Dolphin Insight

The Quarterly News Bulletin of Dolphin (P.G.) Institute of Biomedical & Natural Sciences, Dehra Dun-248 007
{Recognised by UGC U/s 2 (f), Local Chapter NPTEL}

Volume : 09 | Issue : 03 | July - September, 2017

In This Issue:

Medhavi Chhatra Sammaan Samaroh

Dolphin institute felicitated toppers of Uttarakhand School Board

The News Daily Amar Ujala in collaboration with our Institute organized a programme on 9 July 2017 to felicitate the Uttarakhand Board toppers of 2017. Three toppers each of High School and Intermediate boards, from all 13 districts of the State (total 78) were felicitated on the occasion. Shri Trivendra Singh Rawat, Chief Minister of Uttarakhand, his Cabinet Ministers, Shri Madan Kaushik and Shri Subodh Uniyal, Chairman Dolphin Institute Shri Arvind Gupta and a large number of guests graced the occasion.

Shri Trivendra Singh Rawat advised the students to set their goals and make continuous efforts to achieve them. He said that it's noteworthy that today's young generation is very intelligent, and both the parents and the students should work together for a better future.

He emphasized that Uttarakhand is a mine of talents and there are a lot of capable students in every district. On getting adequate opportunities and guidance they will shine not only in state but in the county too. He emphasized that there is a need to search them out and polish. Shri Madan Kaushik congratulated the students for bringing laurels to their schools and districts. He appreciated the efforts of Amar Ujala and others to encourage the intelligent students. Shri Subodh Uniyal also appreciated the efforts of Amar Ujala, Dolphin (P. G.) Institute and others for felicitating the students. He mentioned that it will be particularly helpful in encouraging the students from far off places. Shri Arvind Gupta presented wrist watches and mementos to 65 toppers present on the occasion. Shri Gupta also gifted scholarships Cheques of Rs. 8400/- each to eight topper girls of Uttarakhand Board under the scheme

Shri Trivendra Singh Rawat, Chief Minister Uttarakhand, Cabinet Ministers Shri Subhodh Uniyal, Shri Madan Kaushik, Chairman Shree Arvind Gupta & other Guests felicitating toppers of Uttarakhand School Board

Mahamaya Maa Balasundari Devi Chatravriti Yojana run by Dolphin Institute, Dehradun. He announced that Dolphin Institute is always ready to help and uplift poor and socio-economically backward meritorious students. The Chief Minister of Uttarakhand appreciated the social work done by Dolphin Institute and appealed others to come forward and to follow the social commitment of our Institute.

Entrepreneurship Development Programme on Agriculture based Startups

An Entrepreneurship Development Programme focusing on Agriculture based Startups was conducted at the Institute from 18th to 23rd, September 2017 under the aegis of Capacity building and Skill development Cell.

The workshop was inaugurated by Shri Gauri Shankar, Director, Agriculture, Uttarakhand on September 18, 2017 at the Institute. Shri Gauri Shankar emphasised on agriculture production, and its contribution and challenges in Uttarakhand and discussed the road map by Uttarakhand Govt. to achieve the numerous goals set by Govt. of India for doubling the farmer's income by 2022. He listed various agricultural programme initiated by the Uttarakhand Government. Shri Arvind Gupta, Chairman of Institute explained about the workshop and its objectives, aligning with the Institute's mission of training job providers and not job seekers, and for achieving this mission, Dolphin Institute has started Capacity Building and Skill Development Cell. Dr. Shailja Pant, Principal briefed about the institute and focused on mission and vision of Institute. The Director, Dr. Arun Kumar spoke about the contribution of agriculture sector in India's G.D.P. He was also worried about the decreasing area of cultivated land and demand for agricultural commodities. Dr. Sanjay Kumar Agarwal, Organizing Secretary and In-charge Capacity Building & Skill Development Cell explained various activities of E.D.P Cell since 2012. He also spoke about various prospective started in agriculture. Dr. M.C. Nautiyal, Ex-Dean, G.B. Pant University of Agriculture & Technology, Pant Nagar in his key note address explained various techniques to augment the production in apiculture, sericulture, agriculture and horticulture, etc. He reiterated that it is a good initiative taken by Institute not only in the interest of students but also in the interest of country.

Release of EDP Mannual


Chairman Shree Arvind Gupta felicitating Chief Guest of the programme

Dr. S.K. Aggarwal & Dr. C.S. Pandey welcoming Commander Yog Raj Negi

During the workshop, 'the potter model' was adopted for the first two days where the participants underwent motivational training under following resource persons namely, Dr. Arun Kuksal, Dr. Sanjay K Agarwal, Commander Yog Raj Negi, Ms. Vibhu Krishna and Dr. S. Sen Gupta Pandey.

Dr. Ajay Thakur from F.R.I., Dehradun, Yog Guru Jyoti Baba from Manav Sewa Ashram, Kanpur, Shri Ritesh Jain, Sunfox Technology, Dehradun, Shri Sudhir Thapliyal from Bagwan Gram Udyog Samiti, Ambiwala, Dehradun, Dr. S.S. Singh, Head K.V.K., Dr. A.K. Singh and Dr. Sanjay Sachan, Associate Professor, K.V.K. Dhakrani, Dr. Vijay Veer Singh, Ex-Director, D.R.D.O. Lab, Tejpur and Dr. C.S. Pandey, Head Agriculture Department, D.I.B.N.S., Dehradun inculcated the knowledge of project formulation and identification of Startups to the participants from day three onwards.

Finance is considered as constraint for fulfilling the objectives and to grab opportunities. Shri Vinod Nagpal, Ex-A.G.M., PNB delivered his lecture on accountancy and book keeping and project planning for financial assistance. Shri Sunil Kaul, Ex-Senior Manager, PNB highlighted the role of Micro, Small and Medium Enterprises (MSME). Dr. Sanjay Agarwal discussed about project report preparation techniques. Shri Bijender Sajwan from NISBUD, Dehradun delivered lecture on funding for Startups. Dr. Ratan Kumar from Uttarakhand Horticulture Board enlightened the participants about the various Govt. Schemes for Horticulture Based Startups. A field trip was also organized to expose participants on animal nutrition, backyard poultry, agriculture, mushroom cultivation and protected agriculture.

From Chairman's Desk...

The Amazing Benefits of Silence and Solitude

We are in an age where there is no solitude at all and even if there were any, we'd grab our cell phone to make sure there wasn't any. Whether you're in the camp who believes it or not the pace at which we live our lives and the amount of things we try to pay attention to at once are major recipes for stress, anxiety, depression, and addictive behavior.

Spending time in solitude is actually a very healthy thing to do—it gives us an opportunity to balance the busyness. It's not only a mindful act, but a self-compassionate act too. Furthermore, the more balanced you are, the better you'll rub off on others, so maybe consider it's something that might even make the world a little bit better.

Silence and solitude give us the space to think, act, and play "catch up" with our mind, and can be very healthy for our physical and mental wellbeing. It's time to go to our quiet and peaceful place, and feed our mind and body so we can reap the following benefits.

Improves Memory

Going for a walk in the park alone can cause brain growth in the hippocampus, leading to better memory. It was found that adults who walked for 40 minutes three times a week for a year had brain growth in the hippocampus — an area of the brain associated with spatial memory. Immersing ourselves in nature helps the brain to focus and have better memory consolidation.

Stimulates Brain Growth

Sitting in silence could also boost brain growth by creating new cells. It was found at least two hours of silence could create new cells in the hippocampus region. This is essential since the hippocampus is linked to our ability to learn, remember things, and even our emotions.

Relieves Stress

Noise has a pronounced physical effect on the brain, which can lead to elevated levels of stress hormones. This happens when sound waves reach the brain as electrical signals via the ear, which then causes the body to react to these signals. The amygdala — associated with memory formation and emotion — is activated, and this leads to the release of stress hormones.

It has been found that silence can release tension in the brain and body in just two minutes. Researchers found it was more relaxing than listening to "relaxing" music. This was based on changes in blood pressure and blood circulation in the brain.

Fights Insomnia

Spending a few minutes a day in silence can lead to improved sleep, especially for insomniacs. It has been found that the older adults who had trouble sleeping experienced less insomnia, fatigue, and depression after doing mindfulness meditation. Mindfulness meditation involves focusing on our breathing and then bringing our mind's attention to the present without thinking about the past or the future. It helps to break the train of everyday thoughts to provoke a relaxation response.

Provides inner peace.

