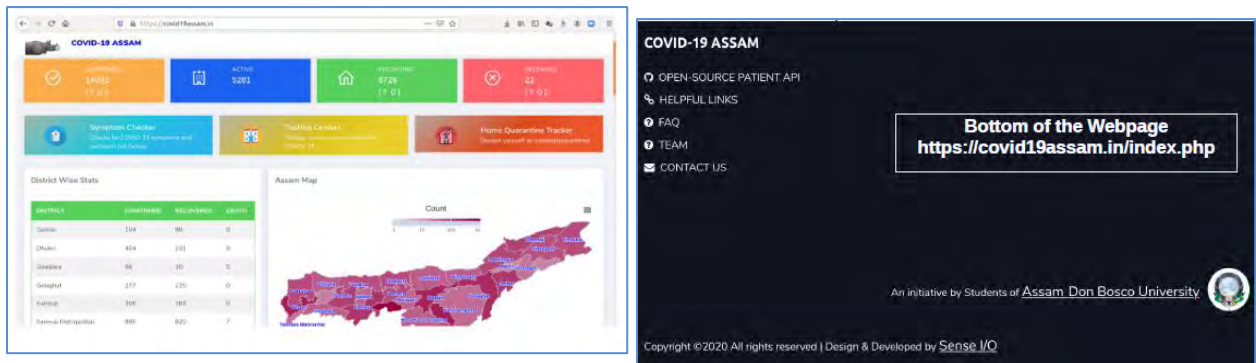
### 2.1 COVID-19 Trackers and Information Website

In an attempt to reach out to the common people of the state of Assam and also the non-residents of the state who are abroad during the coronavirus pandemic, a team of 4 students and 2 faculty members of Assam Don Bosco University came up with a website, covid19assam.in.

This team comprising of students Anuron Patgiri, Sanjiban Roy, Injamul Islam and Jayantajit Gogoi, and faculty members Rupesh Mandal and Nupur Choudhury, implemented the website



making it bilingual (both in English as well as in Assamese) so that the rural people from the vernacular medium can also get a good view of the entire situation prevalent in Assam.



The website provides the following functionalities.

It has a dashboard which gives information related to the state of Assam.

The website hosts the tracker of Covid19 infected patients throughout the districts of the state along with statistical graphs.

It has a symptom checker (bilingual-as per WHO standards) to identify the preliminary symptoms and potential risks that a user might be having in relation to his/her health condition.

It displays the testing centers of Assam for Covid19 along with the directions to reach the same.

It has a Home Quarantine Tracker which would enable the Home Quarantined users to declare themselves as isolated/quarantined which will be helping the users to identify the hotspots in a map based view and thereby use preventive measures while accessing those areas.

The website also comes with WHO directions for sanitization and protection against the pandemic.

It displays the latest tweets from twitter by Honorable Health Minister, Dr. Himanta Biswa Sarma which would give firsthand information to all the users regarding any new press releases.

The website also displays latest news articles covered by the state newspapers related to Covid19 of Assam.

The specialty of the website is its potential use by the rural mass of Assam because of incorporation of the Assamese language in addition to English.

The website is being accessed by people from all over the world and is gaining popularity among rural people as well for its Assamese version. This particular team of developers is also associated with Assam Startup-The Nest and are being currently incubated for their startup "Krisikarman-A SenseI/O product."

Bottom of the Webpage: <https://covid19assam.in>

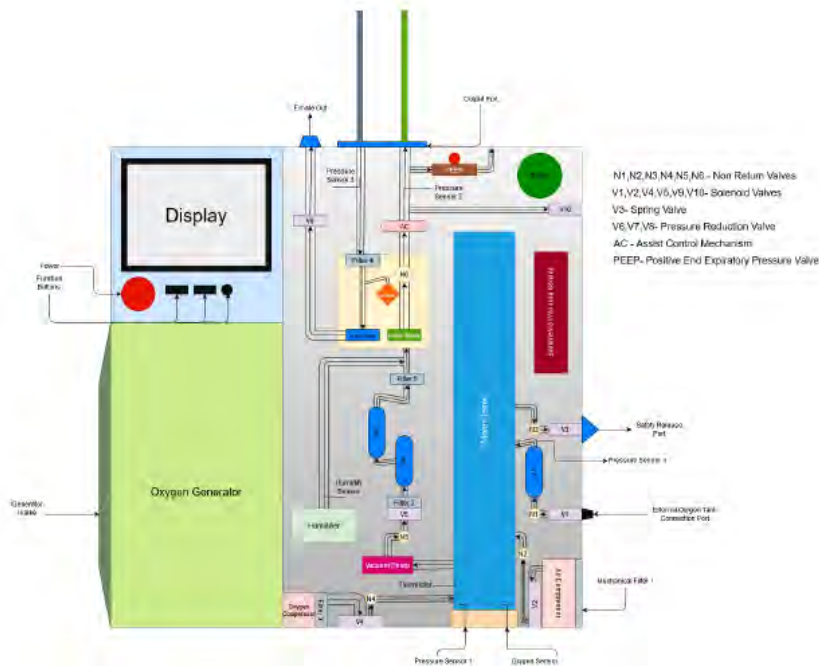
Link to the Website: <https://covid19assam.in/index.php>

Newspaper Clipping: <https://www.telegraphindia.com/north-east/coronavirus-outbreak-varsity-team-launches-website-in-assam/cid/1764134>

Link to the Report: <https://drive.google.com/file/d/1vicv54gZ0bf19Hnu1MoJngGN-cV5tVGR/view?usp=sharing>

## 2.2. Low-cost ICU Ventilator

Dr. Bobby Sharma, Associate Professor & Head, Dept. of CSE, Assam Don Bosco University Designed of a low-cost, simple, easy-to-use and easy-to-build invasive ICU ventilator that can serve at the time of emergency in case of severe acute respiratory syndromes like COVID-19. The project was selected under top 65 ventilators around the world out of 2639 participants, 1029 teams, 94 countries in a challenge organised by “The Montreal General Hospital Foundation and the Research Institute of the McGill University Health Center”, Canada.



Newspaper Clipping:

<https://www.infoans.org/en/sections/news/item/11461-india-innovative-lung-ventilator-designed-by-assam-don-bosco-university-professor>

<https://ius-sdb.com/india-innovative-lung-ventilator-designed-by-assam-don-bosco-university-professor/>

## 2.3 UVC Gloves

As per the direction given by The Ministry of Human Resource Development for Samadhan, two Mechanical Engineering students of Assam Don Bosco University have designed a special pair of Surface sanitization UVC gloves with potential to aid in the fight against COVID-19 developed by two students of the University.

This special pair of gloves will consist of UVC LEDs fitted in it's body connected to a battery. The far Ultraviolet C is a type of UV energy in 207-222 nm wavelength which can kill microorganisms and sanitize surfaces but cannot penetrate human skin. The working will be such that when power is supplied, the radiation emitted from the LEDs fitted in the gloves will sanitize the surface in its contact.

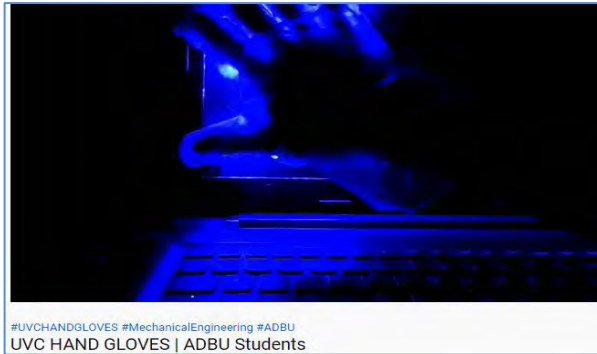
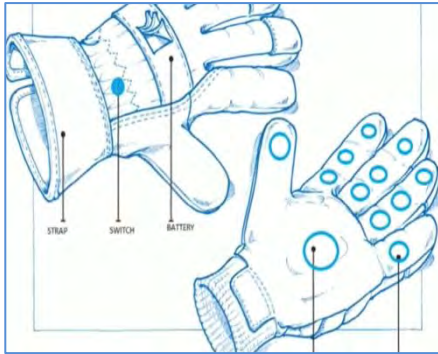
After experimentation of the idea we have come to a conclusion that the UVC gloves that we have designed can do the following very efficiently:

1. It can reduce workload of the cleaners during disinfecting areas caused by repeated wiping and spraying.
2. It can be used in sanitizing non waterproof areas.

- It becomes easy for the cleaners to reach all the corners due to the infusion of the UVC LEDs in hand gloves.

The advantages of our gloves are that:

- No requirement of skilled labours.
- It takes less time.
- It is cost effective in the long run.



#UVCHANDGLOVES #MechanicalEngineering #ABDU  
UVC HAND GLOVES | ABDU Students

News Clipping: <https://www.facebook.com/watch/?v=549648422340491>  
Link to the Video: <https://www.youtube.com/watch?v=9SGv176XeaM>  
Designed and experimented by: Priyanuj Mahanta & Dikshita Kalita

## 2.4 Preventive Measures Flyer of COVID-19 in Assamese and English

**কোভিড-১৯** হৈছে একটা নতুন ধৰণৰ ভাইৰাছ। ইয়াৰ পৰিষ্কাৰ কৰিব লাগিব আৰু ইয়াৰে বিস্তাৰ পৰা ৰোধ কৰিব লাগিব।

- সৰ্বশেষ হাতেৰে বা এলক'হল ভিত্তিক হেণ্ড সেনিটাইজাৰ আৰু পানীৰে হাত ধুই ল'ব লাগিব।
- একোনে আনজনৰ পৰা কমতঃ ১ মিটাৰ (পেচুটক) দূৰত্ব বজাই ৰাখিব।
- জনসংগম স্থানত পৰিহাৰ কৰিব।
- অপৰিষ্কাৰ হাতেৰে চকু, নাক আৰু মুখ স্পৰ্শ নকৰিব।

Source: <https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>  
Umat Bharat Abhiyan Unit, Assam Don Bosco University (U-0049)

**How to protect yourself and prevent the spread of Covid-19 disease:**

- Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water.
- Maintain at least 1 metre (3 feet) distance between yourself and others.
- Avoid going to crowded places.
- Avoid touching eyes, nose, and mouth.
- Cover your mouth and nose with your bent elbow or tissue when you cough or sneeze.
- Stay home and self-isolate even with minor symptoms such as cough, headache, mild fever, until you recover.
- Keep up to date on the latest information from trusted sources, such as WHO or your local and national health authorities.
- If you have a fever, cough and/or difficulty in breathing, seek medical attention, but call (if possible) by telephone in advance and follow the directions of your local health authority.

Source: <https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>

A document on Preventive Measures Related to Covid-19  
<http://web.dbuniversity.ac.in/university-instructions/>

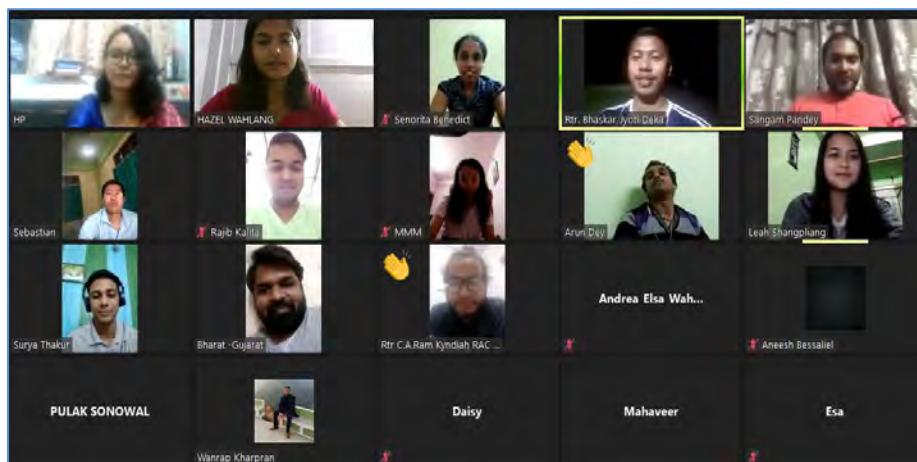
### 3. Reaching out through Virtual Platform Meeting

#### 3.1 Webinar on Handling Boredom and Workload during Lockdown

A Webinar on Handling Boredom and Workload during Lockdown was organized by Assam Don Bosco University in collaboration with Rotaract Club of Pine City, Shillong on the 13th of May 2020 at 6:00 P.M. The welcome speech was given by Rtr. Ram Kyndiah, President of Rotaract Club of Pine City, Shillong, and the resource person were Ms. Sampreeti Das, Asst Professor, Department of Psychology, Assam Don Bosco University. The session was conducted to help youths to cope with boredom because they cannot do the things that they use to, and with the workload that they have like assignments, etc.

The session was divided into three sections: a) Handling Boredom during Lockdown, b) Handling Workload during a lockdown, and c) Group Discussions about lockdown experiences. The session was attended by youths from different states of India.

The participants really appreciated the session as they learned how to manage their workload as a student, how to have a positive perspective towards the work that they need to accomplished, and also how they themselves can create an interesting environment and enjoy everything that they do. A lockdown journal was encouraged by the resource person, and she asked the participants to write what they do every day, and write it in a positive way.

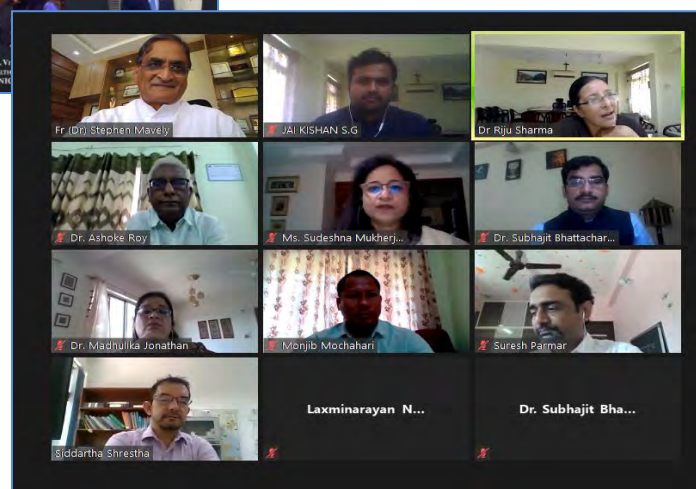


#### 3.2 Webinar on Risk Communication and Community Engagement (RCCE) and Combating Stigma Related to COVID-19 through partnership in North Eastern States

A webinar on Risk Communication and Community Engagement (RCCE) and Combating Stigma Related to COVID-19 through partnership in North Eastern States was jointly organised and supported by Assam Don Bosco University, UNICEF, World Health Organisation (WHO), USAID and PiramalSwathya. 125 participants from various institutions across North-eastern states participated in the webinar. The programme was inaugurated by Fr (Dr) Stephen Mavely, Vice Chancellor, Assam Don Bosco University.

Dr. Ashoke Roy, Director, Regional Resource Centre for North East States, Branch of NHR, MoHFW, was invited to deliver the key note address on Risk Communication and Communication Engagement (RCCE) related to COVID-19. Dr. Madhulika Jonathan, Chief, Field Office, UNICEF, Assam & North East, Dr.Subhajit Bhattacharjee, Sub Regional Team Leader for NE States, World Health Origination, Sudeshna Mukherjee, Vice President, Social and Behaviour Change Communication, Piramal Swasthya, Dr.Ritu Singh Chauhan, National Professional

Officer, WHO, Dr. Vivek Singh, Health Specialist, UNICEF, Laximinarayan Nanda, Child Protection Specialist, UNICEF, Suresh Parmar, C4D Officer, UNICEF, Dr .Riju Sharma, Assam Don Bosco University participated as key resource persons of the programme.



The key themes of the webinar include- National perspective: COVID-19 – challenges and issues in North-eastern context, combating stigma related to COVID-19, psychological support to adolescents and youth during COVID-19 pandemic, Risk communication and community engagement, importance of partnership in Northeast SBCC alliance, etc.

Newspaper Clipping:  
<https://northeastindia24.com/assam-webinar-on-risk-communication-and-community-engagement-rcce-and-combating-stigma-related-to-covid-19-through-partnership-in-north-eastern-states/>

#### 4. Reach-out through Video Platform like YouTube

##### 4.1 Awareness Video on COVID -19

During the COVID-19 outbreak, the university felt the need to make people aware about the pandemic and in order to reach more people, the Unnat Bharat Abhiyan Unit in collaboration with the Department of Psychology, Assam Don Bosco University initiated a “CoVID-19 Awareness Video” to enhance the awareness about the outbreak among the nearby community who’s common language is Assamese. The video was released with the aim to reach mass through an open platform, ADBU Guwahati YouTube Channel on May 12, 2020, and as on 1 June 2021 there were 12,747 views. To spread awareness in Assamese language was held at an immense priority. The video addressed factual information on COVID-19 and trusted sources to get information from.

The video was possible because of Ms. Sampreeti Das, Assistant Professor, Department of Psychology, Assam Don Bosco University, and Mr. Jai Gunasekaran, Assistant Professor, Department of Mass Communication.

### Translation into English

Greetings/ Nomoskaar, My name is Sampreeti Das. The Department of Psychology and Counseling, Assam Don Bosco University in Collaboration with Unnat Bharat Abhiyan, has brought to you some important things related to Covid-19. We hope that we will be able to help you in some way through this video. By now, we already know what Covid-19 is, that it is a virus, and it lives and grows inside another living being. I would like to mention how Covid-19 spreads. Nasal droplets of an infected person can fall on a person or nearby things while sneezing or coughing. Healthy people can be infected if droplets enter their body directly through the eyes, nose or mouth and if they touch their nose, mouth or eyes without washing hands after they touch places with the droplets. There is no evidence so far that it can travel through air. Therefore, maintain a distance of more than one meter from people in public places. The primary symptoms of Covid-19 are also known, yet I would take the opportunity to remind them. The primary symptoms of Covid-19 are fever, dry cough and difficulty in breathing. In such situations you can do the following things:

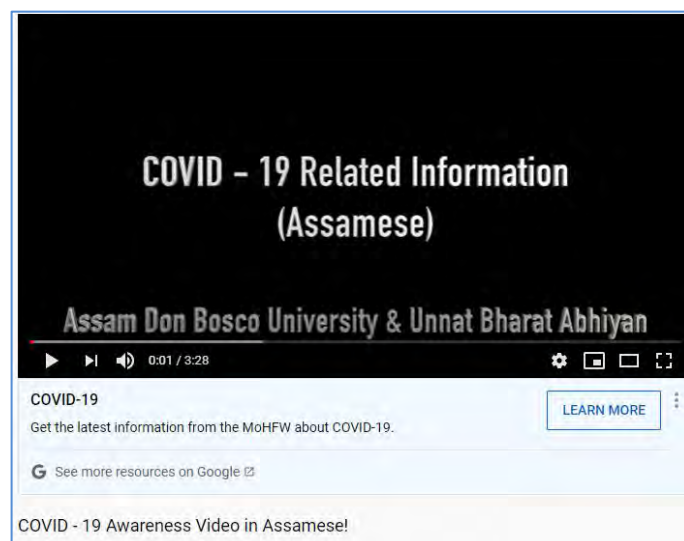
- a) If you have observed the symptoms in you, contact recognized testing centers.
- b) If you have been close to infected people or have come from a place where it has spread to the community, then seek medical advice.
- c) Cover your nose and mouth while sneezing. You can use a tissue paper, mask, scarf or the inside of your shirt sleeve (like this). Do not share your masks or scarf with others and keep them properly washed and clean.
- d) Cook meat and fish properly before eating
- e) Keep washing your hands as required, like, if you have touched a risky surface or people, before and after eating or feeding.