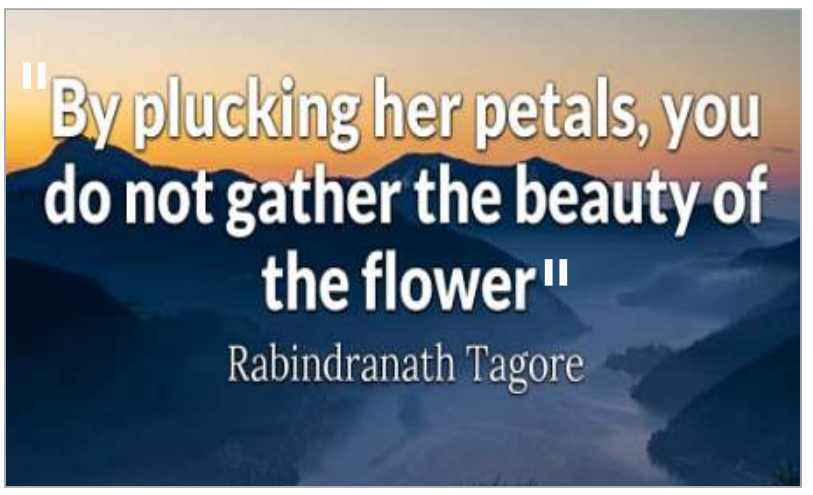
Can you remember the last time you sat in silence and heard the sound of your breathing and felt the sound of your soul? Moments like these are rare, but we need them, like water or like the air that we breathe. Take a few minutes a day for quieting your mind, let go of all the insignificant issues that you can not control and just allow yourself to let be. Feel inner peace emanating through your body. Feel the healing benefits of silence and solitude.

Promotes self-realization

The purpose of maintaining external silence is to encourage the development of internal silence. Yet many people let their inner voice die down in the external chatter. Benefits of silence go far beyond inner tranquility and peace of mind. Silence offers an opportunity to practice awareness and acceptance. It helps you to discover that everything that exists in the universe is already within you.

Silence is not easy to find these days, but after you have read the benefits of silence and solitude, you most probably realize, that it is worth looking for.

Chairman

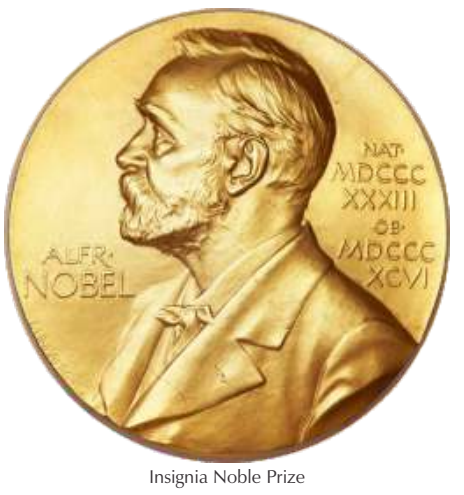


Indian Nobel laureates

The Nobel Prize is a set of annual international awards bestowed on "those who conferred the greatest benefit on mankind" in the fields of Physics, Chemistry, Physiology or Medicine, Literature, Peace and Economics by Swedish and Norwegian institutions in recognition of academic, cultural or scientific advances.

Instituted by Alfred Nobel's last will, which specified that his fortune be used to create a series of prizes, now known as the Nobel Prizes. They are widely recognized as one of the most prestigious honors awarded in the afore mentioned fields.

The prizes in Chemistry, Literature, Peace, Physics and Physiology or Medicine were first awarded in 1901. Medals made before 1980 were struck in 23 carat gold, and later from 18 carat green gold plated with a 24 carat gold coating. Between 1901 and 2016, the Nobel Prizes and the Nobel Memorial Prize in Economic Sciences were awarded 579 times to 911



Insignia Noble Prize

people and organizations. With some receiving the Nobel Prize more than once, this makes a total of 23 organisations, and 881 individuals. Among the total recipients, 12 are Indians, (5 Indian citizens and 7 of Indian origin or residency) since its inception in 1901. Rabindranath Tagore was the first person of Indian origin and also first Asian to be awarded with the Nobel Prize. He received the prize for Literature in 1913, and Mother Teresa is the only woman in the list.

The prize ceremonies take place annually in Stockholm, Sweden (with the exception of the peace prize, which is held in Oslo, Norway).

The prize is not awarded posthumously; however, if a person is awarded a prize and dies before receiving it, the prize may still be presented. Though the average number of laureates per prize increased substantially during the 20th century, a prize may not be shared among more than three people, although the Nobel Peace Prize can be awarded to organizations of more than three people.

As a matter of policy it has been decided to include the brief write up on one Indian Noble laureate in each forth coming issue of Dolphin Insight as a source of inspiration to our students.

- Editorial Board

The Nobel Prize in Literature 1913

Rabindranath Tagore

Born: 7 May 1861, Calcutta, India

Died: 7 August 1941, Calcutta, India

Prize motivation: "because of his profoundly sensitive, fresh and beautiful verse, by which, with consummate skill, he has made his poetic thought, expressed in his own English words, a part of the literature of the West"

Field: Poetry

Language: Bengali and English

Work: Rabindranath Tagore's writing is deeply rooted in both Indian and Western learning traditions. Apart from fiction in the form of poetry, songs, stories, and dramas, it also includes portrayals of common people's lives, literary criticism, philosophy, and social issues. Rabindranath Tagore originally wrote in Bengali, but later reached a broad audience in the West after recasting his poetry in English. In contrast to the frenzied life in the West, his poetry was felt to convey the peace of the soul in harmony with nature.

Citation: "Rabindranath Tagore - Facts". Nobelprize.org. Nobel Media AB 2014. Web. 13 Nov 2017. <http://www.nobelprize.org/nobel_prizes/literature/laureates/1913/tagore-facts.html>

New Faculty joined between July-Sept. 2017

1. Dr. Pankaj Bhatt, M.Sc. (Microbiology), Ph.D., NET, joined as Assistant Professor in Department of Microbiology.

2. Shri Amit Kumar, M.Sc. (Agriculture), NET, joined as Assistant Professor in Deptt. of Agriculture.

3. Dr. Vikaspal Singh, M.Sc. (Forestry), Ph.D., joined as Assistant Professor in Deptt. of Forestry.

4. Shri Rohit Maithani, M.Sc. (Biotechnology), Diploma in IT, joined as Assistant Professor in Deptt. of Agriculture.

5. Shri Pankaj Budhakoti, M.Sc. (Agronomy) joined as Asstt. Professor in Deprtt. of Agriculture.

6. Shri Anil Panwar, M.Sc. (Agriculture), joined as Assistant Professor in Deptt. of Agriculture.

7. Shri Emugan Hrangkhawl, M.Sc. (Agronomy), joined as Assistant Professor (ad hoc) in Department of Agriculture.

8. Shri Lenin Laishram, M.Sc. (Agronomy), joined as Assistant Professor (ad hoc) in Department of Agriculture.

New Indian Words added in Oxford English Dictionary (OED)

70 Indian words have been recently added to Oxford English Dictionary (OED). Words like 'abba', 'anna', 'gulabjamun', 'vada pao' etc., can be found in OED now. Several other words viz., 'jugaad', 'dadagiri' , 'achcha', 'bapu', 'surya namaskar', 'timepass', 'natak', 'chup', 'mirch masala', 'keema' 'funda', 'pukka', etc have now their meaning in OED. These words have been added to OED as Indians have highly specific vocabulary with no direct equivalents in English – explains OED. There are already 900 Indian words covered by OED so far.

The OED publishes four updates a year in March, June, September and December respectively.

Indian words included recently in OED are provided below.

Source: The Hindu.

achcha	abba	anna	bada	bada din
bas	bapu	bhindi	bhavan	chaudhuri
chamcha	chakka jam	chacha	chup	didi
devi	desh	dadagiri	dum	diya
funda	haat	gully	gulab jamun	gosht
jai	kund	keema	jugaad	ji
ji	jhuggi	mirch	mirch masala	mata
nivas	natak	namkeen	nai	nagar
qila	sevak	surya namaskar	tappa	vada

Research Paper Publication

Department of Chemistry:

1. Rawat, S. (2017) A Text book of Chemistry for B.Sc. 1st Semester. Vigyan Bodh Prakashan, Agra; 199 pp (ISBN no: 978-93-85 763-56-4).
2. Rawat, S. Sati, O.P. and Uday Kumar (2017) Evaluation of better antimicrobial activities amongst Sapium sebiferum and Artocarpus heterophyllus. *Int J Pharm Sci.*, 10(1):313-319. (ISSN-2349 -7203).
3. Sati, A. (2017) Evaluation of seasonal and altitudinal variation in antioxidant activity of *Ficus auriculata* leaves. *European Journal of Biomedical* and *Pharmaceutical Sciences*, 4(8): 707-708.