There are also certain things to be avoided, like:

- a) Do not go outside if you are unwell.
- b) If you have observed the symptoms in you, do not stay close to others
- c) If you have observed the symptoms on others, stay away from them.
- d) Do not enter home with the same clothes that were worn while outside.
- e) Do not touch the mouth, nose and eyes, do not touch surfaces, do not eat or feed, without washing exposed body parts with soap after coming back from outside.

If you want to know anything related to Covid-19, please contact the service helpline 104

Thank You!



Link to the Video: [https://www.youtube.com/watch?v=SN\\_y4GsfAgY](https://www.youtube.com/watch?v=SN_y4GsfAgY)

## 4.2 Taking Care of your Mental Health during Covid-19 lockdown

Another video was uploaded by the Unnat Bharat Abhiyan Unit in collaboration with the Department of Psychology, Assam Don Bosco University was on "Taking Care of Mental Health During COVID-19 lockdown" in the Assamese language aimed at enhancing the mental health of the community people by providing them strategies to handling the new normal with was impacted by the COVID-19 outbreak. The video was released with the aim to reach mass through an open platform, ADBU Guwahati YouTube Channel. To spread awareness in Assamese language was held at an immense priority. The video addressed factual information on COVID-19 and trusted sources to get information from.

The video was possible because of Ms. Sampreeti Das, Assistant Professor, Department of Psychology, Assam Don Bosco University, and Mr. Jai Gunasekaran, Assistant Professor, Department of Mass Communication.

### Translation into English

Greetings/ Nomoskaar, My name is Sampreeti Das. The Department of Psychology and Counseling, Assam Don Bosco University in Collaboration with Unnat Bharat Abhiyaan, has brought to you some words on mental health related to Covid-19. We hope that we will be able to help you in some way through this video. It has been seen that this time has had a serious impact on the mental health of people. Specially the frontliners who are on regular duty like Doctors, Nurses, other Medical Staff, Police Staff, Deliver Office Staff etc. There is a negative impact on the mental health of the frontliners during this time period. It is very natural that they and their family as well as general population will feel the stress. In such a time it is essential that you understand when you may need mental health services. The concept mental health takes 3 things at large into understanding: physical satisfaction, balanced/stable emotional regulation and adaptive social function. If you are feeling uneasy in any of these areas or any one of these areas, kindly contact a mental health professional without doubt.

Moreover, there has been a new mental health helpline service initiated by GPRF as Dhara helpline. The helpline can be beneficial for you to get help and support for your mental health issues. The phone number for the helpline will be shown at the end of this video and the helpline stays available from 4am to 12 pm, for 20 hours. Please consider that mental health issues aren't to be stigmatized. It is very natural that one may be stressed while being away from home, reduced physical activity and reduced face to face interaction. We hope that the facts mentioned in this video will guide you through the lockdown phase.

Thank You!



Link to the video:

<https://www.youtube.com/watch?v=-96ImKuYWaM>

#### 4.4 One-minute short film contest

A One-minute short film contest was conducted by the University and it was open to all the faculty and staff members, students, alumni and all friends and family. The objective of the contest was to engage students during the lockdown and themes of the competition were Arts and Crafts, Spreading Hope, Dance and Music, Positivity in Quarantine, science and Technology, and Creative Lockdown Stories.



### 5. Direct Relief Response to COVID-19

#### 5.1 Distribution of Food Packages

With many families being forced to stay at home to prevent further spread of Covid19, a new challenge was afoot – shortage of food. The University got permission from local authorities to distribute food packages to those who need the most. Families were identified by the local authorities; food packages were prepared by volunteers from the University and were distributed to families. Food packages were also distributed to stranded construction workers and tea garden workers.

We are grateful for the assistance from Sonapur Civil Administration led Ms. Jennifer Yasmin Choudhury, SDC, Sonapur Circle.



#### 5.2 Appreciation Cards for Frontline Workers

The alumni also conducted a Card Making Fund Raising Activities in two Children's home: William Lewis Boys Home and A W Thomas Girls Home. Under the leadership of Ms. Habadei



Kharsati (Alumni) and Ms. Camilia Lyngdoh Ryntathieng (Alumni) the children completed 135 cards/bookmarks.

The cards were then bought from the homes by the alumni for Rs. 10, Rs. 25, and Rs. 30/- depending on the type of card. Then Ms. Hazel Wahlang (Alumni) went and distributed the 135 cards and 70 Bible Verse Notes to the Department of Health and Police Station in Meghalaya as a sign of Appreciation for their commitment and an encouragement that their work has not gone unnoticed but they were considered as our HEROs (<https://www.facebook.com/cdsi.dbuniversity/posts/596729597707207>)



### 5.3 COVID-19 Care Centre

With the Pandemic and its month-long lockdowns, classes and all University activities transitioned to virtual mode and “work from home” but this transition provided an opportunity to the University to act as a socially responsible Institution. The University seized a chance to assist the State of Assam and its people by utilising its premises to care for the CoVID-19 affected people. In collaboration and cooperation with the Government of Assam, the University converted the Academic Block 2, Tapesia Campus as a COVID Care Center, accommodating 350 beds, during the pandemic. The Faculty and Staff in the Campused were

Newspaper Clipping: <https://www.sentinelassam.com/guwahati-city/assam-steps-up-fight-against-covid-19-with-2-new-dedicated-hospitals-at-sonapur-487941>

supportive in their own ways to contribute to the society in times of need.

### 5.4 In House Production Hand Sanitizer

In view of Covid-19, it was felt necessary to manufacture hand sanitizers for the benefit of university community. For the preparation of Hand Sanitizers, WHO recommended procedure was followed with modifications. We manufactured three types of hand sanitizers.

- Type-1: the ingredients were isopropyl alcohol, distilled water, hydrogen peroxide and glycerol. In which 70% isopropyl alcohol was maintained and Citronella oil(a few drops).
- Type-2: The ingredients were isopropyl alcohol, distilled water, hydrogen peroxide and glycerol. In which 70% isopropyl alcohol was maintained, Citronella oil (a few drops) and a recommended colour was added.
- Type-3: The ingredients were isopropyl alcohol, distilled water, Carbopol 940 and glycerol.



### 5.5 Sanitization of Building at Assam Don Bosco University

As per Covid 19 Protocol all the academic blocks of the university, Tapesia Campus were sanitized by our support staff taking all precautions that was instructed by the ministry of health services, government of Assam. The support staff were given PPE Kit, Hand gloves, Face shield mask along with 3 ply face mask. Sanitation is carried out on regular basis in every washrooms and hand sanitizer is given in each block and washrooms. Regular thermal scanning is also done in each block on August 2020.



As per Covid 19 Protocol all the academic blocks of the university, Tapesia Campus were sanitized by our support staff taking all precautions that was instructed by the ministry of health services, government of Assam. The support staff was given PPE Kit, Hand gloves, Face shield mask along with 3 ply face mask. Sanitisation is carried out on regular basis in every washrooms and hand sanitizer is given in each block and washrooms. Regular thermal scanning is also done in each block.

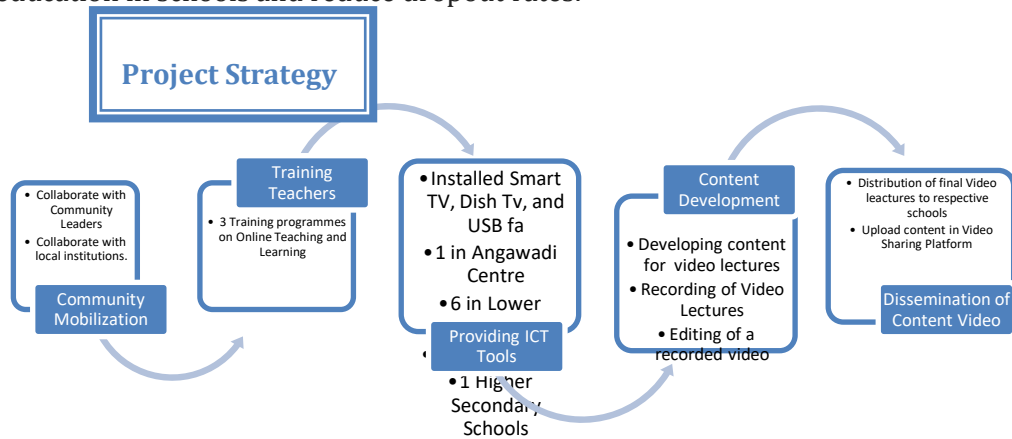
### 6. Bridging the digital divide: Providing access to Information and Communication Technology (ICT) tools for education

In this global public health crisis one major area of concern that has emerged in the neighbouring areas of the university is the inability to access ICT tools for education, as indicated above, causing a setback to online teaching and learning of the school going children. Enhancing education has always been a priority of the university and literacy programmes like 'Swastyayan' and 'Prajwal' have been initiated within communities where students and faculty are engaged in promoting education among the children in these communities. However, considering this situation of 'physical distancing' ADBU has come up with a project proposal

that can help bridge this digital inequality and enable students to adapt themselves to online learning and also maximize the societal impact in the surrounding government schools.

Through the project “Bridging the digital divide: Providing access to Information and Communication Technology (ICT) tools for education”, Assam Don Bosco University in collaboration with Don Bosco Network South Asia aims at achieving the following objectives:

1. Facilitating the holistic development of the children and youth through online teaching and learning.
2. To capacitate the teachers of these schools in the transition from the traditional class room mode to the online teaching mode.
3. To keep up the academic environment in these schools that will support to sustain education in schools and reduce dropout rates.



## 6.1 Community Mobilization

As part of community mobilization, the project team had meetings and discussions with community stakeholders in the Panchayat Office, Elementary Board of Education, School Management Committee, and with the head of the schools/centre to brief them about the project and its important.

The community mobilization started from the month of December 2020 till January 2021. The project team interacted with the teachers as well as the students as they were the direct beneficiaries of the project.

The Community Mobilization was conducted by Dr. Riju Sharma, Director, School of Humanities and Social Sciences, ADBU, Fr. Abraham Kanattu, Advisor, Center for Development Studies and Initiatives and Ms. Hazel Berret Wahlang, Coordinator, CDSI, Assam Don Bosco University.



## 6.2 Training Teachers

*Date: 21 December 2020, 18th & 27th January 2021.*

In the efforts to bridge the digital divide through providing access to ICT tools, the project team conducted a three-day Training Programme for the teachers on ‘Online Teaching and Learning’ on the 21st of December 2020, 18th January and 27th January 2021 at ADBU, University Service

Centre. Addressing the participants on the first day, Dr Riju Sharma, Director, School Of Humanities and Social Sciences, ADBU, welcomed all the participants and introduced the project team. In her speech, she also highlighted on the project objectives and exhorted the participants to work in collaboration towards contributing to the sustainable development goal of 'Quality Education' for the students.

The training programme aimed at equipping the teachers with skills for smooth transition from the traditional class room teaching to this online mode of education

Participants of the First Training Programme were teachers from the following School:

- Sonapur Higher Secondary School
- Arun Sankar Bhaduri Balika Vidyalaya (only Girls High School)
- Goriaghuli Lower Primary School
- 523 No. Kamarkuchi J. B. School
- Upper Tepesia Lower Primary School

Participants of the Second Training Programme were teachers from the following School:

- Karchia Lower Primary School
- Ural Lower Primary School
- Morangabari Pratamik Vidyalaya
- Kamarkuchi High School
- Hatimura Community Centre

Participants of the Third Training Programme were the faculty members from Assam Don Bosco University

#### **Resource Persons:**

1. Mr. Kaushik Bhuyan, Assistant Professor, Department of Mass Communication, Assam Don Bosco University.
2. Mr. Jaikishan SG, Assistant Professor, Department of Mass Communication, Assam Don Bosco University.
3. Mr. Rupam Das, Assistant Professor, Department of Mass Communication, Assam Don Bosco University.

#### *Technical Session 1: Learner Centric MOOCS: Creating Learning Dialogues (LeDs)*

This technical session was intended to introduce teachers to Learner Centric MOOCS (LCM). The LCM model guides a teacher in maintaining a learner-centric approach while planning, designing and conducting online classes. Key aspects include addressing the needs, goals and interests of diverse learners, social interaction and peer learning, and frequent opportunities for practice and feedback via formative assessment activities.

The primary focus of the training session was on creating Learning Dialogue (LeD). Each LeD consists of a short video providing conceptual knowledge, with explicit Reflection Spots for the learner to express prior conceptions or perform micro-practice. The teachers were shown ways to chunk a lecture into multiple LeDs as well as techniques to create engaging LeDs.

#### *Technical Session 2: Mobile Apps for Screen Recording and Editing*

The session focused mainly on hands-on training on the mobile applications which will help the school teachers to record themselves and also share the screen of their presentations/slides/pdf materials as such.

The key mobile applications were: Screencast-o-Matic, Awesome Screenshot, Screen recorder by Kimcy. These applications were chosen particularly to work even on basic smartphones. The trainer had a one-on-one session with all the teachers from downloading the applications, recording a test session of a minute, editing it, and sharing it through WhatsApp. The teachers

showed enthusiasm and eagerness to learn about various mobile applications and were fast learners. By the end of the technical session, they were able to do it themselves.



### 6.3 Providing Information and Communication Technology Tools for Education

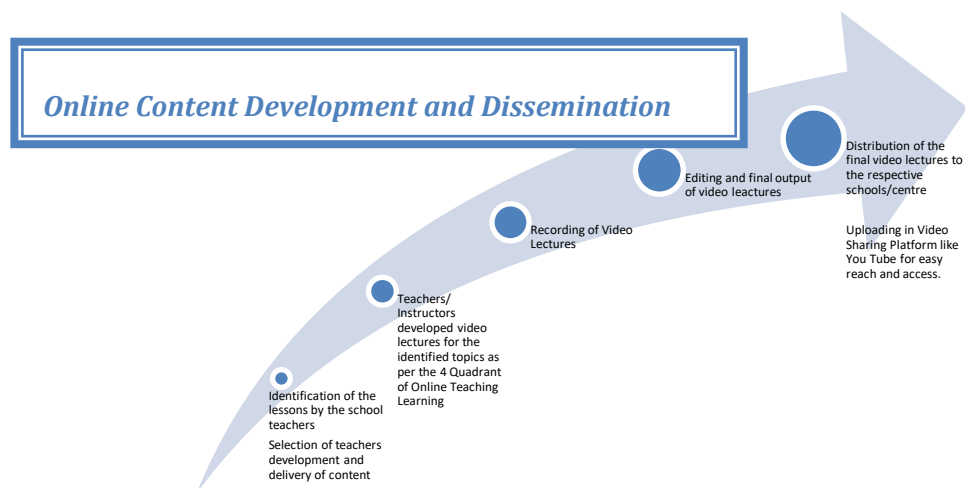
Through this project, we were able to set up Digital Classrooms in 9 schools and 1 Anganwadi Center. The ICT Tools that was provided were: Samsung LED-UA32T4350 AKXXL, Airtel Kit, EVM Pendrive and an extension cord for smooth functioning of the system. The Installation process was done in the month of February 2021 after all the teachers of the project areas completed their training programme on Learning System Management.



A team from Samsung Company and Airtel along with the University's team went to each school/center to install this equipment in consultation with the head and teachers of the school. The equipment was installed in a room with proper security, and which will be access by all the students of the school.

Self-management is the key focus of this project, so the technical team briefed the teachers about the maintenance and operation of the tools. They also informed the school that the Airtel Kit was recharged only for a year and the school will have to manage on their own thereafter. The school agreed to it and assured the team that they will take care of the maintenance from the school funds.

## 6.4 Content Development and Dissemination



The project followed the following strategy to ensure smooth, effective and quality development of video content and distribution to the target population.

The team visited the schools to collect the books and syllabus of the different classes. They also requested the teachers to identify the content for each class that will be taken up by the teachers/instructors. The content was identified and for the Higher Secondary students the teachers requested if it can be done on personality development so that it can be applicable to all the young students. The content was developed keeping in mind the local language because most of the schools selected were vernacular medium schools

The team selected the instructors and provided them with a list of contents that they can choose to work on and develop a content of less than 15 minutes each.

The video lectures were recorded from February 1 to February 28. The instructors were oriented on the four quadrants of online teaching and learning with special emphasis on the first quadrant which deals with content creation and delivery. Every lecture follows the model of Content-Reflection spot-Content.

Instructors were also given a general guideline on delivery techniques for video lectures. Each video lecture took an average of 2 hours for recording. All videos were recorded in the best quality possible.

The editing process started from March 1. Graphics, animations, cut-away, photographs, reference videos were added to compliment the content presented by the instructors. Sound

editing was done to enhance the audio quality. Each video took an average of 16 hours for completion.