National/ International Days

World Mosquito Day Celebration

डॉल्फिन (पी0जी0) इन्स्टिट्यूट ने 21 अगस्त, 2017 को वर्ल्ड मास्क्यूटो डे पर अवेरनैस प्रोग्राम का आयोजन किया। कार्यक्रम का आयोजन तीन चरणों मे किया गया।

प्रथम चरण में छात्रों को मच्छर के काटने व जीवन चक्र से सम्बन्धित विडियो दिखाकर जागरूक किया गया।

दूसरे चरण में जन्तु विज्ञान विभागाध्यक्ष डॉ0 बीना जोशी भट्ट ने मच्छर के जीवन चक्र पर अपना व्याख्यान दिया जिसमें उन्होंने बताया कि किस तरह मच्छर मनुष्य में बीमारी को सक्रमित करता है तथा संक्रमण के बाद विभिन्न अवस्थाओं से गुजरकर परजीवी द्वारा लक्षण दिखलाई देते हैं। मच्छर व मनुष्य मे प्लाजेमोडियम के जीवन चक्र को विस्तार से समझाते हुये विभिन्न सावधानियों तथा नियंत्रण के विभिन्न सुझावों पर प्रकाश डाला।

उन्होंने यह भी बताया कि वर्तमान में चल रहा सीजन जो डेंगू मच्छर (एडीस इगीपटी) के बिल्कुल


Director Dr. Arun Kumar felicitating the winners of Quiz

अनुकूल है इस समय इसका ब्रीडींग सीजन चल रहा है। इसलिये जागरूकता की जरूरत ज्यादा है। इसके लिये उन्होंने छात्र-छात्राओं को डेंगू के विभिन्न लक्ष्ण जैसे अचानक तेज सिर दर्द व बुखार होना, मांसपेशियों तथा जोड़ों में दर्द होना, आंखों के पीछे दर्द होना, जो कि आंखों को घुमाने से बढ़ता है, जी मिचलाना एवं उल्टी होना, गम्भीर मामलो में नाक, मुंह, मसूड़ों से खून आना अथवा त्वचा पर चकत्ते उभरना आदि बताये।

उन्होंने डेंगू से बचने से विभिन्न उपायों को जैसे पानी से भरे हुये बर्तनों व टंकियों आदि ढके रखना, प्रत्येक सप्ताह कूलर को साफ करें, फूल सीलिप के कपड़े पहने, मच्छर रोधी क्रीम, क्वायल रिपलेन्ट आदि का प्रयोग करें।

तृतीय चरण में प्रश्नोत्तरी प्रतियोगिता के आयोजन में 5 टीमों ने हिस्सा लिया जिसमें टीम एम0एस0सी0 प्रथम सेमेस्टर, एम0एस0सी0 तृतीय सेमेस्टर, बी0एस0सी0 बायोटैक्नोलॉजी तृतीय सेमेस्टर व पंचम सेमेस्टर की टीमों ने हिस्सा लिया।

प्रतियोगिता में प्रथम स्थान सुचेता व सदफ एम0एस0सी0 जन्तु विज्ञान प्रथम सेमेस्टर, द्वितीय स्थान सिमरन व वैशाली एम0एस0सी0 जन्तु विज्ञान तृतीय सेमेस्टर तथा तृतीय स्थान शिवानी सती व सुनेना बी0एस0सी0 बायोटैक्नोलॉजी पंचम सेमेस्टर की टीम ने प्राप्त किया।

निदेशक डॉ0 अरूण कुमार ने सभी विजेताओं को पुरस्कार वितरित किये।


Lecture on world Mosquito Day

महात्मा गाँधी व लाल बहादुर शास्त्री की जयन्ती पर आयोजित साप्ताहिक कार्यक्रमों का समापन

डॉल्फिन इन्स्टिट्यूट में आयोजित हुये कई कार्यक्रम


Faculty & students paid tributes to Bapu & Lal Bahadur Shastri Ji

डॉल्फिन (पी0जी0) इन्स्टिट्यूट के परिसर में दिनांक 28 सितम्बर, 2017 से दिनांक 6 अक्टूबर, 2017 तक महात्मा गाँधी लाल व बहादुर शास्त्रकी जयन्ती के अवसर पर आयोजित साप्ताहिक कार्यक्रमों का समापन हो गया। "स्वच्छता में है शक्ति, यही है सच्ची देशभक्ति" थीम पर आधारित गांधी जयन्ती समारोह में संस्थान में काव्य-पाठ, भाषण प्रतियोगिता, पोस्टर प्रजेन्टेशन प्रतियोगिता, सफाई अभियान जैसे कई कार्यक्रम आयोजित किये गये।


Swachata Abhiyan by students

कार्यक्रम में अपने सम्बोधन में संस्थान के चेयरमैन श्री अरविन्द गुप्ता ने कहा कि आज के आधुनिक युग में महात्मा गांधी के विचार व दर्शन और भी प्रासांगिक हो गये हैं। उन्होंने कहा कि रंग, धर्म, जाति व लिंग पर आधारित अस्पृश्यता के विरूद्ध गांधी के संघर्ष व विचार हमें विपरीत समय में भी


Students activities during programme

मजबूती से डटे रहने की प्रेरणा देते हैं।

उन्होंने बताया कि सत्य, अहिंसा व प्रेम गांधी के अस्त्र-शस्त्र थे तथा असहयोग आन्दोलन, सविनय अवज्ञा आन्दोलन, डांडी यात्रा, भारत छोड़ो आन्दोलन व द0 अफ्रीका में उनके संघर्षो पर आधारित उनका जीवन दर्शन आज भी प्रासंगिक हैं। उन्होंने कहा कि परमाणु बम के ढेर पर बैठी दुनिया में गांधी जी का दर्शन ही एकमात्र रास्ता है जो विश्व को शान्ति व सहिष्णुता की ओर ले जा सकता है।

डॉल्फिन स्टूडेन्ट्स वैलफेयर कमेटी के तत्वावधान में आयोजित इस कार्यक्रम में आयोजित काव्य-पाठ में फिजियोथैरेपी विभाग की शैजल और एग्रीकल्चर विभाग के अंकित ने मंत्रमुग्ध कर देने वाली प्रस्तुतियां दीं। वहीं फिजियोथैरेपी विभाग की प्रीति ने गांधी जी का प्रिय भजन "वैष्णव जन को....." गया। फिजियोथैरेपी के ही क्षितिज ने देशभक्ति पर आधारित गीत गाये। बायोटैक्नोलॉजी विभाग की निवेदिता, बबीता मेहता, निधि व पूनम ने शास्त्री जी व गांधी जी के जीवन पर आधारित चर्चा की व वर्तमान परिप्रेक्ष्य में उनके कार्यो व जीवन दर्शन का महत्व बताया।

कार्यक्रम में "भारत की स्वतन्त्रता में बापू का योगदान" विषय पर आधारित पोस्टर प्रजेन्टेशन में छात्रों ने बहुत सुन्दर पोस्टर बनाये जिनकी सभी ने प्रशंसा की। वहीं दिनांक 6 अक्टूबर, 2017 को कॉलेज परिसर से लेकर मां बालासुन्दरी देवी, माण्डुवाला मन्दिर परिसर तक छात्र-छात्राओं द्वारा स्वच्छता अभियान चलाया गया।


Swachata Abhiyan by DSWC

संस्थान में हिन्दी दिवस समारोह का आयोजन

14 सितम्बर 2017 को राजभाषा हिन्दी के प्रति अपनी निष्ठा दर्शाते हुए संस्थान में हर्षोल्लास के साथ हिन्दी दिवस समारोह का आयोजन संस्थान की साहित्य सभा द्वारा किया गया।


Audience & Speakers during the programme on Hindi Diwas

कार्यक्रम के शुभारम्भ में साहित्य सभा के संयोजक डॉ. गजेन्द्र नाथ सिन्हा ने पूरे कार्यक्रम की रूप रेखा एवं आयोजित प्रतियोगिताओं के विषय में सभा को जानकारी प्रस्तुत की।

प्रतियोगिता में हिन्दी निबन्ध लेखन एवं स्वरचित काव्य पाठ विशेष आर्कषण का केन्द्र रहे। कार्यक्रम के मुख्य अतिथि संस्थान के चैयरमैन श्री अरविन्द गुप्ता ने अपने-सम्बोधन में हिन्दी के उपयोग को बढ़ाने के लिए आग्रह किया तथा इस तरह के कार्यक्रमों की निरंतरता बनाये रखने के लिए भी साहित्य सभा को निर्देशित किया।

प्रतियोगिताओं के निर्णायक मंडल के तौर पर डा0 शैलजा पंत (प्राचार्या) एवं लेखा अनुभाग में श्री अमन शर्मा उपस्थित थे। कार्यक्रम का संचालन साहित्य सभा के सह संयोजक डा0 आशीष रतूडी द्वारा किया गया। कार्यक्रम के अन्त में मुख्य अतिथि द्वारा प्रातियोगिता के परिणाम घोषित किये गये। प्रातियोगिता के परिणाम निम्नवत रहे -