Sl. No.	Name	Designation	Department
1	Dr. Sabiha Alam Choudhury	Asst. Professor	Psychology and Counselling
2	Dr. Chandita Baruah	Asst. Professor	Psychology and Counselling
3	Ms. Sampreeti Das	Asst. Professor	Psychology and Counselling
4	Ms. Procheta Mahanta	Asst. Professor	Psychology and Counselling
5	Ms. Pranami Barua	Asst. Professor	Psychology and Counselling
6	Sr. Mary Lena Baglary	Warden	Hostel VI
7	Dr. Ranjita Chanda	Asst. Professor	Education
8	Dr. Bonnie A. Crerar	Asst. Professor	Education
9	Mr. Birinchi Kumar Borual	Lab Assistant	Chemistry
10	Mr. Jugal Kumar Deka	Asst. Professor	Economics
11	Ms. Shilika Khanikar	Research Scholar	Chemical Sciences
12	Dr. Trisha Borgohain	Asst. Professor	English
13	Ms. Priyanka Kalita	Asst. Professor	English
14	Ms. Sagorika Kataky	Asst. Professor	English
15	Mr. Jaikishan S.G.	Asst. Professor	Mass Communication
16	Mr. Kaushik Bhuyan	Asst. Professor	Mass Communication
17	Ms. Hazel Berret Wahlang	Coordinator	Center for Development Studies and Initiatives



## Updates on Placement Activities at ADBU

Assam Don Bosco University has evolved for itself a clear-cut vision that defines its rationale, objectives and approach to excel in teaching, formation of individuals by offering support, making students ready for quality placements at the three vibrant campuses at Tapesia, Azara and Kharguli. The following organizations visited the University Campuses. Due the onset of Pandemic COVID 19, the Placements of students have been affected. However, Care is taken to ensure they're given sufficient training in fields that cater to their interest and can maximize their potential. Also, ADBU's courses are designed to bridge the gap between academia and employment for its students therefore hoping to see many being placed.

Company	Package LPA
ADANI ENTERPRISE	3
TATA CONSULTANCY SERVICES	3.37
GAPGEMINI	3
QUALITY QIOSK	2.25
COGNIZANT	4
BYJUS	6
BYJUS	10
COGNIZANT	2.7
EBIX	3.5
SOFTTECH SERVICES PVT LTD	6.25
ACCENTURE	4.5
SPEEDLABS	3
PAYTM	3.5
SAGAR STEEL	4
COLONEL SHISHUPAL SECURITY CONSULTANCY & SERVICES	3

## Research Activities of ADBU in 2020-2021

### Reports of Course Work 2020

The Course Work for the 2020 batch began on 15<sup>th</sup> July, 2020 with 64 (Sixty four) Research Scholars of which 62 were newly admitted and 2 from the previous batch (Repeaters). Of the 64 (sixty four) Research Scholars, 27 (twenty seven) were from the School of Humanities and Social Sciences, and 37 (thirty seven) were from the School of Science and Technology. At the start of the Course Work, a short Introductory Session was organized with the Hon'ble Vice-chancellor Fr. Dr. Stephen Mavelly, Assam Don Bosco University addressing the researcher on the importance and need of good-quality research, which Assam Don Bosco ventured in and look forward to. The pledge of the Doctoral Scholars on "integrity, pursuit and safety" was administered by the Registrar of Assam Don Bosco University, Fr. Dr. Johny Jose. The Course-work of 2020 was delayed and held on online platform due to the prevailing pandemic situation.



## Paper and Credit

The Assam Don Bosco University Ph.D., Course Work structure has 4 (four) papers, and each of the paper has 4 (four) credit with exception to Research and Publication Ethics of Publication, which has only 2 credit. The two credit paper was introduced to the Ph.D., Course-work as per the UGC regulations and mandate. Thus, the total number of credit for the Ph.D., Course Work was 14 (Fourteen).

Sl. No	Name of the paper	No. of Credit
1	Research Methodology	4
2	Subject Specific	4
3	Review of Literature	4
4	Research and Publication Ethics	2
<b>Total</b>		<b>14</b>

## Introductory Phase of the Course Work and Class Schedule

A two week long intensive class on research methodology was conducted with resource persons from within the University, with Prof. K.C. Kapoor and Dr. Uzzal Sharma as the principal course teachers respectively for the School of Humanities and Social Sciences, and Science and Technology. The week long classes with the resource persons are given below:

### Assignments and Monitoring

On completion of the 2 week long classes, the Research Scholars were put into contact with their respective departments for the Subject Specific activities and concerns. The Research Scholars were continuously monitored by their respective departments and by the principal teachers of the Course Work through numerous assignments. Since the completion of the intensive classes a Research Scholar was expected to submit 3 (three) assignments from the respective departments, 3 (three) other assignments for Research Methodology and other assignments - Quantitative Tools for Humanities and Social Sciences, Latex for Science and Technology, and Biostatistics for Biosciences. All these assignments were closely monitored and were subjected to evaluations.

In addition to the assignments, the Research Scholars were simultaneously engaged in review of literature under the supervision of their respective supervisor(s). A report of the Review of Literature was submitted through the guide by the Researcher which was subjected for evaluation. On completion of all the assignments and Review of Literature the Research Scholars were invited for classes, examination and Presentation of Review of Literature through online platform.

Class on Research and Publication Ethics were also conducted by Pro. Shakuntala Lasker. In the paper, the researchers were assessed through continuous assessment process – quiz, assignments, active participation of the students and a written examination at the end of the class.

### Concluding Phase of the Course Work

As cited above, once again intensive classes for a week was conducted as per the schedule. Along with the classes, activities of written examination and literature review presentation were also conducted.

## Examinations and Result Declaration

In addition to the assignments, the Research Scholars were put to written examination as per the University regulation for Ph.D. Course Work requirements. The examinations conducted were on Subject specific and Research Methodology. The written examinations carried a weightage of 40% while the assignments carried 60% weightage. The written examination was conducted online due to the prevailing pandemic situation, with strict and vigilant proctoring. The schedule for the Written Examination and Review of Literature Presentation is given below:

28/11/2020 (9:30 – 11:30) – Subject Specific Examination  
28/11/2020 (1:30 – 3:30) – Research Methodology Examination  
5/12/2020 – Last date for the Submission of Review of Literature Report  
9/12/2020 – 10/12/2020 – Review of Literature Presentation

Likewise, the Review of Literature with the report submitted through the research guide a presentation of the Review of Literature through online presentation was organized. Unlike the Subject Specific and Research Methodology papers, the Review of Literature distribution of mark was 50% weightage for the report of the Review of Literature and 50% weightage for the Presentation.

A demonstration and a rehearsal of the examinations and review of literature presentation were held well advance to ensure smooth conduct of the examinations. With assurance and confidence we can say the examinations were carried out with outmost satisfaction and no complain received from any quarter. .

On completion of all the requirements and examinations, the Ph.D. Course Work Examination was declared by mid December 2020. As per the regulation of the Assam Don University candidates securing 60% and above / CGPA of 6 and above out of 10 were declared successful. The pass percentage of the batch for 2020 Ph.D., Course work was 97.33%.

### Proposal Seminar: April 2020 – March 2021

S/N	Name	Department	Supervisor(s)	Research Topic	Date of Proposal Seminar
1	Alisha Lalljee	Psychology & Counselling	Dr. Chandita Baruah Dr. Avinash Desousa	Sexual behaviour In adolescence with intellectual impairment	16/10/2020
2	Lavina Daisy Menezes	Engilsh	Dr. Ashima Sona	Concept of hybridization in the Indian trilogy of V.S. Naipaul: A postcolonial perspective	16/10/2020
3	Alice Chackko	Psychology & Counselling	Dr. Sabiha Alam Choudhury	A study on emotional maturity and interpersonal relationship among catholic consecrated women: An intervention study	16/10/2020
4	Mukul Borthakur	Philosophy	Dr. Dominic Meyieho	A study of Tiwa To'rom (Religion): A philosophical perspective and interpretation	16/10/2020
5	Robin Thomas	Social Work	Dr. Lukose PJ	Social entrepreneurship – An ameliorating factor for the empowerment of rural women in Kerala – special reference to Idukki and	16/10/2020

				Wayanad districts	
6	M. Abdul Majid Ahmed	English	Dr. Ashima Sona	Humour, irony and satire in the novels of Chetan Bhagat	16/10/2020
7	Ashraful Hussain	English	Dr. Nabamita Das	Shakespeare's adaptation in Bollywood and Vishal Bhardwaj's trilogy: A socio-political study	16/10/2020
8	Augustin Joseph	Education	Dr. KC Kapoor	A study on Teacher Morale of the secondary and senior Secondary school teachers of Darjeeling hills in relation to some variables	16/10/2020
9	Nayanmoni Borah	Biotechnology	Dr. Vedant Bporah Dr. Ramendra Nath Sarma	Morphological and molecular diversity in aromatic rice of India	17/10/2020
10	Santasree Sarma Biswas	Biotechnology	Dr. Jayanti Datta Roy	In silico studies of phyto-compounds as efflux pump inhibitors on multi-dry resistance mechanism in mycobacterium tuberculosis	17/10/2020
11	Lal Omega Boro	Computer Applications	Dr. Gypsy Nandi	Early detection and classification of breast cancer using advanced soft computing techniques	17/10/2020
12	Antony AF	Management	Dr. Biju Mani Das	Job satisfaction of civilian personnel in inter service organisations: A study with special reference to military engineer services	17/10/2020
13	Jyoti Prasad Roy Choudhury	Physics	Dr. Samrat Dey Dr. Nayan Mani Nath	Theoretical and phenomenological studies on nanoscopic memristive systems	17/10/2020
14	Priyanuj Kalita	Physics	Dr. Monmoyuri Baruah and Dr. Dulen Saikia	Development of cost effective method for preparation of conducting ink based on carbon and synthesis of Ag-nanoparticles for flexible electronics	17/10/2020
15	Songeeta Singha	Biotechnology	Dr. J.N. Vishwakarma Dr. R. Thomas	Relative expression studies of virulent genes (stx, eae) of shiga-toxin producing <i>Escherichia coli</i> (STEC) in response to external stresses	17/10/2020
16	Ashraful Hussain	English	Dr. Nabamita Das	Shakespeare's adaptation in Bollywood and Vishal Bhardwaj's trilogy: A socio-political study	17/10/2020
17	Chayanika Dutta	Education	Dr. Ranjita Chanda	Issues and concerns on policy implementation in higher educational institutions of Kamrup (Metroplitan) district	18/01/2021