निबन्ध लेखन प्रतियोगिता		स्वरचित काव्य पाठ प्रतियोगिता	
प्रथम पुरस्कार	- जयती चौहान बीएड0	प्रथम पुरस्कार	- क्षितिज (बी0पी0टी)
द्वितीय पुरस्कार	- नवनीत शुक्ला बीएससी एग्रीकल्चर	द्वितीय पुरस्कार	- आस्था संजवाण (बी0एड0)
तृतीय पुरस्कार	- रौशनी नामईराकपम होरटीकल्चर	तृतीय पुरस्कार	- कु0 शेजल (बी0पीटी0)
सात्वाना पुरस्कार	- प्रवीण लखेडा		

71st Independence Day celebrated with full enthusiasm


Diretor's Speech on Independence Day

The 71st Independence Day was jointly celebrated in the Campus on 15th August 2017 by faculty, staff and students in large number. Patriotic songs were sung by the students after the National Flag was hoisted by the Principal and the Director. Floral tribute were offered to the Father of the Nation, and Dr Arun Kumar delivered the Independence Day address in which he stated that "on this day, let all of us join in paying our respectful homage to the great personalities who sacrificed their lives in struggle for the independence of our country". He called upon the students to get empowered with right learning to harness the inherent potential, stay away from being complacent, become informed and knowledgeable individuals by emulating the personalities of the leaders like Mahatma Gandhi, Pt. Jawaharlal Nehru, Sardar Ballabh Bhai Patel, Subhash Chandra Bose and others. Message from the Chairman was also read to the participants in his absence.

Flag Hoisting

The flag hoisting ceremony was followed by excellent cultural programme by students who sang on patriotic songs. Pritam sung Vande Mataram, Ankita Belwal presented Hindi poem 'Kabhi Arsh par..', Apoorva sang 'Aay mere pyare watan...', Gaurav Balooni delivered a speech, Sarita presented a solo dance on 'Vande Matram & Desh Rangeela Rangeela..', Chinar & group presented 'Jai ho..', Physiotherapy department's students presented dance and lastly Shivani Sati presented a melodious patriotic song 'Kar Chale Hum Fida...'. Sweets and refreshments were served to the staff, faculty and students.




Student's performances


Signature Campaign

World Physiotherapy Day

Department of Physiotherapy celebrated world physiotherapy day on 8th September 2017. The day is an opportunity for physical therapists from all over the world to raise awareness about the crucial contribution the profession makes towards keeping people well, mobile and independent. The day marks the unity and solidarity of the physical therapy community around the world.

The Department organized Essay competition on "Scope of Physiotherapy". Yashwant MPT I stood first, Sundaram of BPT I stood second and Nauyuma BPT I and Naveen BPT II stood third. A painting competition was also organised in which Arpan MPT I year stood first and Nauyuma and Shejal of BPT I year stood second. Third prize was awarded to Kirti BPT I year. The Department also organised a special lecture on, "History of Physical Therapy." the guest speaker was Dr Shan-E-Mohd, Director of Ultimate Fitness Academy. Dr Shan explained the importance of physical therapy in current scenario and explained how concern for fitness is becoming most important aspect of our lifestyle. The guest speaker introduced the students to the diverging trends in physiotherapy and upcoming fields of interest.

Students of the department also hosted a short cultural programme. It included dances from all corners of India and presented group songs to entertain the audience.

All the physiotherapists and students pledged to raise awareness about the crucial contribution the profession makes in keeping people well, mobile and independent.


Faculty & students with Guest speaker on World Physiography Day

Field Visit/Educational trips

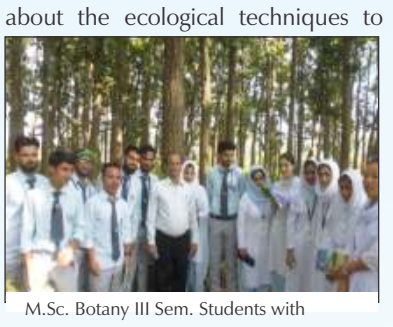

M.Sc. Agronomy 3rd Sem students with Dr. P.K. Seghal

1. Department of Agriculture:

Dr. P.K.Seghal, Asst. Professor, Dept. of Agriculture took the students of M.Sc. Agronomy 3rd Semester to Food Corporation of India (FCI) godown, Rudrapur, Uttrakhand on 29th Sept. 2017 for identification and control practices of storage insect pests. The staff of FCI updated the students on valuable technical know how about storage insect pests like Khapra beetle, Rice weevil, Rust red flour beetle and Lesser grain borer, etc. The main practices followed for control used by FCI was fumigation of the grain stock with aluminium phosphide after covering with plastic sheet and using wooden base to prevent the direct contact of grain bags with land surface.

2. Department of Botany

Students of M.Sc. Botany III Semester undertook a field visit to Sal forest, Dunga on 28.07.2017 with Dr. K.P. Tripathi, Head, Botany Department. During the field visit students learnt about the ecological techniques to


M.Sc. Botany III Sem. Students with Dr. KP Tripathi, HOD.

study the forest ecosystem. They also learnt about the exploration and analysis techniques of diversity and productivity of the natural forest ecosystem.

Students of M.Sc. Botany I Semester undertook a field visit on 29.08.2017 to the Sal forest Manduwala, Dehradun with Dr. K.P. Tripathi, Head, Botany Department. During field visit the students learnt about the exploration and identification of plants in field. They also learnt the plant collection and herbarium preparation methods for flowering plants.

Students of M.Sc. Botany III Semester undertook a visit to Forest Pathology Lab and Museum, Forest Research Institute, Dehradun on 27.09 with Dr. K. P. Tripathi, Head, and Ms. Prerna Bahuguna, faculty from the Botany Department. During this visit the Scientific and Technical staff of FRI demonstrated the importance of collection and maintenance of the fungal culture and also the technique of the wood decay fungal culture. Students also visited the forest pathology museum.


Dr. K.P. Tripathi, HoD Botany demonstrating the M.Sc.Botany I sem. students.

3. Department of Horticulture

B.Sc. Horticulture I Semester students undertook a field visit to Regional Sericulture Research Station, Sahaspur


B.Sc. Horticulture I Sem. Students with Dr. Pallavi Bhatia

on 16th September, 2017 to learn about the rearing of silkworms, different stages in their life-cycle and varieties of mulberry tree. The students accompanied Dr. P.K. Sehgal, Department of Agriculture and Dr. Pallavi Bhatia, Department of Botany from the Institute. Lectures on various aspects of research in Sericulture were delivered by Drs. V.B. Srivastava, and Mishra from the Research Station.

Dolphin institute started its new session (2017-18) with recital of Sundarkand and bhandara

Traditionally every new academic session in the institute starts with worshipping in ancient Mahamaya Maa Balasundari Devi temple located near the premises of the institute. Like earlier years this year too the new session started with Sundar kand path and bhandara on August 06, 2017. The programme started with havan in which management, faculty, staff and students made aahuti for peace, prosperity and success for all in the coming session. Shri Hariom Vatsa, Smt. Sandhya Vatsa and team recited melodious and devotional sundar kand path, which made every one present in the programme spiritual. After the path the bhandara was distributed. More than 1000 people took the prasad and felt blessed. Management, faculty, staff and students expressed their gratitude to Mahamaya Maa Balasundari Devi and Bajrangbali Hanuman ji and also prayed for better life.

Bhandara

Bhandara

गढ़वाल वि0वि0 अन्र्तमहाविद्यालयी फुटबाल टूर्नामैन्ट (महिला वर्ग) में बिरला कैम्पस चैम्पियन

- डॉल्फिन इन्स्टिट्यूट देहरादून में हुआ हे0न0ब0ग0 (के0) वि0वि0 वार्षिक फुटबाल टूर्नामैन्ट का आयोजन ।
- बी0जी0आर0 कैम्पस पौड़ी को 3-0 से हराकर बिरला कैम्पस श्रीनगर ने जीता फाइनल।

Winners being felicitated with shield & Certificates

डॉल्फिन (पी0जी0) इन्स्टिट्यूट ऑफ बायोमेडिकल एण्ड् नेचुरल साइन्सेज के परिसर में हेमवती नन्दन बहुगुणा गढ़वाल (केन्द्रीय) विश्वविद्यालय का वार्षिक फुटबाल टूर्नामैन्ट (महिला वर्ग) का आयोजन किया गया। इसमें सम्बद्ध महाविद्यालयों की पांच टीमों ने भागीदारी की। इनमें डी0ए0वी0 (पी0जी0) कॉलेज देहरादून, बिरला कैम्पस श्रीनगर, बी0जी0आर0 कैम्पस पौड़ी, डॉल्फिन (पी0जी0) इन्स्टिट्यूट देहरादून तथा रा0स्ना0महा0 कोटद्वार की टीमें थी।

Runners up team felicitated with Trophy & Certificates

फुटबाल टूर्नामैन्ट का उद्घाटन गढ़वाल वि0वि0 की ओर से पर्यवेक्षक डॉ0 जोसेफ सिंह ने किया। उन्होंने सभी टीमों के मैनेजर, कोच व खिलाड़ियों से मुलाकात की व उन्हें शुभकामनायें दी।

टूर्नामैन्ट के एकमात्र नाक आउट मुकाबले में बिरला कैम्पस श्रीनगर ने डॉल्फिन इन्स्टिट्यूट देहरादून को 2-1 से हराया। इसमें बिरला कैम्पस श्रीनगर की ओर से साबिया बानो ने 2 गोल किये वहीं डॉल्फिन (पी0जी0) इन्स्टिट्यूट देहरादून की ओर से मियाम पेर्टिन ने 1 गोल किया।

पहले सेमीफाइनल मुकाबलें में बी0जी0आर0 कैम्पस पौड़ी ने पी0द0ब0 रा0स्ना0महा0 कोटद्वार को 1-0 से हरा दिया। इसमें बी0जी0आर0 कैम्पस पौड़ी की नेहा रावत ने विजयी गोल किया।

वहीं दूसरे सेमी फाइनल में बिरला कैम्पस श्रीनगर ने डी0ए0वी0 (पी0जी0) कॉलेज देहरादून को कड़े मुकाबले में 1-0 से हराया। इस मैच का निर्णय पैनाल्टी शूट आउट से हुआ।

महिला बर्ग के फुटबाल टूर्नामैन्ट का फाइनल मुकाबला बहुत रोमांचक रहा। इसमें निर्धारित दोनों हॉफ में दोनों टीमें कोई गोल नही कर सकी। अत: पैनाल्टी शूट आउट में बिरला कैम्पस श्रीनगर ने 3-0 से बी0जी0आर0 कैम्पस पौड़ी को हराकर फुटबाल टूर्नामैन्ट जीत लिया।

डॉल्फिन इन्स्टिट्यूट के चेयरमैन श्री अरविन्द गुप्ता ने विजेता टीम की प्रशंसा की तथा सभी खिलाड़ियों को उनके शानदार खेल के लिए शुभकामनाएं दी। टूर्नामैन्ट का आयोजन डॉल्फिन इन्स्टिट्यूट के स्पोर्टस ऑफीसर श्री एन0के0 जोशी की देखरेख में हुआ।

Academic Achievements

College Toppers

B.Sc. Agriculture- 3rd Sem.

LOK RAJ BHATT
82.67%

B.Sc. Agriculture- 5th Sem.

MILLO MEENA
81.50%

B.Sc. Agriculture- 7th Sem.

MHAO T KIKON
82.60%

B.Sc. Agriculture- 7th Sem.

MHAO T KIKON
82.60%

B.Sc. Agriculture- 7th&8th Sem.

PATE TALO
82.60% & 83.77%

B.Sc. Biotechnology-3rd year

HEPSEEBA TANDI
71.62%

B.Sc. Forestry- 7th Sem.

KANCHAN DADWAL
86.40%

B.Sc. Forestry- 7th Sem.

SUMAN SHARMA
86.40%

M.Sc. MLT- 1st Sem.

UPENDRA ARYAL
78.57%

M.Sc. MLT- 3rd Sem.

SHIKHA PALIWAL
75.28%

M. Sc. Bioche.-1st & 2nd Sem.

NEHA BISHT
8.67 CGPA

M.Sc. Biotech.- 1st & 2nd Sem.

VIKAS ROUTHAN
8.33 CGPA

M.Sc. Botany-1st & 2nd Sem.

THUPTEN TSERING
8.25 CGPA

M.Sc. Chem.-1st&2nd Sem.

KANCHAN KUMARI
8.08 CGPA

M.Sc. Forestry- 1st & 2nd Sem.

VIKETOLI AYEMI
7.58 CGPA

M.Sc. Microbio.- 1st & 2nd Sem.

ANURAG
8.33 CGPA

M.Sc. Pharm. Chem.- 1st & 2nd Sem.

ABDULLAH
8.17 CGPA

M.Sc. Physics- 1st & 2nd Sem.

JAGJEET S. SUDAN
8.33 CGPA

Joint Toppers

M.Sc. Zoology- 1st & 2nd Sem.

SWATI KOTWAL
8.50 CGPA

M.Sc. Zoology- 1st & 2nd Sem.

NISHMA MANHAS
8.50 CGPA

DSWC NEWS

Trending News:

Cyber Crime

Cybercrime refers to all the activities done with criminal intent in cyberspace. Because of the anonymous nature of the internet, miscreants engage in a variety of criminal activities. The field of cybercrime is just emerging and new forms of criminal activities in cyberspace are coming to the forefront with each passing day.

Cybercrimes can be basically divided into three major categories

- Cybercrimes against persons,
- Cybercrimes against property, and
- Cybercrimes against Government.

Offences

Cyber offences are the illegitimate actions, which are carried out in a classy manner where either the computer is the tool or target or both.

Cyber-crime usually includes the following:

- Unauthorized access of the computers
- Data diddling
- Virus/worms attack
- Theft of computer system
- Hacking
- Denial of attacks
- Logic bombs
- Trojan attacks
- Internet time theft
- Web jacking
- Email bombing
- Salami attacks
- Physically damaging computer system

Offences under the I.T. Act 2000

The following table lists the offence and penalties against each section of the I.T. Act.

Section	Offence	Punishment	Bailability and Congizability
65	Tampering with Computer Source Code	Imprisonment up to 3 years or fine up to Rs 2 lakhs	Offence is Bailable, Cognizable and triable by Court
66	Computer Related Offences	Imprisonment up to 3 years or fine up to Rs 5 lakhs	Offence is Bailable, Cognizable and Triable
66-A	Sending offensive messages through Communication service, etc...	Imprisonment up to 3 years and fine	Offence is Bailable, Cognizable and triable by Court
66-B	Dishonestly receiving stolen computer resource or communication device	Imprisonment up to 3 years and/or fine up to Rs. 1 lakh	Offence is Bailable, Cognizable and triable by Court
66-C	Identity Theft	Imprisonment of either description up to 3 years and/or fine up to Rs. 1 lakh	Offence is Bailable, Cognizable and triable by Court
66-D	Cheating by Personation by using computer resource	Imprisonment of either description up to 3 years and /or fine up to Rs. 1 lakh	Offence is Bailable, Cognizable and triable by Court
66-E	Violation of Privacy	Imprisonment up to 3 years and /or fine up to Rs. 2 lakh	Offence is Bailable, Cognizable and triable by Court
66-F	Cyber Terrorism	Imprisonment extend to imprisonment for Life	Offence is Non -Bailable, Cognizable and triable by Court of Sessions
67	Publishing or transmitting obscene material in electronic form	On first Conviction, imprisonment up to 3 years and/or fine up to Rs. 5 lakh On Subsequent Conviction imprisonment up to 5 years and/or fine up to Rs. 10 lakh	Offence is Bailable, Cognizable and triable by Court
67-A	Publishing or transmitting of material containing sexually explicit act, etc... in electronic form	On first Conviction imprisonment up to 5 years and/or fine up to Rs. 10 lakh On Subsequent Conviction imprisonment up to 7 years and/or fine up to Rs. 10 lakh	Offence is Non -Bailable, Cognizable and triable by Court
67-B	Publishing or transmitting of material depicting children in sexually explicit act etc., in electronic form	On first Conviction imprisonment of either description up to 5 years and/or fine up to Rs. 10 lakh On Subsequent Conviction imprisonment of either description up to 7 years and/or fine up to Rs. 10 lakh	Offence is Non Bailable, Cognizable and triable by Court
67-C	Intermediary intentionally or knowingly contravening the directions about Preservation and retention of information	Imprisonment up to 3 years and fine	Offence is Bailable, Cognizable.
68	Failure to comply with the directions given by Controller	Imprisonment up to 2 years and/or fine up to Rs. 1 lakh	Offence is Bailable, Non - Cognizable.
69	Failure to assist the agency referred to in sub section 33 in regard interception or monitoring or decryption of any information through any computer resource	Imprisonment up to 7 years and fine	Offence is Non -Bailable, Cognizable.
69-A	Failure of the intermediary to comply with the direction issued for blocking for public access of any information through any computer resource	Imprisonment up to 7 years and fine	Offence is Non -Bailable, Cognizable.
69-B	Intermediary who intentionally or knowingly contravenes the provisions of sub -section 22 in regard monitor and collect traffic data or information through any computer resource for cyber security	Imprisonment up to 3 years and fine	Offence is Bailable, Cognizable.
70	Any person who secures access or attempts to secure access to the protected system in contravention of provision of Sec. 70	Imprisonment of either description up to 10 years and fine	Offence is Non-Bailable, Cognizable.
70-B	Indian Computer Emergency Response Team to serve as national agency for incident response. Any service provider, intermediaries, data centers, etc., who fails to prove the information called for or comply with the direction issued by the ICERT.	Imprisonment up to 1 year and/or fine up to Rs. 1 lakh	Offence is Bailable, Non - Cognizable
71	Misrepresentation to the Controller to the Certifying Authority	Imprisonment up to 2 years and/ or fine up to Rs. 1 lakh.	Offence is Bailable, Non - Cognizable.
72	Breach of Confidentiality and privacy	Imprisonment up to 2 years and/or fine up to Rs. 1 lakh.	Offence is Bailable, Non - Cognizable.
72-A	Disclosure of information in breach of lawful contract	Imprisonment up to 3 years and/or fine up to Rs. 5 lakh.	Offence is Cognizable, Bailable
73	Publishing electronic Signature Certificate false in certain particulars	Imprisonment up to 2 years and/or fine up to Rs. 1 lakh	Offence is Bailable, Non - Cognizable.
74	Publication for fraudulent purpose	Imprisonment up to 2 years and/or fine up to Rs. 1 lakh	Offence is Bailable, Non - Cognizable.