18	Saju Thomas	Education	Dr. KC Kapoor	Impact of Scouts and Guides programmes on human development in Don Bosco Schools of Assam: A study	18/01/2021
19	Maria Soosai S	Education	Dr. KC Kapoor	Attitude of stakeholders towards inclusion of students with visual impairment into mainstream schools of Assam	18/01/2021
20	Shajan Noronha D	English	Dr. Nabamita Das	A semiotic analysis of urban youth culture in select Indian English novels	18/01/2021
21	Gauri Nandan Saikia	Social Work	Dr. Riju Sharma	Psycho-social aspects that influence the reproductive health choice: A study of pregnant women living with HIV in Assam	18/01/2021
22	Nilufa Karim	Social Work	Dr. Lukose P. Jacob	An interventional study on families affected by alcohol dependence syndrome to assess family functions and its effects in promoting life coping skills	18/01/2021
23	Miranda Sonowal	Social Work	Dr. Jacob Islary	Identity dynamics in Assam: A sociological analysis of the Sonowal Kacharis	18/01/2021
24	Lakhima Hazarika	North East India Studies	Dr. Francis Fernandez	A historical study of the Deshi community of undivided Dhubri district of Assam with special reference to their socio-cultural life	18/01/2021
25	Lungailin Gangmei	North East India Studies	Dr. Joseph Puthenpurakal & Dr. Senstian Karottupuram	British Rongmei relations and its socio-cultural impacts (1828-1947)	18/01/2021
26	Longbir Augustine Kathar	Management	Dr. Biju Mani Das	Social media marketing strategies: How travel and tourism company use social media as a marketing tool	18/01/2021
27	Bidangshri Basumatary	Zoology	Dr. Yumnam Lokeshwor Singh	Ichthyofaunal diversity of bodoland territorial region, Assam	18/01/2021
28	Mebari Vanessa R. Dorphang	Zoology	Dr. Saibal Sengupta	A taxonomic review of <i>Amolops Cope</i> , 1865 in India	18/01/2021
29	Jakrimchi A. Sangma	Zoology	Dr. Bhavna Prishnee Baroowa	A study of the role of antimicrobial peptides in the humoral innate immunity of Eri Silkworm, <i>phisosamiaricini</i>	18/01/2021

30	Nizara Singha	Zoology	Dr. Y. Lokeshwor Singh	Systematics of ornamental fishes in lower Assam	18/01/2021
31	Dimpi Bora	Biotechnology	Dr. Probin Phanjom	Effect of ZnO nanoparticulates on the expression of BADH2Gene responsible for aroma in Joha Rice (Oryza Sativa Indica) an aromatic rice variety of Assam	18/01/2021
32	Rupesh Mandal	Computer Science & Engineering	Dr. Bobby Sharma	Design and analysis of flash flood prediction model using internet of things and machine learning	18/01/2021
33	Francis Iawphniaw	Physics	Dr. Samrat Dey Dr. Shantu Saikia	Study and understanding of noise assisted particle dynamics in periodic potential systems	18/01/2021
34	Anindita Tamuli	Commerce	Dr. Chayanika Sarma	Total quality management practices of medium enterprises: A comparative study of the service and manufacturing enterprises of Kamrup District, Assam	18/01/2021
35	Aju Kurian	Education	Dr. Zacharias Tirkey	A Study of Effect of Cognitive Research Trust Programme on Creativity and Achievement in Science of Class VIII Students of Don Bosco Schools of West Bengal and Sikkim	27/03/2021
36	Pundalillia Waikhom	Management	Dr. Biju Mani Das	Human Resource Management Practices and its Effectiveness in Small and Medium Enterprises in Assam with Reference to Kamrup District	27/03/2021
37	A. Binita Singha	Commerce	Dr. Biju Mani Das	Sustainability Practices of Private and Public Limited Companies of Assam	27/03/2021
38	Arindom Hazarika	Management	Dr. Rashimita Barua	New Venture Creation through Business Incubators: An Assessment of Technology Business Incubators and Agri Business Incubators Functioning in Assam	27/03/2021
39	Devanjal Bora	Botany	Dr. Raju Kumar Pegu	Study on the Diversity and Distribution of Monotypic Angiosperm Taxa in Assam (India) with Special Reference to Taxonomic Implications and Conservation need	27/03/2021

40	Victor Saikhom	Civil Engineering	Dr. Manoranjan Kalita	A Study on Utility of Unmanned Aerial Vehicle (UAV) Remote Sensing for Wildlife Habitat Assessment of Sangai in Keibul Lamjao National Park	27/03/2021
41	Labet Bankynmaw Marpna	Chemical Science	Dr. JN Vishwakarma	Synthetic Investigations on novel Fluorinated Organic Compounds	27/03/2021
42	Ritu Sarkar	Education	Dr. Zacharias Turkey	Effect of Technological Practices on the Academic Performance of Secondary School Stage Pupil-teachers and their Attitude Towards Technological Practices in Meghalaya	27/03/2021
43	Avijit Sarkar	Education	Dr. Tania Sur Roy	Gamification in Education: A Study on its Effectiveness in Teaching Mathematics at the Secondary Level	27/03/2021
44	Marma Sangma	Philosophy	Dr. Dominic Meyieho	A study of environmental ethics of the A'chiks: An emic philosophical perspective vis-à-vis folklore-legends, myths and songs	27/03/2021
45	Anabil Goswami	Management	Dr. Rashmit Barua	Sustainability and competitiveness of small pig farms of Assam	27/03/2021

### Pre-submission April 2020 - March 2021

S/N	Name & ID	Department	Supervisor(s)	Title of the Thesis	Date of Pre-submission
1	Jessy MJ DU2016PHD0013	Social Work	Dr. Riju Sharma	Effectiveness of life skill training program to enhance mental health of young people: An intervention study of Kerala	12/08/2020
2	Dominic PT DU2014PHD0060	Social Work	Dr. Molly K.	A participatory research to understand farmers' suicide in India: A case study in Wayanad district Kerala	12/08/2020
3	Joby Mani DU2012PHD0017	Social Work	Dr. Riju Sharma	Role of rural tribal women in household decision making: A comparative study of self-help group and non-self-help group tribal women	12/08/2020

				involved in micro credit and micro enterprise activities of Goalpara district of Assam	
4	Mitra Das DU2015PHD0033	North East India Studies	Dr. Tiluttoma Baruah	Social and environmental dimensions of tribal health – A study among the Monpas of Arunachal Pradesh	13/08/2020
5	Kuntal Sarma DU2015PHD0029	North East India Studies	Dr. Tiluttoma Baruah	Revivalism, ethnicity and identity among the Tai Khamyangs of Assam with special reference to Charaideo district	13/08/2020
6	Marie Kalita DU2015PHD0003	North East India Studies	Dr. BK Das	A study on private higher educational institutions affiliated to Gauhati University up to 2017 of Kamrup (M) district	14/08/2020
7	Agnes Humtsoe DU2017PHD0016	Education	Dr. KC Kapoor	Awareness and attitude towards human rights education in relation to cognitive and non-cognitive variables among the pupil teachers of B.Ed. programme in Nagaland: A study	14/08/2020
8	Vidhya DS DU2014PHD0050	Electronics and Communication Engineering	Dr. Manjunath Ramachandra	Efficient realization and verification of mixed signal logic with differentially fed neural networks	17/08/2020
9	Chandra Kanta Bhattacharjee DU2015PHD0042	Biotechnology	Dr. PK Borah	Impact of micro-RNA on inflammasome activation to understand the pathogenesis of diabetic nephropathy	17/08/2020

				among type 2 diabetic mellitus individuals	
10	Bijit Debbarma DU2013PHD0006	Management	Dr. KS Chakraborty	Marketing of handloom products produced through clusters: A case study of Tripura	18/08/2020
11	Francis Sebastian DU2015PHD0030	Management	Dr. Sam Thomas	The impact of mirror neuron based cause related marketing communication on customer attitude towards corporate image in India	18/08/2020
12	Johnson KP DU2017PHD0026	Social Work	Dr. Riju Sharma	A study on the mental health of senior secondary school students in Kerala in relation to spiritual well-being and social support	14/10/2020
13	Poly Varghese DU2014PHD0056	Social Work	Dr. Melvil Pereira and Dr. Joseph Xavier	Improved health security through RSBY - A study on the Munda tribe in the State of Jharkhand	14/10/2020
14	Paul Punii DU2012PHD0003	North East India Studies	Dr. Dominic Meyieho	The Poumai Naga folklores: A historico-cultural study and identity formation through folktales, agricultural feasts, social organizations and customary laws	14/10/2020
15	Kumaresh Sarma DU2013PHD0030	Electronics and Communication Engineering	Dr. Sunandan Baruah	Metamaterial and nanometamaterial based antenna design for wireless communication	15/10/2020
16	Bornali Bora Patowary DU2013PHD0026	Electrical and Electronics Engineering	Dr. Shakuntala Laskar	Development of CSA doped PANi-Ta <sub>2</sub> O <sub>5</sub> based Chemi-resistors and OFETs for NO <sub>2</sub> gas detection at room temperature	15/10/2020
17	Tapu Ghosh DU2015PHD0041	Biotechnology	Dr. Keshab Barman and Dr. Laishram I.	Isolation and characterization of ribosome in	15/10/2020



			Singha	activating protein from <i>Trichosanthes dioica</i> with anti-cancer properties	
18	Suraj Marathe DU2014PHD0048	Mechanical Engineering	Dr. Carmo Quadros	Application of six sigma methodology to increase the overall performance of hydraulic pressure die casting machinery and the process	19/01/2021
19	Monimugdha Bhuyan DU2015PHD0011	North East India Studies	Dr. Birinchi K. Medhi	Rice culture among the Assamese Hindus in a rural context of Assam: An anthropological insight	19/01/2021
20	Davis KV DU2013PHD0034	Education	Dr. Umarani Pappuswamy	Information and communication technology in teaching-learning in Meghalaya	19/01/2021
21	Raffealla Nongrum DU2013PHD0014	Biotechnology	Dr. RN Bhuyan	A study on genetic variation using molecular markers, morphometric characters, ultrastructure of gonada and chromosome among two different species belonging to the genus: <i>Neolissochilus</i> of Meghalaya, India	19/01/2021

**Ph.D. Degree Awarded: April 2020 – March 2021**

S/N	Name of the research scholar	Title of the thesis	Department	Convocation
1	Kakoli Das Kalita	Fishing technologies and associated cultures of communities in North Western Assam	North East India Studies	Convocation 2020
2	Jaison Varghese	Social survival of Chakma settlers in North East India: A case of Arunachal Pradesh	Social Work	Convocation 2020
3	MC Rasmin	Struggle of community radio in Sri Lanka: Status of community ownership and legal recognition	Mass Communications	Convocation 2020
4	Purchila Jamir	A comparative study of indigenous	Comparative	Convocation 2020

		religious beliefs and Baptist Christian beliefs among the AOs in Nagaland	Religion	
5	Rosily TE	A comparative study of the strategies followed by Salesian and model schools in Andhra Pradesh and Telengana in developing life skills in students	Education	Convocation 2020
6	KJ Antony	Symbolism in religion: Its origin and importance in theologizing'	Comparative Religion anykj@yahoo.com	Next Convocation
7	Thomas MJ	The impact of internet use on the ministry of the young and senior clergy in India: An exploratory-analytical study	Psychology and Counselling mjtomssp@gmail.com	Next Convocation
8	Ashit Kumar Paul	Contribution of Neo-Assamese Muslims to the agricultural development of Assam with special reference to Kamrup district	North East India Studies paulashit4@gmail.com	Next Convocation
9	Mintu Bhattacharya	Intellectual disability: Students, parents coping competencies for inclusive education - A study of Kamrup district in Assam	Education mints17@gmail.com	Next Convocation
10	Aparup Sharma	Modeling a traffic accident management system of Assam - Preventive measures, in situ management, trauma care centres and post trauma management	Commerce and Management aparup_sharma@yahoo.in	Next Convocation
11	Joseph Mathew	Social entrepreneurship and social value creation by A'King Nokmas among the Garos of Meghalaya	Management chettanyjose1993@gmail.com	Next Convocation
12	Mitra Das	Social and environmental dimensions of tribal health - A study among the Monpas of Arunachal Pradesh	North East India Studies mitradas2011@rediffmail.com	Next Convocation
13	Kuntal Sarma	Revivalism, ethnicity and identity among the Tai Khamyangs of Assam with special reference to Charaideo district	North East India Studies 321kuntalsarma@gmail.com	Next Convocation
14	Rose Mary Koch	Impact of ethnic conflict on the high school students with special reference to Kokrajhar district in Bodoland territorial area districts (BTAD), Assam	Education kochrosemary00@gmail.com	Next Convocation
15	E. Manoj	Identity, developmental perspective and social change among the Pnar of Meghalaya	North East India Studies manuantosvd@gmail.com	Next Convocation
16	A. Nirmala	Community service learning and its impact on life skills development among school children	Education nirmalaibvm@gmail.com	Next Convocation

17	Marie Kalita	A study on private higher educational institutions affiliated to Gauhati University up to 2017 of Kamrup (M) district	North East India Studies mariekalita91@gmail.com	Next Convocation
18	Agnes Humtsoe	Awareness and attitude towards human rights education in relation to cognitive and non-cognitive variables among the pupil teachers of B.Ed. programme in Nagaland: A study	Education agneshumtsoe@gmail.com	Next Convocation
19	Bornali Bora Patowary	Development of CSA doped PANi-Ta <sub>2</sub> O <sub>5</sub> based Chemi-resistors and OFETs for NO <sub>2</sub> gas detection at room temperature	Electrical and Electronics Engineering borabornali@yahoo.co.in	Next Convocation

## University at a Glance: Statistics

Journal title	Editors
Journal of Northeast Indian Cultures	Dr. Dominic Meyieho Assistant Professor, Department of Education
ADBU Journal of Engineering	Prof. Shakuntala Laskar Professor, Department of Electrical and Electronics Engineering
The Journal of Development Practice	Dr. Jacob Islary Assistant Professor, Department of Social Work
Journal of Applied and Fundamental Sciences	Dr. Samrat Dey Assistant Professor, Department of Physics
Journal of Management in Practice	Mr. Chandan Dutta Assistant Professor, Department of Management
ADBU Journal of Electrical and Electronics Engineering	Mr. Jesif Ahmed and Mr. Bikramjit Goswami Assistant Professors, Department of Electrical and Electronics Engineering

### PROGRAMMES OF STUDY

There are currently 19 graduate programmes, 19 post-graduate programmes, and 24 doctoral programmes in the university. The details are given in the chart below:

Sl. No.	Programmes	Degree and Discipline
<b>Undergraduate Programmes</b>		
<b>School of Technology</b>		
1	Bachelor of Technology	BTECH - Civil Engineering
2	Bachelor of Technology	BTECH - Mechanical Engineering
3	Bachelor of Technology	BTECH - Computer Science and Engineering
4	Bachelor of Technology	BTECH - Electrical and Electronics Engineering
5	Bachelor of Technology	BTECH - Electronics and Communication Engineering
6	Bachelor of Computer Applications	BCA - Computer Applications
<b>School of Commerce and Management</b>		
7	Bachelor of Commerce	BCOM
8	Bachelor of Business Administration	BBA
<b>School of Humanities and Social Sciences</b>		
9	Bachelor of Arts	BA (Honours) - Economics
10	Bachelor of Arts	BA - Philosophy
11	Bachelor of Arts	BA (Honours) - English
12	Bachelor of Arts	BA (Honours) - Psychology
13	Bachelor of Arts	BA (Honours) - Education
14	Bachelor of Arts	BA (Honours) - Mass Communications
<b>School of Fundamental and Applied Sciences</b>		
15	Bachelor of Science	BSC (Honours) - Physics
16	Bachelor of Science	BSC (Honours) - Chemistry
17	Bachelor of Science	BSC (Honours) - Mathematics
<b>School of Life Sciences</b>		
18	Bachelor of Science	BSC (Honours) - Botany

19	Bachelor of Science	BSC (Honours) – Zoology
<b>Post Graduate Programmes</b>		
<b>School of Technology</b>		
1	Master of Technology	MTECH - Computer Science and Engineering
2	Master of Technology	MTECH - Electrical and Electronics Engineering
3	Master of Technology	MTECH - Electronics and Communication Engineering
4	Master of Technology	MTECH - Civil Engineering
5	Master of Computer Applications	MCA - Computer Applications
<b>School of Commerce and Management</b>		
6	Master of Business Administration	MBA - Business Administration
7	Master of Commerce	MCOM
<b>School of Humanities and Social Sciences</b>		
8	Master of Social Work	MSW - Social Work
9	Master of Arts	MA Education (Educational Leadership)
10	Master of Science	MSC Psychology (Psychological Counselling)
11	Master of Arts	MA English
12	Master of Arts	MA Mass Communication
<b>School of Fundamental and Applied Sciences</b>		
13	Master of Science	Physics
14	Master of Science	Chemistry
15	Master of Science	Mathematics
<b>School of Life Sciences</b>		
16	Master of Science	Biochemistry
17	Master of Science	Biotechnology
18	Master of Science	Microbiology
19	Master of Science	Botany
20	Master of Science	Zoology
<b>Doctoral Programmes</b>		
<b>School of Technology</b>		
1	Doctoral Programme	PHD - Computer Science
2	Doctoral Programme	PHD - Civil Engineering
3	Doctoral Programme	PHD - Electrical and Electronics Engineering
4	Doctoral Programme	PHD - Electronics and Communications Engineering
5	Doctoral Programme	PHD – Mechanical Engineering
6	Doctoral Programme	PHD – Computer Applications
<b>School of Commerce and Management</b>		
7	Doctoral Programme	PHD – Management
8	Doctoral Programme	PHD – Economics
9	Doctoral Programme	PHD – Commerce
<b>School of Humanities and Social Sciences</b>		
10	Doctoral Programme	PHD - Social Work
11	Doctoral Programme	PHD - Mass Communication
12	Doctoral Programme	PHD - Language Studies
13	Doctoral Programme	PHD - Comparative Religion
14	Doctoral Programme	PHD - North East India Studies
15	Doctoral Programme	PHD – Philosophy
16	Doctoral Programme	PHD – Education
17	Doctoral Programme	PHD -Psychology and Counselling
<b>School of Fundamental and Applied Sciences</b>		
18	Doctoral Programme	PHD – Physics