Cyber Laws are the sole savior to combat cyber-crime. It is only through stringent laws that unbreakable security could be provided to the nation's information. The I.T. Act of India came up as a special act to tackle the problem of Cyber Crime. The Act was sharpened by the Amendment Act of 2008.

Cyber Crime is committed every now and then, but is still hardly reported. The cases of cyber-crime that reaches to the Court of Law are therefore very few. There are practical difficulties in collecting, storing and appreciating Digital Evidence. Thus the Act has miles to go before it can be truly effective.

Vipul Garg
Dean Students Welfare
Expert Cyber Law

Dainik Jagran organized Youth Parliament at Doplphin Institute

Participants in Youth Parliament Programme

Dainik Jagarn in collaboration with Dolphin Students Welfare Committee organised the "Youth Parliament" on September 12, 2017 in the Institute. The objective of the event was to generate awareness in youth about the role of parliament and its role in resolving the issues in democratic manner. About 150 students from different departments participated in the first round, of these following six students, namely, Saizal Kanyal (B.P.T.), Nidhi Walia (B.P.T.), Rohit Pandey (B.P.T.), Jitender Shah (Agriculture), Ankita Belwal (Agriculture), and Anil Kumar (Agriculture) were short listed for the second round

The first round was organised in different colleges to constitute the "Youth Parliament". The second round was held at Law College, Dehradun. Dolphinite, Saizal Kanyal of B.P.T., was selected for the "Youth Parliament". Following the nomination of members to the youth parliament, six members were appointed as ministers. Saizal Kanyal, who got 12 votes, was appointed as the Minister for Home & External Affairs. The monsoon session was also held at the Law College, Dehradun. Saizal Kanyal, Minister for Home and External Affairs announced that the government will control the crime and maintain the law and order situation in the country. She further said that her Government will earnestly work on the internal security. She added that in the current session Women and Child security bills will be given priority, while the Defence Policy will be summarised soon.

Dolphinites participated in 'Run for Uttarakhand'

Participants in "Run for Uttarakhand"

"Run for Uttarakhand" was organised in Dehradun on 29th August 2017 on the occasion of National sports day. Chief Minister Trivendra Singh Rawat and Sports Minister Arvind Pandey flagged off the marathon from Gandhi Park. Hosting of proposed 38th national games in Uttarakhand was also announced during the ceremony. 25 thousand students from different schools and colleges of Uttarakhand participated in the run with full enthusiasm. 100 students and others from our Institute took part in Run for Uttarakhand. The marathon passed through Gandhi Park, Globe Chowk, Behel Chowk, Beni Bazar, Sachivalaya Chowk, Kanak Chowk and returned back to Pavalion ground. The Honb'le Chief minister also joined the students in the marathon for some time.

Shri Trivendra Singh Rawat, Chief Minister announced that the state is ready to host the National Games in 2018. Shri Arvind Pandey, Sports minister mentioned that in coming months various sports events will be organised in the state as precursor to the National Games. Agriculture Minister Subodh Uniyal, many MLA's, Additional Chief Secretary Om Prakash, DGP Anil Raturi, Dr Akhilesh Bajpayee and a large number of youth and senior citizens also participated in the Run for Uttarakhand.

Indian Institute of Remote Sensing (IIRS)
Online Certificate course at Dolphin Institute, Dehradun

The Indian Institute of Remote Sensing (IIRS) Dehradun is conducting a 3 months online certificate course namely Basics of "Remote Sensing, Geographical Information System & Global Navigation Satellite System" for the students and faculty of the Institute in collaboration of Department of Computers. The course has started on August 19, 2017. 90 students and 10 faculties from different departments who have registered themselves for this course are attending 3-4PM online classes per week. The course is being conducted through 'a-view' software, and the final online examination will be undertaken by IIRS on December 6 & 11, 2017.

STUDENT CORNER

दीपावली – रौशन पर्व या प्रदूशित जश्न

हम भारतीय इस दीपावली को दो प्रमुख तरीको से मनाते हैं एक पर्व के तौर पर तो दूसरा जश्न के तौर पर। दोनों में बहुत बड़ा तो नही बल्कि एकदम उल्टा फर्क है। दीपावली के पर्व की तैयारियों और उत्साह नौरात्र में देवी के आगमन से ही शुरू हो जाती है और दीपावली में बने मिठाई के खत्म होने तक, बिजली के झालर उतरनेतक (जो कि पड़ोसियों पर निर्भर करता है), आम के पल्लौ को नदी में विसर्जित करने तक, हम जैसे बच्चों के विद्यालय फिर से शुरू होने तक बनी रहती है।

इस पर्व में हम पूर्णतः लक्ष्मी जी को प्रसन्न करने में लगे रहते हैं। घर में माँ लक्ष्मी कि कृपा सदा बनी रहे इसलिये घर की साफ–सफाई, नए कपड़े, बरतन, पुराने कपड़ों का निवारण तथा अपने

जीवन को सकारात्मक चीजों से भर देते हैं। यह उत्सुकता हमारे मन से दीपावली के दिन तक बढ़ती रहती है और शाम को आठ से रात बारह बजे तक चरम सीमा पर रहती है, यह चरम सीमा वह क्षेत्रफल है जिसके अन्तर्गत हम पटाखे, फुलझड़ीयों जोरदार तरीके से जलाते है इसे मै दीपावली का जश्न कहना पसन्द करूगा।

सुबह दो प्रमुख घटनाओं से शुरू होती हैं। सूर्य कि लालिमा का विस्तार होना तथा चिड़ियों की चहचहाहट का प्रसारण होना। दोनों ही प्रकृति की खास कृयाएं है लेकिन दीपावली के जश्न के बाद जो सुबह होती है वह कुछ अलग ही होता है जिसमें दीपावली के दोनों पहलू (पर्व और जश्न) का परिणाम साफ तरीके से नजर आता है।

एक तरफ दीयों की कतारे सूरज को शरमा देती है तो दूसरी तरफ जले हुए पटाखों कि कतार चिड़ियों को डरा देती है वो सहमी हुई अपने घोसले में अभी भी रात में आए उस अनजान भूकम्प को महसूस करती है। वे ऐसी जगह खोजने लगती है जहां पेड़–पौधे हों, खुली हवा हो व प्रदूषण रहित हो खास कर जहाँ इंसान न हों। मगर शहरों में तपस्याग्रस्त चिड़ियाओं को ऐसी जगह मिले तो कहा मिले। अगर आसपास के गाँव में दोचार बाग मिल भी जाए तो उस ममता का क्या जो शहर में किसी के घर के छज्जों पर लगे छोटे से घोसले में चहचहा रहीं है, कराह रही हैं, जिसके पास ताजी सांस नहीं है कि वह उड़ने के लिए हिम्मत जुटा सके।

हम इंसान ही पर्व मनाते है ईश्वर को बुलाने के लिए लेकिन हमारे ही जश्न ने उनके वाहक को असमर्थ बना दिया है। कैसे आएंगी लक्ष्मी जब उनके वाहक उल्लू के पास उड़ने का बल ही ना हों।

लक्ष्मी को तो आपने खुश कर दिया लेकिन वो तभी आपाएंगी जब उनका वाहक खुश होगा।

– क्या हम इस बार अपने आसपास के वातावरण और जीवजंतुओं की सुरक्षा को ध्यान में रख कर दीपावली मनाएंगे–

नवनीत शुक्ला
बी.एस.सी.–फॉरेस्ट्री

FACULTY CORNER

Numeracy in Research Planning

Statistics is a subject that confuses many, scares some but excites few. After all, how thrilling can numbers or formulas be?' they seem to think! This situation is unfortunate and unnecessary. Unfortunate because citizens in all walks of life need to understand their own problems and problems of the society. This often involves appreciating statistics. It is unnecessary because heart of statistics is not numbers, nor formulas, but logic. And all of us can comprehend logic, especially if it is expressed in the context of our own problems.