19	Doctoral Programme	PHD - Chemical Sciences
20	Doctoral Programme	PHD – Mathematics
<b>School of Life Sciences</b>		
21	Doctoral Programme	PHD – Biotechnology
22	Doctoral Programme	PHD – Biochemistry
23	Doctoral Programme	PHD – Microbiology
24	Doctoral Programme	PHD – Zoology

## STUDENT DISTRIBUTION

Sl. No	Department	Bachelor's Programmes			Master's Programmes			Doctoral Programme			Total
		M	F	Tot	M	F	Tot	M	F	To	
1	Electronics and Communication	30	4	34	1	1	2	3	2	5	41
2	Electrical and Electronics Engineering	47	11	58	5	8	13	0	3	3	74
3	Computer Science and Engineering	156	38	194	4	0	4	1	5	18	216
4	Mechanical Engineering	64	5	69	0	0	0	2	0	2	71
5	Civil Engineering	183	94	277	4	5	9	2	0	2	288
6	Computer Applications	143	19	162	82	30	112	2	3	5	279
7	Management	58	24	82	39	30	69	1	0	11	162
8	Commerce	81	45	126	39	48	87	0	1	1	214
9	Economics	32	12	44	0	0	0	1	1	2	46
10	Social Work	0	0	0	49	13	181	1	8	19	200
11	Psychology and Counselling	49	13	187	7	44	51	3	1	4	242
12	Mass Communication	45	41	86	3	3	6	2	3	5	97
13	Education	21	26	47	8	13	21	9	1	19	87
14	English	75	13	206	18	61	79	5	5	10	295
15	North East India Studies	0	0	0	0	0	0	5	6	11	11
16	Comparative Religion	0	0	0	0	0	0	2	1	3	3
17	Philosophy	96	4	100	0	0	0	2	0	2	102
18	Physics	13	7	20	34	36	70	4	1	5	95
19	Chemistry	5	20	25	24	55	79	1	2	3	107
20	Mathematics	15	11	26	16	38	54	0	1	1	81
21	Bio Science	0	0	0	15	55	70	1	1	24	94
22	Botany	11	14	25	20	52	72	1	1	2	99
23	Zoology	19	26	45	23	57	80	2	0	10	135
	TOTAL	114	67	181	39	66	105	9	6	16	303
		3	0	3	1	8	9	2	7	7	9

**GRADUATING STUDENTS**

<b>PROGRAMMES</b>	<b>Degree</b>	<b>Graduated</b>	<b>Not eligible</b>
Bachelor of Technology (Computer Science Engineering), (Electrical and Electronics Engineering), (Electronics and Communications Engineering), (Civil Engineering) and (Mechanical Engineering)	<b>BTECH</b>	198	1
Bachelor of Computer Applications	<b>BCA</b>	42	0
Bachelor of Philosophy	<b>BA</b>	26	0
Bachelor of Commerce	<b>BCOM</b>	57	0
Bachelor of Arts in Economics	<b>BA</b>	2	0
Bachelor of Arts in English	<b>BA</b>	43	0
Bachelor of Arts in Education	<b>BA</b>	6	6
Bachelor of Arts in Mass communication	<b>BA</b>	13	0
Bachelor of Arts in Psychology	<b>BA</b>	39	1
Master of Technology (Computer Science Engineering)	<b>MTECH</b>	6	0
Master of Technology (Electrical and Electronics Engineering)	<b>MTECH</b>	4	0
Master of Technology (Electronics and Communications Engineering)	<b>MTECH</b>	2	0
Master of Technology (Civil Engineering)	<b>MTECH</b>	8	0
Master of Commerce	<b>MCOM</b>	36	1
Master of Business Administration	<b>MBA</b>	37	0
Master of Computer Applications	<b>MCA</b>	44	1
Master of Social Work	<b>MSW</b>	77	0
Master of Science in Psychology (Psychological Counselling)	<b>MSC</b>	25	0
Master of Arts in Education (Educational Leadership)	<b>MA</b>	11	0
Master of Arts in English	<b>MA</b>	36	0
Master of Science in Physics	<b>MSC</b>	23	0
Master of Science in Chemistry	<b>MSC</b>	29	0
Master of Science in Mathematics	<b>MSC</b>	19	0
Master of Science in Biotechnology	<b>MSC</b>	12	1
Master of Science in Biochemistry	<b>MSC</b>	7	0
Master of Science in Microbiology	<b>MSC</b>	2	2
Master of Science in Zoology	<b>MSC</b>	48	0
Doctor of Philosophy	<b>PhD</b>	15	0
<b>TOTAL</b>		<b>876</b>	<b>13</b>

**Overall Pass Percentage = 98.52%**

## GOLD MEDALISTS

Name	Type of Award	Programme	CGPA
Bibin Mathew Varghese	University Gold Medal	Bachelor of Arts (BA Honours) - Philosophy	9.83
Murchana Goswami	University Gold Medal	Bachelor of Arts (BA Honours) - English	8.22
Debarsheena Changkakati	University Gold Medal	Bachelor of Arts (BA Honours) - Psychology	8.5
Sushmita Bhowmick	University Gold Medal	Bachelor of Arts (BA Honours) - Mass Communication	8.31
Swaati Valerie Sanga	University Gold Medal	Bachelor of Arts (BA Honours) - Education	8.84
Vipin Joseph	University Gold Medal	Master of Arts (MA) - English	8.83
Bamin Anku	University Gold Medal	Master of Arts (MA) - Education	8.87
Martin Lallawmsiama Ralte	University Gold Medal	Master of Science (MSc) - Psychology	8.51
Amal M. Joy	University Gold Medal	Master of Social Work (MSW)	8.98
Sentimongla Lemtor	University Gold Medal	Master of Science (MSc) - Physics	8.6
Jnana Ranjan Das	University Gold Medal	Master of Science (MSc) - Physics	8.6
Lekhnath Sharma	University Gold Medal	Master of Science (MSc) - Chemistry	8.74
Vikuoazonuo Sekhose	University Gold Medal	Master of Science (MSc) - Mathematics	9.48
Vishal Das	University Gold Medal	Master of Science (MSc) - Biotechnology	8.42
Neha Paul	University Gold Medal	Master of Science (MSc) - Biochemistry	8.4
Sonali Yadav	University Gold Medal	Master of Science (MSc) - Microbiology	8.42
Archana Lama	University Gold Medal	Master of Science (MSc) - Zoology	9.02
Simranjit Singh Bedi	University Gold Medal	Bachelor of Technology (BTech) - Computer Science and Engineering	9.51
Supratik Sen	University Gold Medal	Bachelor of Technology (BTech) - Electronics and Communication Engineering	9.28
Sikhamoni Das	University Gold Medal	Bachelor of Technology (BTech) - Electrical and Electronics Engineering	8.52
Jemima Yasmin	University Gold Medal	Bachelor of Technology (BTech) - Civil Engineering	9.37
Bikram Paul	University Gold Medal	Bachelor of Technology (BTech) - Mechanical Engineering	9.09
R Lalhruaizela	University Gold Medal	Bachelor of Computer Applications (BCA)	9.23
Genevieve Chyrmang	University Gold Medal	Master of Computer Applications (MCA)	8.46
Happy Deori	University Gold Medal	Master of Technology (MTech)-Civil Engineering	9.03
Manshi Sangwan	University Gold Medal	Bachelor of Commerce (BCom)	9.02
Millennium Nongrum	University Gold Medal	Master of Commerce (Mcom)	8.95
Tanmoy Roy	University Gold Medal	Master of Business Administration (MBA)	9.15
Boqhito K. Chishi	Chancellor's Gold Medal		
Simranjit Singh Bedi	Vice Chancellor's Gold Medal		

## TEACHING STAFF



Faculty	Regular		Adjunct		Visiting	TOTAL
	Male	Female	Male	Female	Male	
Professor	18	1	27	3		49
Associate Professor	6	7	31	1	2	47
Assistant Professor	86	67	8	7		168
<b>Total</b>	<b>110</b>	<b>75</b>	<b>66</b>	<b>11</b>	<b>2</b>	<b>264</b>

#### **NON TEACHING STAFF**

NUMBER OF STAFF	MALE	FEMALE	TOTAL
Senior Administrative Staff	15	10	25
Library Staff	2	5	7
Office Staff	11	7	18
Technical Staff	24	2	26
Service Staff	16	27	43
<b>Total</b>	<b>68</b>	<b>51</b>	<b>119</b>