Numeracy in Research Planning: How to Check if Rice is Cooked ?

We take a pinch of grains of rice and press to check if the core is soft. If yes, we declare that rice (we mean all grains) is cooked. How do you know? The unstated assumption is that all grains of rice in that pot are alike (in an identical state of being cooked). If this assumption is not true, our conclusion can go wrong. This predicament indeed does occur if the heat of the stove is too strong while cooking. Then we get multi-tiered performance. The bottom tier is charred and black. The middle layer is edible while the top layer is still raw. Why don't we check every grain to rule out errors? Simply because, it is cumbersome, time consuming and usually, unnecessary!

All these considerations are equally relevant in many studies. We take water samples, air samples and soil samples. Studies of sample plots in forests are common. By sampling we hope to know about a huge entity at low cost. This is a valid and successful approach. It is only necessary to be careful about assumptions. Is the entire forest area of interest uniform? River banks, eastern and western slopes of hills and rocky outcrops may have very different vegetation. So it is best to divide the forest area into strata or divisions such that each division is relatively homogeneous but there are differences between divisions. Some sampling has to be done in every stratum. If a stratum has a lot of variation in it, more effort has to be spent on studying it. If a stratum is very uniform a few observations will suffice to show what is in it.

How large should a sample be? Or how many individuals should be examined to estimate reliably some feature of the population? Generally, larger the sample size, greater is the precision of an estimate. But we cannot go on observing because resources in terms of time, money, personnel, etc. are limited. While the question about sample size is very important, it is also very difficult to answer in general. If we want to know the number of mammary glands in different mammals, observing one or two adult females in a species suffices. This is because the trait is almost without variation. The same is true of clutch size in birds. On the other hand if our interest is number of eggs laid by frogs or size of crowns in tree species, many more observations would be necessary. If a population is small, like trees in a few hectares of forest, 5% sampling is usually adequate. If the target population (not necessarily human) size is very large, this rule becomes inappropriate. Instead it is the actual sample size that becomes crucial. When election patterns are predicted, though the size of a parliament constituency is of the order of 10 lakh, a few hundred individuals selected carefully and interviewed skillfully can indicate the result.

Ecologists often want to measure diversity in an ecosystem. It appears that here also sampling a few hundred individuals does the job quite well. A good familiarity with the population to be sampled is very essential for effective sampling. If we want to estimate sex ratio in black bucks or langurs (the black faced monkey) or elephants and we examine some breeding groups, we will find that adult males are very few. We have to know that large number of males live separately as bachelor herds or just loners. Otherwise we will get a totally misleading answer even though we use correct statistical procedures.

Dr. Sanjay K. Agarwal
HOD-Department of Biostatistics & Computers

DISTINGUISHED ALUMNI

Dr Deepak Samantray, PT
MPT BATCH: 2006-2008
CSMT (AUS), CMMT (MANIPS), CMT (LONDON)
Life member Indian Association of Physiotherapists

Dr. Deepak Samantray (PT) has vast experience of 12 yrs in the field of physiotherapy rehabilitation. He did his Bachelor's degree (BPT) in physiotherapy from Padmashree Institute, Bangalore in 2005, where he gained training in various multispecialty hospitals. He completed his master degree (MPT) in Musculoskeletal Disorders from this Institute in 2008. He learnt advanced concepts of spine therapy from India and Australia.

Dr. Deepak Samantray is an eminent Indian Physiotherapist with major specialization in the Physiotherapeutic treatment of Spinal disorders, musculoskeletal injuries, arthritis, backache and degenerative conditions. He is associated with various educational institutes, non profitable organizations and physiotherapy care centres all over India. Dr Samantray is continuously travelling and teaching to students and practitioners on the subject of Spinal Manual therapy concepts.

Since 2008 he is practicing at Relight Physiotherapy Centre as a Clinical Manipulative Physiotherapist. Currently he is the Director, Relight Physiotherapy Centre, Bhubaneswar, Odisha. Dr Samantray also holds the post of Principal at Franklin Institute of Medical Sciences - since August 2017. Earlier (from 2010 – 2013) he was the HOD of International Institute of Rehabilitation Sciences, Bhubaneswar. He is also working as a Resource Person for Manual Therapy Workshops since 2013 (till date he has conducted 46 workshops).

Training and Placement Cell

PHD Chamber of Commerce & Industry- State Chapter of Uttarakhand in collaboration with Directorate of Industry, Govt. of Uttarakhand organized the second "Start-Up Seminar" on 7th September 2016 at Dehradun. The PHD Chamber also Started Coaching and Mentoring Cell Start Up Task-Force of the PHD Chamber Uttarakhand State Chapter. The objective of the seminar was to provide opportunity to Start-up Entrepreneurs and Researchers to accelerate the development of their Startup with special focus on SMEs and Rural Start-ups.

30 students from M. Sc. Microbiology- III Semester from Dolphin Institute attended the seminar.

Training & Placement Cell : Interview

1. **17 July 2017**
   Sent for interview- Zydus Animal Health (A subdivision of Cadila Healthcare Ltd., Haridwar)
   1. Sandeep Gairola- M. Sc. Pharmaceutical Chemistry 2015- SELECTED
   2. Neeraj Singh Negi- M. Sc. Pharmaceutical Chemistry 2016- SELECTED
2. **18 August 2017**
   Sent for interview- GMP Pharma Institute, Dehradun
   1. Jayati Chauhan- M. Sc. Chemistry 2017
   2. Vaishali Mishra- M. Sc. Pharmaceutical Chemistry 2017
   3. Vivek Sati- M. Sc. Microbiology 2016- SELECTED
3. **04 September 2017**
   Sent for interview- Marico India Ltd., Dehradun
   1. Vivek Sati- M. Sc. Microbiology 2016- SELECTED
4. **06 October 2017**
   Sent for interview- GMP Pharma Institute, Dehradun
   1. Kanika Sood- M. Sc. Microbiology 2017- SELECTED

Nicobar Pigeon, *Caloenas nicobarica* (Linnaeus, 1758)

Nicobar Pigeon

The Nicobar Pigeon, a small island specialist, is one of the most beautiful but also most threatened of the pigeon/dove species. They are heavier than most of pigeons and can be up to 32-35cm (16 in) in size. The pigeon is stocky and dark; it is metallic green with coppery reflections with unique long fowl like hackles on the neck. The head, upper neck flight feathers and breast are dark slate blackish gray with a silvery purplish bloom. The tail of this pigeon is very short with a pure white undercoat. The global population size has not been quantified, but the species is described as generally scarce to rare, although locally commoner on smaller islets.

The Nicobar pigeon's breeding range encompasses the Andaman and Nicobar Islands of India, the Mergui Archipelago of Myanmar, offshore islands of south-western Thailand, Peninsular Malaysia, southern Cambodia and Vietnam, and many of the small islands between Sumatra, the Philippines and the Solomon Islands.

It often breeds in dense colonies, on extremely small, wooded offshore islands and forages in situ or on adjacent mainland (or larger island) areas up to at least 500 m. It prefers uninhabited and remote islets with original forest vegetation, though these must be close enough to large areas of lowland rainforest which it requires for foraging. Nests in trees and shrubs and has a clutch size of one.

Threats

Trapping it for food, the pet trade and perhaps for their gizzard-stones is a serious threat to this bird. The clearance of small islands for plantations and the adjacent areas of lowland forest which it requires for foraging must have reduced numbers. Predation by rats *Rattus* spp., cats and other alien predators at nesting grounds has adversely effected the population of this colonial species.

The species is suspected to be declining at a moderately rapid rate, owing to habitat destruction, trapping for food and the pet trade as well as the effects of introduced predators.

Redlist Category

This species is classified as Near Threatened because throughout its wide range it is thought to be declining as a result of the above threats.

Conservation Actions Underway

CITES Appendix I.

Recommended Citation

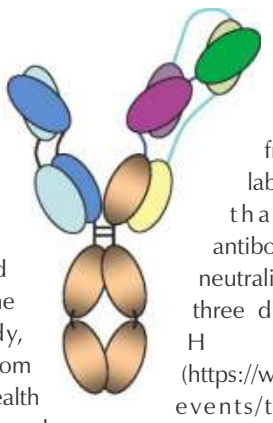
Bird Life International (2017) Species factsheet: Caloenas nicobarica. birdlife.org.
BirdLife International (2017) IUCN Red List for birds.

SCIENTIFIC ADVANCEMENTS

'Chemical Surgery' Used For First Time to Mend Harmful Mutations in Human Embryos

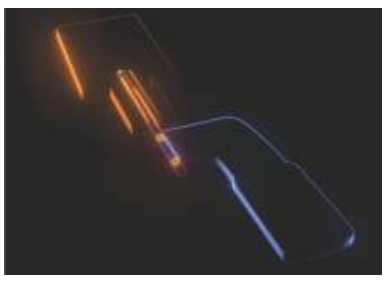
Researchers in China have used a procedure described as "chemical surgery" to mend harmful mutations in human embryos for the first time. The scientists found that it was possible to repair a faulty gene that gives rise to a serious blood disorder called beta thalassemia which can be caused by one misspelling in the DNA code. Crispr-Cas9 was used to make precision cuts in faulty genes which the body can then repair with the correct DNA. (https://www.theguardian.com/science/2017/sep/28/chemical-surgery-used-to-mend-harmful-mutations-in-human-embryos-base-editing).

Three-in-One Antibody Protects Monkeys from HIV-Like Virus



A three-pronged antibody made in the laboratory protected monkeys from infection with two strains of SHIV, a monkey form of HIV, better than individual natural antibodies from which the engineered antibody is derived. The three-pronged antibody, created by investigators from the National Institutes of Health (NIH) and the Paris-based pharmaceutical company Sanofi, also stopped a greater number of HIV strains from infecting cells in the laboratory more potently than natural, single antibodies. This new broadly neutralizing antibody binds to three different critical sites on HIV. (https://www.niaid.nih.gov/news-events/three-one-antibody-protects-monkeys-hiv-virus).

Scientists Find Particle That Acts as its Own Anti-Particle



Physicists from the University of California and Stanford University have discovered evidence of Majorana fermions, long-hypothesized particles that are their own antiparticles. A collision between a particle and its antiparticle, which is called annihilation, is found to release energy. It is claimed that the discovery of these particles will help in the creation of more robust quantum computers. (https://www.sciencealert.com/physicists-made-a-particle-that-behaves-just-like-its-own-antiparticle).

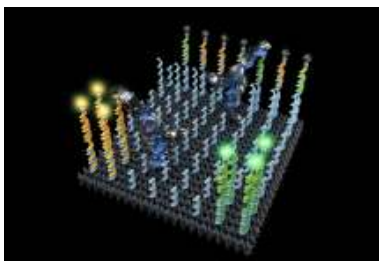
Virus-Free Pigs Cloned For Safer Transplants for Humans

US-based scientists aiming to make pig organs safe enough to be transplanted into humans have used CRISPR gene-editing technology to clone piglets that lack a potentially dangerous retrovirus. Pigs are seen as a viable source for organ transplants into humans because their organs are similar in size. The clones will be monitored for long-term effects from the procedure. Transplants from pigs could offer a new potentially life-saving alternative for patients diagnosed with organ failure and no other viable treatment options. A shortage of available human organs has led scientists to study the possibility of animal donors to close the gap. (http://www.livemint.com/Science/Scientists-create-safer-pig-organs-with-goal-of-transplants).

Researchers Invent Novel Process for Extracting Sugars from Wood

A research team led by an Indian at the University of Delaware has invented a more efficient process for extracting sugars from wood chips, corn cobs, and other organic waste. The technology uses a salt solution for breaking down wood cellulose at low temperatures of 85ºC. The water and energy-efficient process gives a 95% theoretical yield of sugars, said researchers. (https://phys.org/news/2017-09-sugars-wood)

Nanobots Made of DNA Can Now Carry & Sort Molecular Cargo

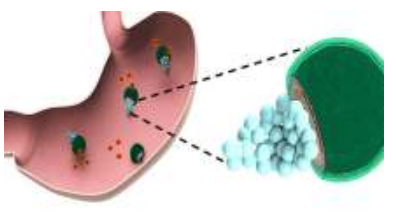


Caltech scientists have developed a "robot" using a single strand of DNA, that can "walk" around a surface, pick up molecules and drop them off in designated locations. The molecular prototype successfully sorted six fluorescent molecules into correct places in 24 hours. The bots could be used for delivering drugs when a specific signal is given in bloodstreams, said researchers. (https://phys.org/news/2017-09-dna-nanorobot-molecules-predefined-regions).

Flower Colour Changed Using Gene Editing

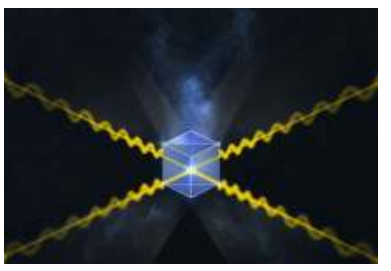
In a world-first, Japanese scientists have used the revolutionary CRISPR, or CRISPR/Cas9, genome- editing tool to change flower colour in an ornamental plant. The flower colour of the traditional Japanese garden plant, Japanese morning glory (Ipomoea nil or Pharbitis nil) was changed from violet to white, by disrupting a single gene. This research highlights the huge potential of the CRISPR/Cas9 system to the study and manipulation of genes in horticultural plants. (https://www.sciencedaily.com/releases/2017/09/170905123207.

Micromotor-Enabled Active Drug Delivery For in Vivo Treatment of Stomach Infection



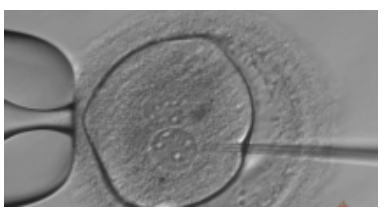
US-based researchers have demonstrated the first-ever use of micromotors to treat a bacterial infection in the stomach of mice. The motors, each about half the width of a human hair, are propelled as they neutralise gastric acid after which they release antibiotics, said researchers. The antibiotics restore normal stomach pH within 24 hours without producing harmful residues, they added. (https://www.nature.com/articles/s41467-017-00309).

Physicists Quantum Teleported Complex Light Patterns for the First Time



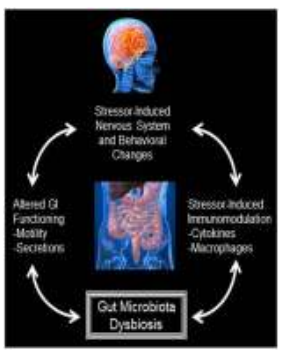
A team of Scottish and South African researchers have provided the world's first experimental demonstration of entanglement swapping and teleportation of orbital angular momentum (OAM) patterns of light. The property of entanglement allows transfer of information without physically transferring photons, the quantum of light. Further, interfering with photons renders the information useless, making the signal "unhackable". (https://www.sciencealert.com/physicists-work-out-a-way-to-cram-more-information-into-quantum-messages)

Scientists Use Gene-Editing Technology To Knock Out Genes in Human Embryos for First Time



In a first, scientists at UK-based Francis Crick Institute have genetically edited human embryos to understand the role of a fertility gene in embryonic development. The findings could help understand the genetic cause of miscarriages and improve IVF techniques. This comes after similar human DNA editing experiments were performed in China and the US, triggering ethical debates. They found that in humans OCT4 is plays a role in the development. (http://www.sciencemag.org/news/2017/09/scientists-use-gene-editing-technology-knock-out-genes-human-embryos-first-time).

Gut Microbes May Talk To the Brain through Cortisol



While it is known that brain functions are influenced by the composition of gut bacteria, a US-based study suggests cortisol, often called the stress hormone, serves as the communication channel between them. Researchers studied one-month-old pigs, as they have similar gut and brain development traits as human infants. The findings could explain how mental disorders like autism develop. (https://www.sciencedaily.com/releases/2017/08/170821122736).

Engineering Malaria Resistance in Mosquitoes

In an attempt to cut the spread of malaria, US-based scientists have genetically modified (GM) Anopheles mosquitoes to suppress the growth of malaria-causing parasite Plasmodium in their gut. The team observed the mosquitoes for 10 generations, where 90% of offsprings carried the GM trait. Further, the GM mosquitoes maintained their resistance to the malaria parasite for seven years. (https://www.nih.gov/news-events/nih-research-matters/engineering-malaria-resistance-mosquitoes).

Scientists Have Developed Surgical Glue That Seals Wounds in 60 Seconds

Australia and US-based researchers have developed an elastic surgical glue that seals wounds in 60 seconds without the need for surgical staples or sutures. The gel-like material can be applied directly and is activated by UV light. The gel is based on methacryloyl-substituted tropoelastin (MeTro), a hybrid elastic protein, and can be squirted onto internal and external wounds to seal them up and encourage healing. Further, it has a built-in degrading enzyme which can be modified to determine how long the sealant should last to heal the wound (https://www.sciencealert.com/this-incredible-surgical-glue-heals-wounds-faster-than-ever-before).

Editorial Board : Dr. Arun Kumar, Shri S.K. Sheel, Shri Vipul Garg, Ms. Malti Sawhney, Ms. Deepti Gulati and Shri V.R. Panwar

Designed by : S.K. Thapliyal